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UNIT 1-TODAY'S TECHNOLOGIES

Over the years, technology has revolutionized our world. Technology has created amazing tools and resources, putting useful information at their fingertips. Modern technology has made it possible for the discovery of many functional and utility devices like the smartwatch and the smartphone. With all these revolutions, technology has also made our lives easier, faster, better… and more fun.

COMPUTERS

A computer is a device that can be instructed to carry out sequences of arithmetic or logical operations automatically via computer programming. Modern computers have the ability to follow generalized sets of operations, called programs. These programs enable computers to perform an extremely wide range of tasks. A "complete" computer including the hardware, the operating system (main software), and peripheral equipment required and used for "full" operation can be referred to as a computer system. This term may as well be used for a group of computers that are connected and work together, in particular a computer network or computer cluster.

Computers are used as control systems for a wide variety of industrial and consumer devices. This includes simple special purpose devices like microwave ovens and remote controls, factory devices such as industrial robots and computer-aided design, and also general purpose devices like personal computers and mobile devices such as smartphones. The Internet is run on computers and it connects hundreds of millions of other computers and their users.

LAPTOPS

A laptop computer, sometimes called a notebook computer by manufacturers, is a battery- or AC-powered personal computer generally smaller than a briefcase that can easily be transported and conveniently used in temporary spaces such as on airplanes, in libraries, temporary offices, and at meetings. A laptop typically weighs less than 5 pounds and is 3 inches or less in thickness. Among the best-known makers of laptop computers are IBM, Apple, Compaq, Dell, and Toshiba.

TABLETS

A tablet computer, commonly shortened to tablet, is a mobile device, typically with a mobile operating system and touchscreen display processing circuitry, and a rechargeable battery in a single thin, flat package. Tablets, being computers, do what other personal computers do, but lack some input/output (I/O) abilities that others have. Modern tablets largely resemble modern smartphones, the only differences being that tablets are relatively larger than smartphones, with screens 7 inches (18 cm) or larger, measured diagonally, and may not support access to a cellular network.

The touchscreen display is operated by gestures executed by finger or digital pen (stylus), instead of the mouse, trackpad, and keyboard of larger computers. Portable computers can be classified according to the presence and appearance of physical keyboards. Two species of tablet, the slate and booklet, do not have physical keyboards and usually accept text and other input by use of a virtual keyboard shown on their touchscreen displays. To compensate for their lack of a physical keyboard, most tablets can connect to independent physical keyboards by wireless Bluetooth or USB; 2-in-1 PCs have keyboards, distinct from tablets (Wikipedia, 2019).

DESKTOPS AND ALL-IN-ONES

A desktop computer is a personal computer designed for regular use at a single location on or near a desk or table due to its size and power requirements. The most common configuration has a case that houses the power supply, motherboard, memory, and disk storage. The desktop uses a keyboard and a mouse as input devices. The output devices are the monitor, speakers and printer. The case may sit horizontally or vertically and placed either underneath, beside or on top of the desk.

Another type of desktop is called an **all-in-one.** An all-in-one does not contain a tower. The same case is used to house the display and processing units.

SERVER

A server is a computer program or device that provides a service to another computer program and its user, also known as the client. In a data center, the physical computer that a server program runs on is also frequently referred to as a server. That machine may be a dedicated server, or it may be used for other purposes as well. A server can support from two to several thousand connected computers and devices at the same time. Servers are available in a variety of sizes and types for both small and large business applications.

MOBILE AND GAME DEVICES

A mobile device is a computing device small enough to hold in your hand. Because of their reduced size, the screens on mobile devices are small (often between 3 and 5 inches). Some mobile devices are Internet capable, meaning that they can connect to the Internet wirelessly. You often can exchange information between the Internet and a mobile device or between a computer or network and a mobile device. Popular types of mobile devices are smart-phones, digital cameras, portable and digital media players, e-book readers, and wearable devices.

Mobile devices can be categorized as computers if they operate under the control of instructions stored in their own memory; can accept data; process the data according to specified rules; produce or display information; and store the information for future use.

SMARTPHONES

A smartphone is an Internet-capable phone that usually also includes a calendar, an address book, a calculator, a notepad, games, and several other apps (which are programs on the smartphone). Other apps are available through an app store that typically is associated with the phone. Smartphones and basic phones are two categories of cell phones that are available on the market. The term basic phone was created to distinguish the phone from a smartphone. ... Smartphone is a mobile phone that operates on an operating system, like a mini computer. Smartphones are basically that – a mini computer.

Many smartphones have touch screens. Instead of or in addition to a touch screen, some smartphones have a keyboard that slides in and out from behind the phone. Others have built-in mini keyboards or keypads that contain both numbers and letters. Some are called a phablet because they combine the features of a smartphone with a tablet.

Instead of calling someone's phone to talk, you can send messages to others by pressing images on an on-screen keyboard on the phone, keys on the phone's mini keyboard, or buttons on the phone's keypad.

WEARABLE DEVICES

Wearable technology, wearables, fashionable technology, wearable devices, tech togs, or fashion electronics are smart electronic devices (electronic device with micro-controllers) that can be incorporated into clothing or worn on the body as implants or accessories.

Wearable devices such as activity trackers are an example of the Internet of Things, since "things" such as electronics, software, sensors, and connectivity are effectors that enable objects to exchange data through the internet with a manufacturer, operator, and/or other connected devices, without requiring human intervention.

Wearable technology has a variety of applications which grows as the field itself expands. It appears prominently in consumer electronics with the popularization of the smartwatch and activity tracker. Apart from commercial uses, wearable technology is being incorporated into navigation systems, advanced textiles, and healthcare.

GAME DEVICES

Gaming is yet another area with a strong presence on the market for mobile devices. At the lower end are simple devices for small children. These are programmed with one game or just a few games. At the high end are sophisticated systems with the ability to load games and with internet connectivity. They have rich multimedia and enable multiple players to be linked together.

A game console is a mobile computing device designed for single-player or multiplayer video games. Gamers often connect the game console to a television so that they can view their gameplay on the television's screen. Many game console models are Internet capable and allow you to listen to music and watch movies or view photos. Typically weighing between three and eleven pounds, the compact size of game consoles makes them easy to use at home, in the car, in a hotel, or any location that has an electrical outlet and a television screen.

Gaming devices provide a variety of interesting activities and ways for young people to engage with their friends and families.

However, it is important to be aware of what these devices can do and how you can talk with your child to help them to use this technology in safe and positive way.

All modern gaming devices offer parental controls to help you manage how your child uses their device, but these do need to be set up for them to be operational.

OPERATING SYSTEMS

An operating system (OS) is the software that controls a computer's hardware and peripheral devices and allows other programs to function. Early computers did not have disk drives but were hard-wired to carry out specific computations. Later, computers were able to store instructions loaded into the computer's memory using punch cards and later magnetic tapes. Computer memory space was limited and when the instructions to control a computer were moved onto a disk drive, such as a floppy disk or internal hard drive, it was considered cutting-edge technology. Today, any modern operating system would be considered a disk operating system (Rouse & Cobb, 2016).

Disk operating system is also used to describe several very similar command line disk operating systems. PC-DOS (Personal Computer Disk Operating System) was the first widely-installed disk operating system. It was developed for IBM by Microsoft Corporation, which also produced its own almost identical version called MS-DOS.

The early operating systems did not multitask, as they were only able to run one program at a time. The command line interface, in which a user has to type in commands, required the user to remember commands to run programs or do other operating system tasks, making it difficult for novices to use. For example, typing the command "cd \directory_name" changed the current working directory to the named directory and typing the command "dir" listed the files in the current directory.

When Microsoft first introduced Windows as a graphical user interface (GUI) for MS-DOS, early users had to type "WIN" at the DOS prompt to launch the Windows program. Windows has since evolved from being a GUI program running under DOS to a full operating system taking over as the default OS, though it was not until Windows XP that consumer versions of Windows stopped relying on the DOS program win.com to bootstrap the Windows kernel.

The last retail version of MS-DOS was MS-DOS 6.22. After this release, MS-DOS was still bundled as part of Windows, but no longer required a separate license. It can still be run under Windows using the

Command Prompt program. There is an open source version of DOS called FreeDOS which is based on and compatible with MS-DOS.

Note: The acronym DoS with a lowercase O is short for Denial of Service, a method of attacking a networked computer by sending it an abnormally high number of requests in order to exhaust its resources so that genuine users cannot gain access.

MACINTOSH OPERATING SYSTEMS

The family of Macintosh operating systems developed by Apple Inc. includes the graphical user interface-based operating systems it has designed for use with its Macintosh series of personal computers since 1984, as well as the related system software it once created for compatible third-party systems (Wikipedia, 2019).

In 1984, Apple debuted the operating system that is now known as the "Classic" Mac OS with its release of the original Macintosh System Software. The system, rebranded "Mac OS" in 1996, was preinstalled on every Macintosh until 2002 and offered on Macintosh clones for a short time in the 1990s.

The current Mac operating system is macOS, originally named "Mac OS X" until 2012 and then "OS X" until 2016. Developed between 1997 and 2001 after Apple's purchase of NeXT, Mac OS X brought an entirely new architecture based on NeXTSTEP, a Unix system, that eliminated many of the technical challenges that the classic Mac OS faced.

Prior to the introduction of Mac OS X, Apple experimented with several other concepts, releasing different products designed to bring the Macintosh interface or applications to Unix-like systems or vice versa, A/UX, MAE, and MkLinux. Apple's effort to expand upon and develop a replacement for its classic Mac OS in the 1990s led to a few cancelled projects, code named Star Trek, Taligent, and Copland.

Although they have different architectures, the Macintosh operating systems share a common set of GUI principles, including a menu bar across the top of the screen; the Finder shell, featuring a desktop metaphor that represents files and applications using icons and relates concepts like directories and file deletion to real-world objects like folders and a trash can; and overlapping windows for multitasking.

CREATING FOLDERS & UNZIPPING FILES

Folders on a computer function much like folders in a file cabinet: they help organize information and documents into folders that can be organized in a variety of ways. An example of how one might organize information is chapters in a cookbook. Rather than have all recipes printed alphabetically, they are usually grouped into subject areas such as meat dishes, vegetable dishes, casseroles, salads, cakes and cookies.

You may find that the cakes and cookies section is subdivided into cakes and cookies. The cookies section may be subdivided into drop cookies, rolled cookies and bar cookies. Doing this makes finding one specific type of recipe much faster and easier.

You have practiced creating, renaming and deleting folders. Now it is time to put what you did into action for this class. You will create folders for the student lab files and PowerPoint documents that have been provided to you, as well as folders where to save the documents you create as you do lab exercises.

RETRIEVE LESSON FILES FROM THE ONLINE COURSE ROOM

Step 1. **Review the video "How to Unzip a Folder in Canvas".** This will give you step by step illustrations on how to do this when it is necessary. I have tried to place all the files you need in the zipped folder; however, occasionally there may be a file that needs to be downloaded separately. The process used is always the same. The video explains this in detail.

Step 2. Double click on the CIS 210 Units folder. You may note there are 16 folders in this folder. Each folder contains file for the chapters in the book you will be working on for the units. You need these files for the various lessons you will be
completing in the class.

THE UNITS FOLDERS

Step 1. The unit folders are named with the following naming convention:

- u01a1
- u02a1
- u03a1
- … u16a1

- **u** = unit
- **01** = unit number
- **a** = assignment
- **1**= first assignment for the unit.

Step 2. Most of the folders contain the student lesson files for that unit. If the particular unit does not have any files in it, do not worry you will be filling it with a file. That is the plan. You should be using these folders as you work on each assignment. If you save the files for each unit in the appropriate unit folder, it will make it much easier on you to find lessons you have completed.

CAPTURE YOUR SCREEN - WINDOWS

The following instructions are for capturing your screen to prove you have done the activity. For

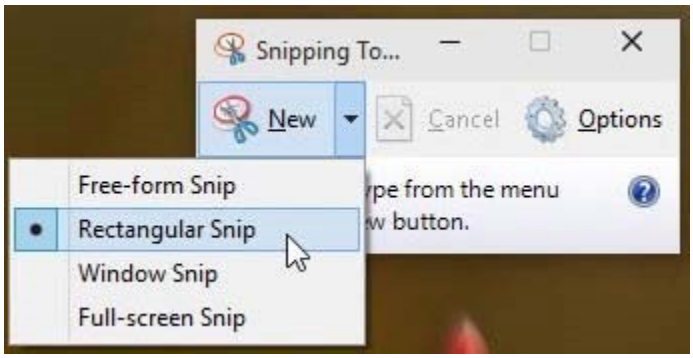
this assignment, you will be submitting a copy of the file structure you have created. I need to see the CIS Unit folders and the CIS 210 Student File Folders.

Step 1. Open a blank Word document and save it as **u01a1-2 Screen shot File Folders** **Step 2.** **Using your Snipping Tool**

i. To open Snipping Tool, type Snipping Tool in the search box on the taskbar, and then select

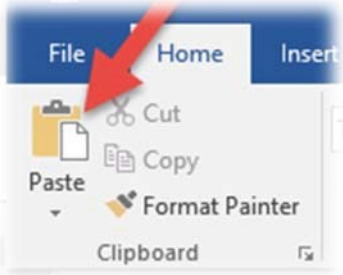
Snipping Tool.

ii. To take a screenshot with Snipping Tool, select New, and then select the part of the screen that you want to capture. Choose from freeform, rectangular, window, or full-screen snips by selecting the arrow on the New button.



Step 3. **Show a view of your folders** – Your textbook has detailed instructions on pages OFF 31-33 on how to view these folders. Once you have a good view of the folders, I want you to use your snipping tool to capture that screen.

Step 4. **Copy your Screen Capture** – With your captured screen now on your snipping tool, click Edit copy.



Step 5. Navigate to your Word document. Notice on the Home ribbon band the word **Paste** is now dark click on it. This will paste a screen copy of the folders you have created.

Step 6. Save Your **u01a1-2 Screen Shot File Folders** file again and upload it to Canvas in the assignment area for u01a1.

CAPTURE YOUR SCREEN – MACINTOSH (OS X)

HOW TO TAKE A SCREENSHOT OF YOUR ENTIRE SCREEN

Step 1. Press Shift-Command (⌘)-3.
Step 2. Find the screenshot as a .png file on your desktop.

HOW TO TAKE A SCREENSHOT OF A SELECTED PORTION OF YOUR SCREEN

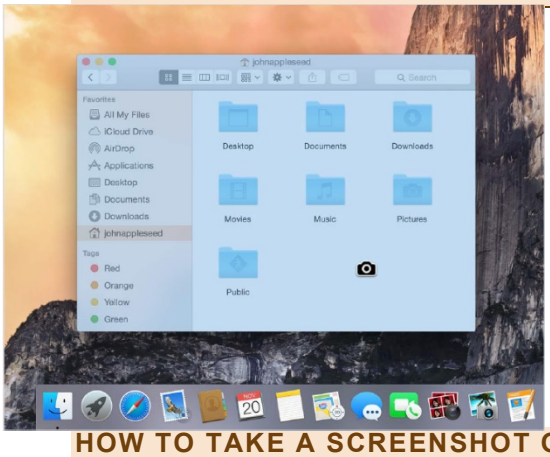
Step 1. Press Shift-Command-4. The pointer changes to a crosshair.

Step 2. Move the crosshair to where you want to start the screenshot, then drag to select an area. While dragging, you can hold Shift, Option, or Space bar to change the way the selection moves.

Step 3. When you've selected the area you want, release your mouse or trackpad button. To cancel, press the Esc (Escape) key before you release the button.

Step 4. Find the screenshot as a .png file on your desktop.

HOW TO TAKE A SCREENSHOT OF A WINDOW



Step 1. Press Shift-Command-4. The pointer changes to a crosshair.

Step 2. Press the Space bar. The pointer changes to a camera.

Step 3. Move the camera over a window to highlight it.

Step 4. Click your mouse or trackpad. To cancel, press the Esc (Escape) key before you click.

Step 5. Find the screenshot as a .png file on your desktop.

This works with windows in the Finder and most apps.

HOW TO TAKE A SCREENSHOT OF A MENU

Step 1. Click the menu to reveal its contents.

Step 2. Press Shift-Command-4. The pointer changes to a crosshair.

Step 3. Drag to select the menu.

Step 4. Release your mouse or trackpad button. To cancel, press the Escape (esc) key before you release the button.

Step 5. Find the screenshot as a .png file on your desktop.

These steps capture the contents of a menu, but not its title:

Step 1. Click the menu to reveal its contents.

Step 2. Press Shift-Command-4. The pointer changes to a crosshair.

Step 3. Press the Space bar. The pointer changes to a camera.

Step 4. Move the camera over the menu to highlight it.

Step 5. Click your mouse or trackpad. To cancel, press the Esc (Escape) key before you click.

Step 6. Find the screenshot as a .png file on your desktop.

UNIT 1 QUIZ – STUDY GUIDE

TRUE/FALSE

1. Electronic components in computers process data using instructions, which are the steps that tell the computer how to perform a task
2. An all-in-one contains a separate tower.
3. Smartphones typically communicate wirelessly with other devices or computers.
4. Data conveys meaning to users, and information is a collection of un processed items, which can include text, numbers, images, audio, and video.
5. The terms, web and Internet, are interchangeable.
6. One way to protect your computer from malware is to scan any removable media before using it.
7. Operating systems are a widely recognized example of system software.
8. A headset is a type of input device.
9. A scanner is a light-sensing output device.
10. Although some forms of memory are permanent, most memory keeps data and instructions temporarily, meaning its contents are erased when the computer is turned off.
11. A solid-state drive contains one or more inflexible, circular platters that use magnetic particles to store data, instructions, and information.
12. You usually do not need to install web apps before you run them.

MULTIPLE CHOICE

13. Operating systems are a widely recognized example of system software.
    a. Storage
    b. Solid-state drives
    c. Cloud Storage
14. _____ is an Internet service that provides remote storage to computer users.
    a. Cloud storage
    b. Smart TV
    c. Bluetooth
    d. Solid-state drive (SSD)

15. A computer that delivers requested webpages to your computer or mobile device is a(n) _____.

    a. FTP device
    b. VoIP computer
    c. Web server
    d. Hard drive

16. A _____ is software that enables users with an Internet connection to access and view webpages on a computer or mobile device.

    a. Search Engine
    b. Wiki
    c. Digital media player
    d. Browser

17. A(n) ____ is any hardware component that allows you to enter data and instructions into a computer or mobile device.

    a. Output device
    b. Display
    c. Communications device
    d. Input device

18. Which of the following is not an example of an output device?

    a. Display
    b. Speaker
    c. Printer
    d. Scanner

19. ____ consists of electronic components that store instructions waiting to be executed and the data needed by those instructions.

    a. Memory
    b. Storage
    c. Solid-state drives
    d. Cloud Storage

20. ____ is an Internet service that provides remote storage to computer users.

    a. Cloud storage
    b. Smart TV
    c. Bluetooth
    d. Solid-state drive (SSD)

21. _____ uses short-range radio signals to enable computers and devices to communicate with each other.

    a. Wi-Fi
    b. A hot spot
    c. Cellular radio
    d. Bluetooth

22. A(n) _____ is a collaborative website that allows users to create, add to, modify, or delete the content via their browser.

    a. Podcast
    b. Blog
    c. Wiki
    d. Online social network

MATCHING

Match the following terms with the correct definition:

1. All-in-one
2. Server
3. Phablet
4. Digital device Convergence
5. Touchpad
6. Storage Device
7. Solid-state Drive
8. File
9. Software
10. Operating System

Definitions

A. Term that describes the trend of computers and devices with technologies that overlap
B. Mobile device that combines features of a smartphone and a tablet.
C. Storage device that typically uses flash memory to store data, instructions, and information.
D. Small, flat, rectangular pointing device that is sensitive to pressure and motion.
E. Set of programs that coordinates all the activities among computer or mobile device hardware.
F. Named collection of stored data, instructions, or information
G. Type of desktop computer that does not contain a tower and instead uses the same case to house the display and the processing circuitry
H. Series of related instructions, organized for a common purpose, that tells the computer what tasks to perform and how to perform them
I. Computer that is dedicated to providing one or more services to other computers or devices on a network.
J. Component that records and/or retrieves items to and from storage media.

UNIT 2 – DIGITAL SECURITY RISKS

A **digital security risk** is an event or action that could cause a loss of or damage to computer or mobile device hardware, software, data, information or processing capability. The more common digital security risks include Internet and network attacks, unauthorized access and use, hardware theft, software theft, information theft, and system failure.

Some breaches to digital security are accidental, many or intentional. Some intruders do not disrupt a computer or device's functionality; they merely access data, information, or programs on the computer or mobile device before signing out. Other intruders indicate some evidence of their presence either by leaving a message or by deliberately altering or damaging data.

RISK MANAGEMENT

Risk management occurs everywhere in the financial world. It occurs when an investor buys low-risk government bonds over riskier corporate bonds, when a fund manager hedges his currency exposure with currency derivatives, and when a bank performs a credit check on an individual before issuing a personal line of credit. Stockbrokers use financial instruments like options and futures, and money managers use strategies like portfolio and investment diversification to mitigate or effectively manage risk.

Inadequate risk management can result in severe consequences for companies, individuals, and for the economy. For example, the subprime mortgage meltdown in 2007 that helped trigger the Great Recession stemmed from poor risk-management decisions, such as lenders who extended mortgages to individuals with poor credit, investment firms who bought, packaged, and resold these mortgages, and funds that invested excessively in the repackaged, but still risky, mortgage-backed securities (MBS) (Kenton, 2018).

CYBER CRIME

The National Computer Security Survey (NCSS) documents the nature, prevalence, and impact of cyber intrusions against businesses in the United States. It examines three general types of cybercrime:

- Cyber-attacks are crimes in which the computer system is the target. Cyber-attacks consist of computer viruses (including worms and Trojan horses), denial of service attacks, and electronic vandalism or sabotage.
- Cyber theft comprises crimes in which a computer is used to steal money or other things of value. Cyber theft includes embezzlement, fraud, theft of intellectual property, and theft of personal or financial data.
- Other computer security incidents encompass spyware, adware, hacking, phishing, spoofing, pinging, port scanning, and theft of other information, regardless of whether the breach was successful

CYBER-TERRORIST

A Cyber-terrorist is a criminal who uses computer technology and the Internet, especially to cause fear and disruption. Some cyber-terrorists spread computer viruses, and others threaten people electronically.

- **Spyware -** The **Dangers** of **Spyware**. **Spyware** is software that is downloaded onto your computer to track your activities without your knowledge. ... Most of the time **spyware** is used to monitor your internet surfing habits, and this information is used in conjunction with adware to target specific advertisements to your tastes.
- **Cryptocurrency mining -** Cyber criminals are using tools to perform cryptocurrency mining in the background unbeknownst to a user, essentially a form of malware that eats up bandwidth and poses security risks.
- **Supply chain compromises** - Not only are software supply chains at risk, but hardware supply chains are as well. Because cloud objects can also be unexpected entry vectors, supply chain attacks have become a broad category of threat.
- **Adware --** Adware is the name given to programs that are designed to display advertisements on your computer, redirect your search requests to advertising websites and collect marketing-type data about you – for example, the types of websites that you visit – so that customized adverts can be displayed.
- **Hacking** – Hacking is identifying weakness in computer systems or networks to exploit its weaknesses to gain access. Example of Hacking: Using password cracking algorithm to gain access to a system
- **Phishing** – Phishing is when a scammer uses fraudulent emails or texts, or copycat websites to get you to share valuable personal information – such as account numbers, Social Security numbers, or your login IDs and passwords. Scammers use your information to steal your money or your identity or both (Office of Justice Programs, 2019).
- **Spoofing --** For scammers, spoofing is a tool for getting information or bypassing call blockers. Typically, scammers use spoofing to pose as a bank, business, or government agency to trick people into giving up personal or financial information. According to the IRS, scammers posing as tax collectors snagged about $26.5 million from people using spoofed phone numbers.
- **Pinging --** The **Ping** utility is an online free tool that help you to verify if a domain/server is operating and network accessible. This Ping tool uses the Internet Control Message Protocol (ICMP) Echo function as detailed in RFC 792. A small packet will be sent through the network to a given IP address (IPv4) or host name. This packet contains 64 bytes - 56 data bytes and 8 bytes of protocol reader information. The device that sent the packet then waits and listens for a return packet. If the connections are good and the target domain/server is up, a good return packet will be received. Ping can also tell the user the number of hops between two targets and the amount of time it takes for a packet to make the complete trip. In addition, this tool can also be used to resolve the host name to an IP address. Instead of entering the IP address, you can enter the host name for pinging.
- **Port Scanning** – A **port scanner** is an application designed to probe a server or host for open ports. Such an application may be used by administrators to verify security policies of their networks and by attackers to identify network services running on a host and exploit vulnerabilities.

Summary of Findings

- 67% detected at least one cybercrime.
- Nearly 60% detected one or more types of cyber-attack.

- 11% detected cyber theft.
- 24% detected other computer security incidents.
- Most businesses did not report cyber-attacks to law enforcement authorities.
- The majority of victimized businesses (86%) detected multiple incidents, with half of these (43%) detecting 10 or more incidents during the year.
- Approximately 68% of the victims of cyber theft sustained monetary loss of $10,000 or more. By comparison, 34% of the businesses detecting cyber-attacks and 31% of businesses detecting other computer security incidents lost more than $10,000.
- System downtime lasted between 1 and 24 hours for half of the businesses and more than 24 hours for a third of businesses detecting cyber-attacks or other computer security incidents (Office of Justice Programs, 2019).

PASSWORDS

Some websites and companies force us to use complex passwords that are a minimum length or contain uppercase characters, numbers, and even special characters (!, @, #, etc). Why are such complicated, hard-to-remember passwords important?

WHY USE PASSWORDS AT ALL?

With so many details of our life now being stored or managed online, using strong passwords is more important than ever! It's all too easy to go about your online life without ever thinking twice about using secure passwords, or maybe you find passwords to be a nuisance. It can happen, though. Imagine if a hacker was to gain access to your:

- Email account to monitor your personal communications
- Online banking account to make transfers or view account numbers
- Facebook, Twitter, etc. to post negative or defamatory comments to your friends.
- Online shopping account to make purchases with your saved credit card numbers
- Online file storage to access or delete your personal information.
- Remote business connection to spread viruses through your company network

HOW TO CREATE A STRONG PASSWORD

Creating a strong password can be broken down into two requirements:

1. **PASSWORD LENGTH** - We recommend a minimum of 8 characters. This is the absolute, most important consideration for creating a strong password. For example, assuming you followed the rest of the recommendations below, the time a computer would need to guess a password containing only 6 characters is 52 seconds. Increase that to 8 characters and now you're looking at 3 days. Add another 2 characters (up to 10 now) and a hacker would need to spend about 58 years.
2. **PASSWORD COMPLEXITY -** We recommend using all 4 types of complex characters. A complex password doesn't mean it has to be a random bunch of characters. Complexity means that a password uses more than just lowercase characters. Ideally, you want your password to contain at least one of each of the following: lowercase letters, uppercase letters, numbers, and special characters (!, @, #, etc). A 10-letter long, all lowercase password that might take a computer 9 hours to guess is boosted to 14 years by simply using 1 uppercase letter and 1 special character instead.

These passwords should be treated like the keys to your home. It can certainly be difficult to remember a different, super-complex password for all of the different things you use. Try some of these tips to create strong passwords that you can actually remember (Hurt, 2012).

HOW TO REMEMBER A STRONG PASSWORD

Use sentences instead of single words. Use something easy for you to remember and has some kind of personal significance.

1. Start with an easy-to-remember phrase — For example: Diamonds are a girls best friend
2. Remove the spaces and shorten the words — DiamondsRgbf!
3. Change some letters into numbers or special characters — Di@m0ndsRgbf!

USE A PASSPHRASE. A passphrase can be abbreviations or initials of a longer phrase, such as a favorite song. For example, "My baloney has a first name, it's OSCAR!" could become "Mbhafn,IO!"

USE A PASSWORD MANAGER. A password manager is a software program that can store your various user names and passwords for many different websites and computers. This way, you can use more complex passwords without fear of forgetting them. Of course, they're all protected by your one, primary password, so make sure that's a good one!

IS YOUR PASSWORD HACKER-PROOF?

Here are a couple of great websites to test your password to see how long it would take a computer to crack your password by simply guessing every possible variation.

1. https://howsecureismypassword.net/— Try clicking the "Show Details" and "Show Settings" links for more details.
2. https://www.grc.com/haystack.htm/— This one shows you online attack scenarios as well.

UNIT 2 QUIZ – STUDY GUIDE

TRUE/FALSE QUESTIONS

1. Any illegal act involving the use of a computer or related devices generally is referred to as a crimeware.
2. A rootkit displays an outline advertisement in a banner or pop-up window on webpages, email, or other Internet services.
3. Viruses, worms, and other malware can be hidden in downloaded game files and mobile apps.
4. An audit trail records in a file both successful and unsuccessful access attempts.
5. It is good practice to change your passwords frequently.
6. Intentionally erasing software would be considered software theft.
7. A typical license agreement allows you to rent or lease the software.
8. Unencrypted readable data is called ciphertext.
9. Private key encryption is also called asymmetric key encryption.
10. VPNs encrypt data to help ensure that the data is safe from being intercepted by unauthorized people.
11. When data is traveling to or from a computer to a cloud service, it is subject to interception.
12. A good practice to secure your wireless network is to immediately broadcast the SSID.

MULTIPLE CHOICE

13. A _____ is someone who demands payment to stop an attack on an organization's technology infrastructure.
    a. Cyberextortionist
    b. Script kiddie
    c. Cracker
    d. Cyberterrorist
14. _____ Is a program that hides in a computer or mobile device and allows someone from a remote location to take full control of the computer or device.
    a. Spyware
    b. A trojan horse
    c. A rootkit
    d. Adware
15. A _____ is a program or set of instructions in a program that allows users to bypass security controls when accessing a program, computer, or network.
    a. Session cookie
    b. Botnet
    c. Back door
    d. Zombie
16. An employee using an organization's computer to send personal email messages might be an example of ____.
    a. Unauthorized access and use
    b. Hardware vandalism
    c. Cybercrime
    d. Intellectual property rights violation
17. A _____ is a private combination of words, often up to 100 characters in length and containing mixed capitalization and punctuation, associated with a user name that allows access to certain computer resources.
    a. Private key
    b. Passphrase
    c. Passcode
    d. Encryption algorithm
18. A(n) ___ is a set of characters that the originator of the data uses to encrypt the text and the recipient of the data use to decrypt the text.
    a. Plaintext
    b. Public key
    c. Encryption key
    d. Cipher
19. A(n) ___ backup method is the only real-time back up, providing very fast recovery of data.
    a. Continuous data protection
    b. Full
    c. Selective
    d. Incremental
20. Online shopping websites generally use a _____ to keep track of items in a user's shopping cart.
    a. Location sharing algorithm
    b. Phishing filter
    c. Keygen
    d. Session cookie

MATCHING

Match the terms with their definitions:

21. Script kiddie _____
22. Zombie _____
23. Bot _____
24. Spoofing _____
25. Access Control _____
26. Keygen _____
27. Digital certificate _____
28. Technology ethics _____
29. Digital rights management _____
30. Cookie _____

a. Compromised computer or device whose owner is unaware the computer or device is being controlled remotely by an outsider.
b. Technique intruders use to make their network or Internet transmission appear legitimate to a victim computer or network.
c. Program that performs a repetitive task on a network.
d. Small text file that a web server stores on your computer
e. Notice that guarantees a user or website is legitimate
f. Strategy designed to prevent illegal distribution of movies, music, and other digital content.
g. Program that creates software registration numbers and sometimes activation codes.
h. Hacker who does not have the technical skills and knowledge of a cracker
i. Security measure that defines who can access a computer, device, or network; when they can access it; and what actions they can take while accessing it.
j. Moral guidelines that govern the use of computers, mobile devices, information systems, and related technologies.

MICROSOFT OFFICE SUITE

Office **365** is a subscription that comes with premium apps like Word, Excel, PowerPoint, OneNote, Outlook, Publisher, and Access (Publisher and Access available on PC only). The apps can be installed on multiple devices, including PCs, Macs, iPads, iPhones, Android tablets, and Android phones.

The prices and the services for the applications available vary depending on the package you have purchased. This is a link to the current retail pricing for home and business users: https://www.microsoft.com/en-us/microsoft-365/buy/compare-all-microsoft-365-products?tab=1

MS WORD – This is a full featured word processing program that allows you to create professional-looking documents and revise them easily.

- **MS POWERPOINT** – PowerPoint is a presentation program that enables you to produce professional-looking presentations and then deliver them to an audience.
- **MS EXCEL**– Excel is a powerful spreadsheet program that allows you to organize data, complete calculations, make decisions, graph data, develop professional-looking reports, publish organized data to the web, and access real-time data from websites.
- **MS ACCESS (PC Only)**—Access is a database management system that enables your to create a database; add, change, and delete data in the database; ask questions concerning the data in the database; and create forms and reports using the data in the database.
- **MS OUTLOOK**—Outlook is a communications and scheduling program that allows you to manage emails accounts, calendars, contacts, and access to other Internet content.

- **MS PUBLISHER (PC Only)**—Publisher is a desktop publishing program that helps you create professional-quality publications and marketing materials that can be shared easily.
- **MS ONENOTE**—OneNote is a note taking application that allows you to store and share information in notebooks with other people.
- **SHAREPOINT WORKSPACE**—SharePoint is a collaboration application that allows you to access and revise files stored on your computer from other locations.
- **TEAMS--** Get your team on the same page with group chat, online meetings, calling, and web conferencing. Collaborate on files with built-in Office 365 apps like Word, Excel, PowerPoint, and SharePoint.
- **EXCHANGE** -- A Microsoft Exchange account is a work or school email account. The organization that gave you the Exchange email account is running a Microsoft Exchange Server, or is using Microsoft Office 365 which uses Exchange Server to provide email. When you use an Exchange account, your email messages are delivered to and saved in your mailbox on the Exchange server. Your contacts and calendar are saved there, too. When your business or school sets up their Exchange server, they choose what method your Exchange account uses to access email on the server. This will determine how your email works.
- **ONE DRIVE** -- OneDrive is Microsoft's storage service for hosting files in the "cloud." It is available for free to all the owners of a Microsoft account. OneDrive offers users a simple way to store, sync and share various types of files, with other people and devices on the internet. Windows 10, Windows 8.1, and Xbox One use OneDrive to synchronize system settings, visual customization, themes, app settings, and even Microsoft Edge's tabs, browsing history and saved passwords.

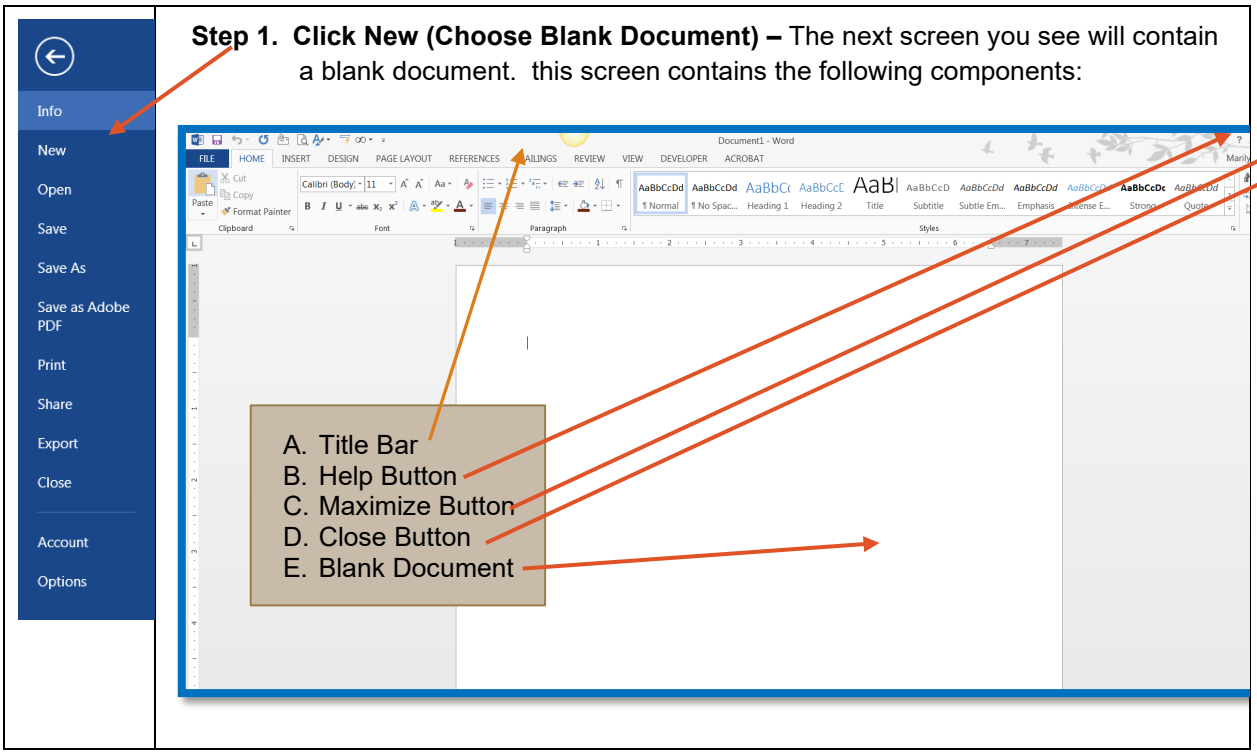
TABLE OFFICE SUITES

APPS LICENSES	OFFICE 365 FAMILY	OFFICE 365 PERSONAL	OFFICE HOME & STUDENT	OFFICE 365 BUSINESS STANDARD	OFFICE 365 PREMIUM	OFFICE 365 APPS
Word	✓	✓	✓	✓	✓	Web Only
PowerPoint	✓	✓	✓	✓	✓	Web Only
Excel	✓	✓	✓	✓	✓	Web Only
Access				✓	✓	PC Only
Outlook	✓	✓	✓	✓	✓	Web Only
Publisher				✓	✓	PC Only
OneNote	✓	✓	✓	✓	✓	
Teams				✓	✓	✓
Services	One Drive, Skype	One Drive, Skype	One Drive, Skype	One Drive, Exchange, Share Point	One Drive Skype Exchange Share Point Intune Azure	One Drive
Licenses	**6**	**1**	**1**	**5**	**5**	**1 user**

MS WORD

The MS Office Applications are set with similar features. We will start out introduction with the word processing application (MS Word) this should give you a foundation to learn how the applications are

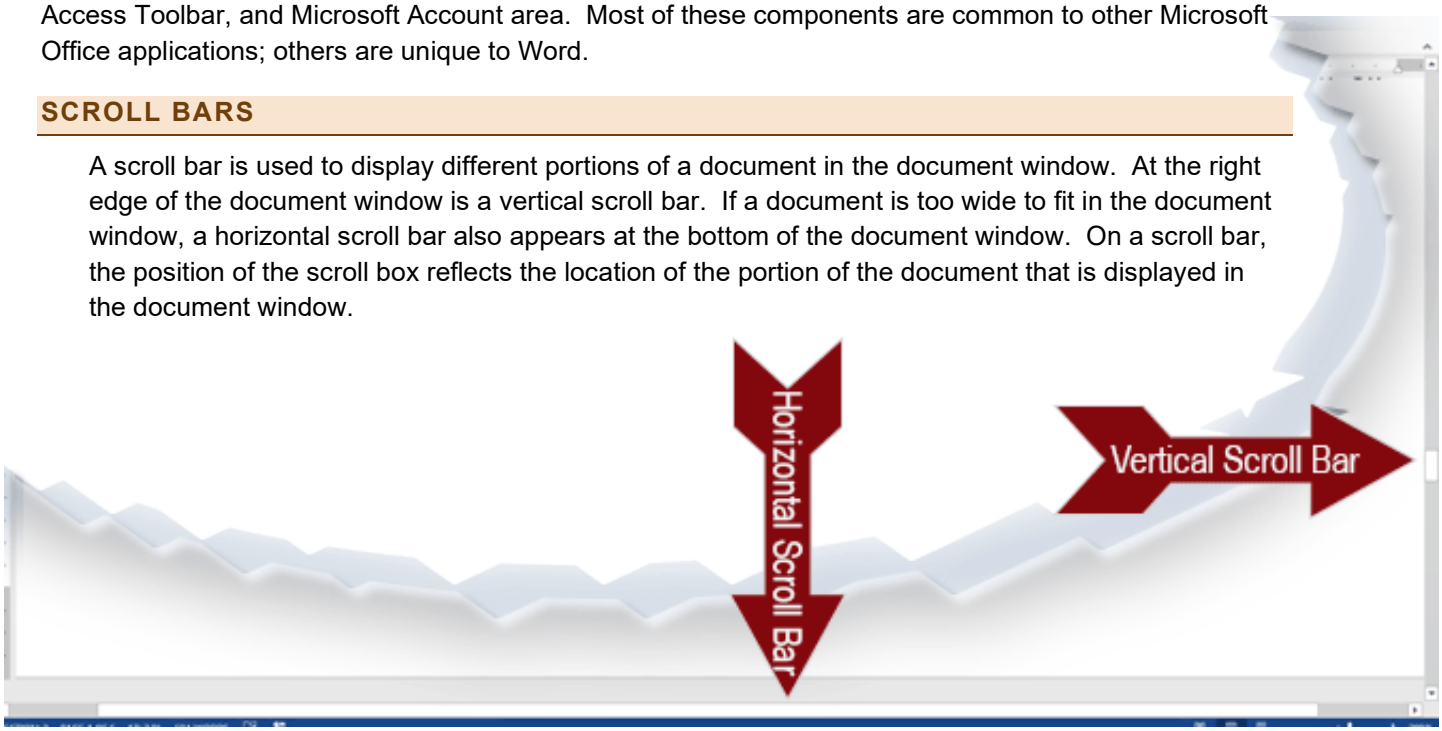
designed. When you click on the Word icon you may see a screen that contains all or some of the following components:



The Word window consists of a variety of components to make your work more efficient and documents more professional. These include the document window, ribbon, mini toolbar, shortcut menus, Quick Access Toolbar, and Microsoft Account area. Most of these components are common to other Microsoft Office applications; others are unique to Word.

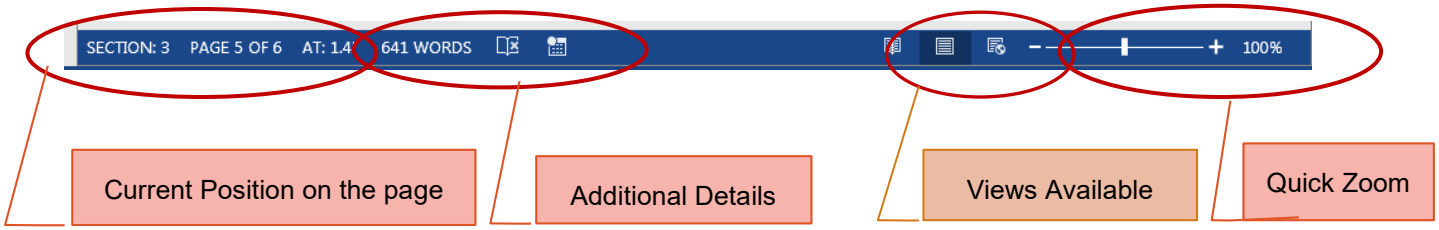
SCROLL BARS

A scroll bar is used to display different portions of a document in the document window. At the right edge of the document window is a vertical scroll bar. If a document is too wide to fit in the document window, a horizontal scroll bar also appears at the bottom of the document window. On a scroll bar, the position of the scroll box reflects the location of the portion of the document that is displayed in the document window.



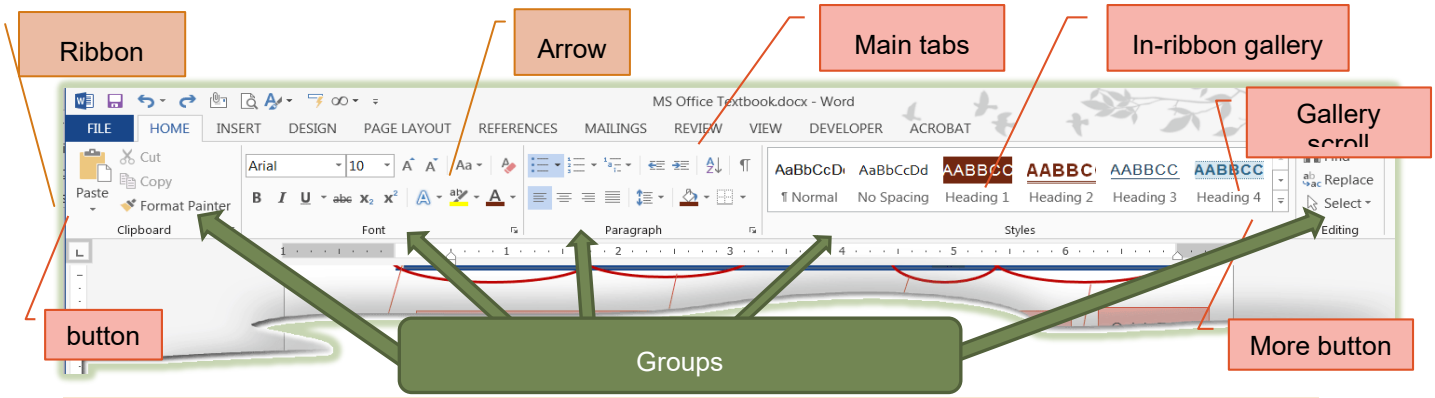
STATUS BAR

The status bar is located at the bottom of the document window displays the status of certain commands and keys; it also provides controls for viewing the document. As you type text or perform certain tasks, various indicators and buttons may appear on the status bar.



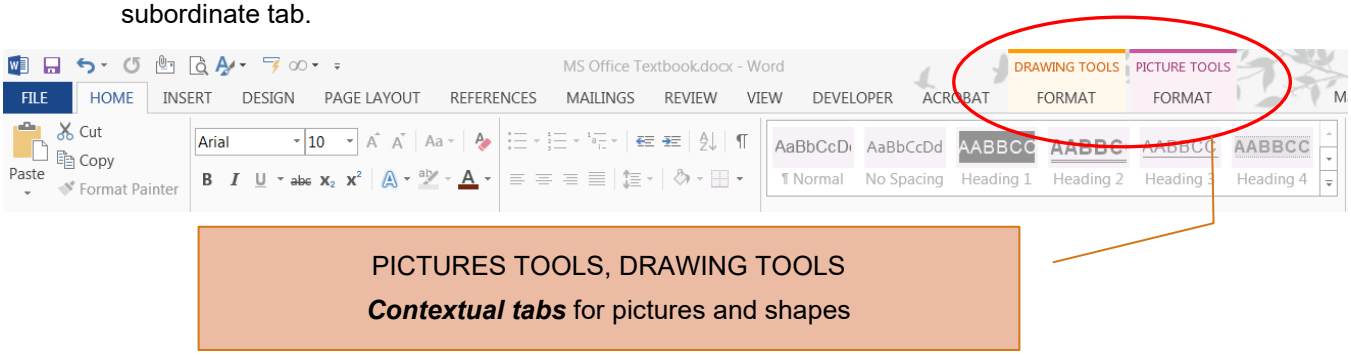
RIBBON

The ribbon located near the top of the window below the title bar is the control center in Word and other Office Apps. The ribbon provides easy, central access to the tasks you perform while creating a document. The ribbon consists of tabs groups, and commands. Each **tab** contains a collection of groups, and each **group** contains related commands. When you run an Office app, such as Word, it initially displays seral main tables, also called default or top-level tabs. All Office apps have a **HOME** tab, which contains the more frequently used commands.



CONTEXTUAL TABS

In addition to the main tabs, the Office apps display tool tabs, also called contextual tabs, when you perform certain tasks or work with objects such as picture or tables. it you insert a picture in a Word document, for example, the PICTURE TOOLS tab and its related subordinate FORMAT tab appear, collectively referred to as the PICTURE TOOLS FORMAT tab. When you are finished working with the picture, the PICTURE TOOLS FORMAT tab disappears from the ribbon. Word and other Office apps determine when tool tabs should appear and disappear based on tasks you perform. Some tool tabs such as the TABLE TOOLS tab, have more than one related subordinate tab.



GROUP PROJECT - REPORT

The style of reports should be concise, giving precise detail. Flowery language should not be used. Data may be presented as charts, graphs, or tables, if appropriate.

Descriptions of methodology should be sufficiently clear and detailed to allow someone else to replicate them exactly.

USING THE PASSIVE VOICE

Scientific reports tend to be written in what is called the passive voice, which is more formal. For example, “The experiment would have been better if ….”, rather than “I could have improved the experiment by ….”. Similarly, “It is recommended that….” rather than “I recommend….”. This is because a scientific report is intended to be objective and based on the analysis of data, rather than subjective and based on personal views and opinions.

However, many leading scientists (including the Astronomer Royal, Sir Martin Rees) are encouraging a return to the active voice where appropriate. If you are unsure about this, you should ask your tutor.

To make the group assignment easier for this unit, I have listed some basic MLA report formatting techniques. You should refer to these techniques while creating your group report. The same techniques will be reviewed in detail for Unit 3.

MS WORD MLA GENERAL GUIDELINES

MLA style specifies guidelines for formatting manuscripts and using the English language in writing. MLA style also provides writers with a system for referencing their sources through parenthetical citation in their essays and Works Cited pages.

Writers who properly use MLA also build their credibility by demonstrating accountability to their source material. Most importantly, the use of MLA style can protect writers from accusations of plagiarism, which is the purposeful or accidental uncredited use of source material by other writers.

If you are asked to use MLA format, be sure to consult the MLA Handbook (8th edition). Publishing scholars and graduate students should also consult the MLA Style Manual and Guide to Scholarly Publishing (3rd edition). The MLA Handbook is available in most writing centers and reference libraries; it is also widely available in bookstores, libraries, and at the MLA web site. See the Additional Resources section of this handout for a list of helpful books and sites about using MLA style.

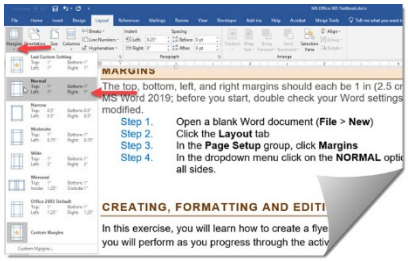
GENERAL GUIDELINES

- Type your paper on a computer and print it out on standard, white 8.5 x 11-inch paper.
- Double-space the text of your paper, and use a legible font (e.g. Times New Roman). Whatever font you choose, MLA recommends that the regular and italics type styles contrast enough that they are recognizable one from another. The font size should be 12 pt.
- Leave only one space after periods or other punctuation marks (unless otherwise instructed by your instructor).
- Set the margins of your document to 1 inch on all sides.

- Indent the first line of paragraphs one half-inch from the left margin. MLA recommends that you use the Tab key as opposed to pushing the Space Bar five times.
- Create a header that numbers all pages consecutively in the upper right-hand corner, one-half inch from the top and flush with the right margin. (Note: Your instructor may ask that you omit the number on your first page. Always follow your instructor's guidelines.)
- Use italics throughout your essay for the titles of longer works and, only when necessary, providing emphasis.
- If you have any endnotes, include them on a separate page before your Works Cited page. Entitle the section Notes (centered, unformatted).

MARGINS

The top, bottom, left, and right margins should each be 1 in (2.5 cm) wide. This is the default setting for MS Word 2019; before you start, double check your Word settings to make sure they have not been modified.

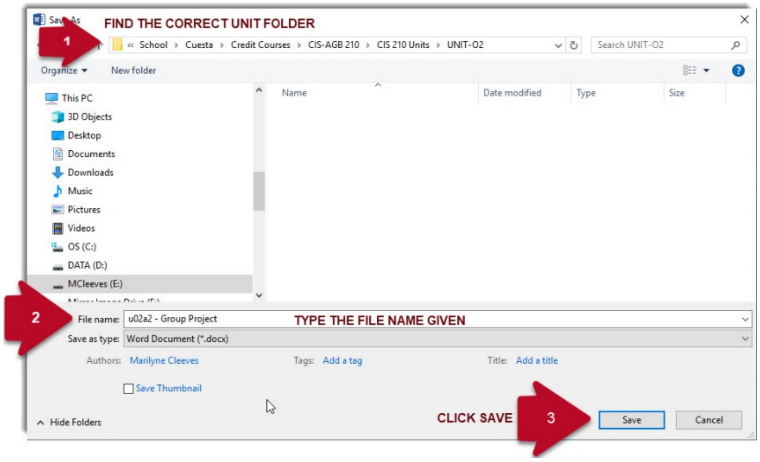


Step 1. Open a blank Word document (**File** > **New**)
Step 2. Click the **Layout** tab
Step 3. In the **Page Setup** group, click **Margins**
Step 4. In the dropdown menu click on the **NORMAL** option. This will set your margins at 1" on all sides.

SAVE THE FILE

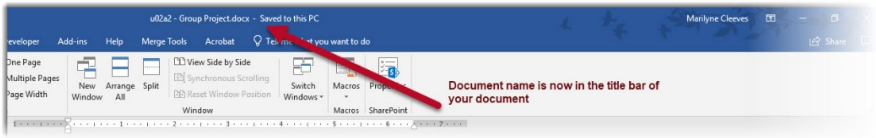
Step 5. Now that the margins are set, you should save your file. An easy saving method is to use your **CTRL** key with the letter **S**. In a new document, if you hold down **CTRL** and hit the letter **S**, you will receive a Save As dialog box.

Step 6. Click on the ***Browse*** option and navigate to your folders for this class. In the illustration my folder is in School\Cuesta\Credit Courses\CIS-AGB 210\CIS 210 UNITS\ UNIT-02



Step 7. In the section marked **File name**, type your file name as **u02a2 – Group Project.** *NOTE: You will eventually be uploading your completed portion to the group discussion area (**u02d1-Group Project: Discussion**). This is for the other members of your group to review your submission. The managing editor of your group will be compiling the reports that have been uploaded to the group discussion area.*

Step 8. ***Click Save***. You will see the new file name appear in the title bar of your document.



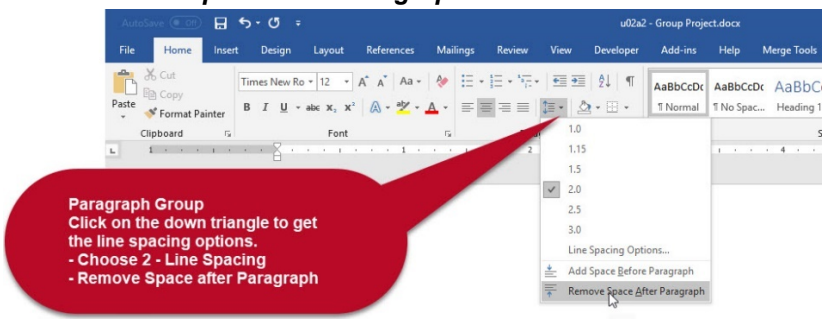
ADJUST LINE AND PARAGRAPH SPACING

Line spacing is the amount of vertical space between lines of text in a paragraph. Paragraph spacing is the amount of space above and below a paragraph. By default, the normal style places 8 points of blank space after each paragraph and inserts a vertical space equal to 1.08 lines between each line of text.

The MLA and APA documentation styles requires that you double-space the entire research paper. Double-space means that the amount of vertical space between each line of text above and below the paragraph should be equal to one blank line.

Use these steps when adjusting the line spacing:

Step 1. **Click** the **Home** tab to bring the Home ribbon into view
Step 2. Navigate to the Paragraph group. In the group, you should notice a small triangle pointing down. You will **click on the *down triangle*** next to the line spacing option
Step 3. **Click *2.0*** for the spacing
Step 4. **Click *Remove Space after Paragraph***



You should now have the proper spacing for the report.

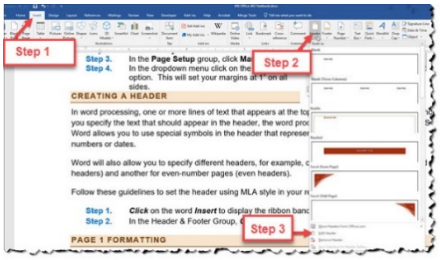
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from loosing your work.

CREATING A HEADER

In word processing, one or more lines of text that appears at the top of each page of a document. Once you specify the text that should appear in the header, the word processor automatically inserts it. MS Word allows you to use special symbols in the header that represent changing values such as page numbers or dates.

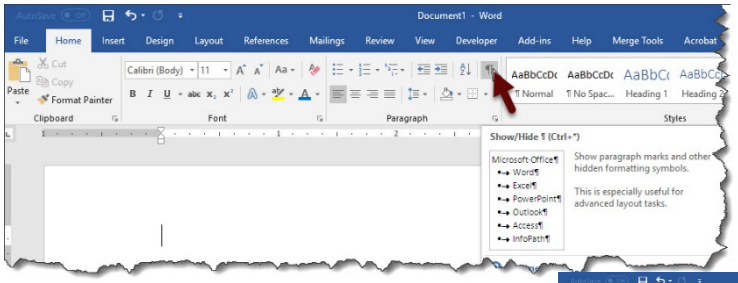
Word will also allow you to specify different headers, for example, one for odd-numbered pages (odd headers) and another for even-number pages (even headers).



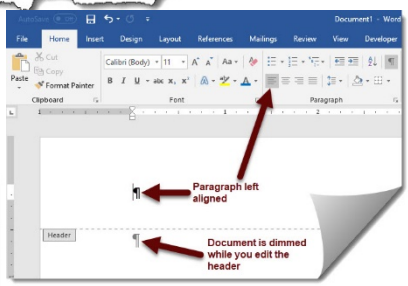
Follow these guidelines to set the header using MLA style in your report.

Step 1. ***Click*** on the word ***Insert*** to display the ribbon band.
Step 2. In the Header & Footer Group, ***Click Header***
Step 3. In the drop-down menu**, *Click Edit Header***
Step 4. **Click** the **Home** tab to display the home ribbon band.

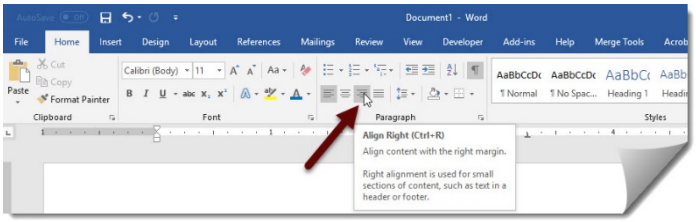
Step 5. While editing the header**, click the show/hide** option.



The show/hide button shows the paragraph marks for the activity. Note that the paragraph is now left aligned.



Step 6. ***Click*** on the ***Align Right*** Option.

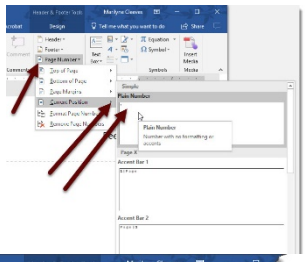


Step 7. When writing an MLA paper, you would usually put your last name and then insert the page number. Because this is a group project, I am expecting to see your group name and the page number. ***Type*** your ***group name*** and hit the ***space*** bar. *The example is showing Beehives as the group name. Make sure you use your actual group name.*

Step 8. ***Click*** on the ***Insert*** tab to display the Insert ribbon band.

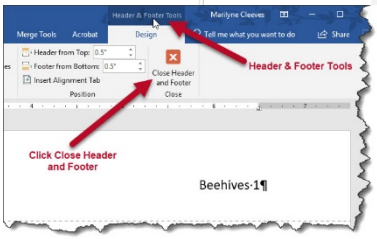
Step 9. In the Header & Footer Group, ***Click*** on ***Page Number.***

Step 10. Choose ***Current Position***. ***Click*** on the ***Plain Number*** option. Word will automatically place the current page number next to the space after the name. This is a code. As your paper progresses, you will note that all the pages are automatically numbered with the current page number for that page.



Step 11. Next ***Click*** on the contextual tab labeled ***Header and Footer Tools***. This menu only appears when you are in the header & footer option of MS Word.

Step 12. You will notice a red X at the end of the menu. ***Click*** on the option to ***Close Header and Footer***.



SAVE YOUR UPDATES

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NAME AND COURSE INFORMATION (PAGE 1)

MLA style does not require a separate title page for research papers. Since we are learning MLA format, you will be following all the guidelines for the style. The title page added after the report will be completed for your instructor to identify which members of your group helped with the activity.

For the group activity, you will be placing your group name and course information in a block at the top of the first report page. This is the format used in this section:

Student Name

Instructor Name

Course Number

Date (use month day, year option)

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from loosing your work.

DRAFT REPORT WITH REFERENCES

The draft document will need your typed submission to the group with the references you used. If your references are created properly in MS Word, your group managing editor will have a much easier time creating your document. Each report will be unique in that your group should decide what you will research and what the group plans to submit.

This does not need to be a long report. I am primarily interested in checking the group submission for the correct format, content and details that will eventually follow through to the UNIT 3 assignment.

MS WORD SOURCE REFERENCES

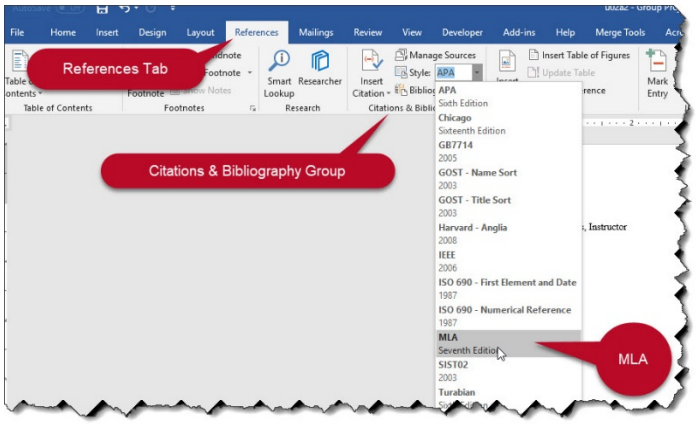
During your research, be sure to record essential publication information about each of your sources. MLA documentation style requires information for many types of publications. These are just a few of the MLA documentation requirements:

- **Book:** full name of author(s), complete title of book, edition (if available), volume (if available), publication city, publisher name, publication year, and publication medium
- **Magazine:** full name of author(s), complete title of article, magazine title, issue number (if available), date of magazine, page numbers of article, publication medium, and date viewed (if medium is a website).
- **Website:** full name of author(s), title of website, website publisher or sponsor (if none, write n.p.) publication date (if none, write n.d.), publication medium, and date viewed

As you are working on your paper you should record your sources using the Word reference feature. Follow these guidelines:

Step 1. **Click** on the **References** option to open the References ribbon band.
Step 2. ***Find*** the ***Citations & Bibliography group***
Step 3. In the ***Style*** option choose ***MLA.***

NOTE: *Word 2019 is using the Seventh Edition. When writing a report, it is important to ask your instructor which style and edition he or she requires. The rules change over time and many instructors follow rigid guidelines.*

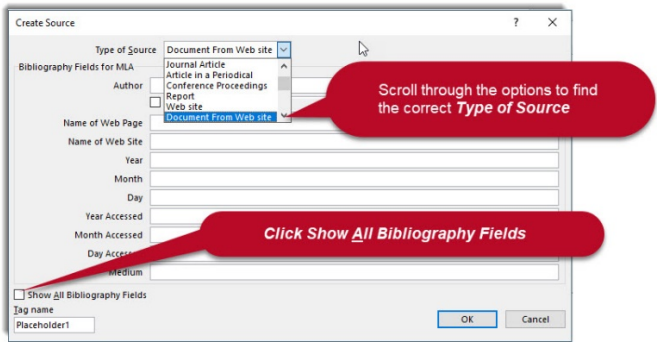


Step 4. Now that the style has been determined, you ***Click*** on ***Manage Sources***

Step 5. This opens the ***source manager***. Since this is new source you ***Click*** on ***New…***

Step 6. When creating a source, it is important to pay close attention to detail. First choose the ***type of source***. This will give you the important fields for citing the document you are referencing.

Step 7. Make sure the ***Show All Bibliography Fields*** option is ***checked***. This will illustrate more available options. It is not necessary to fill in every field but the more detail the better. This gives you the option to record the reference in detail. You may need to refer to this source for a different document.

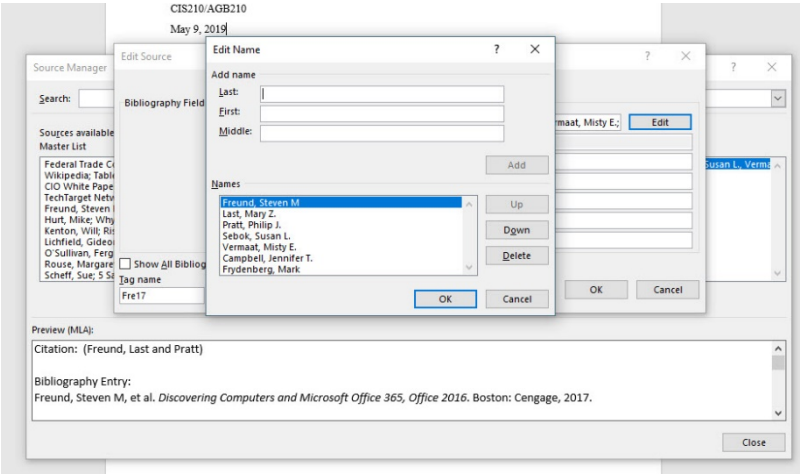


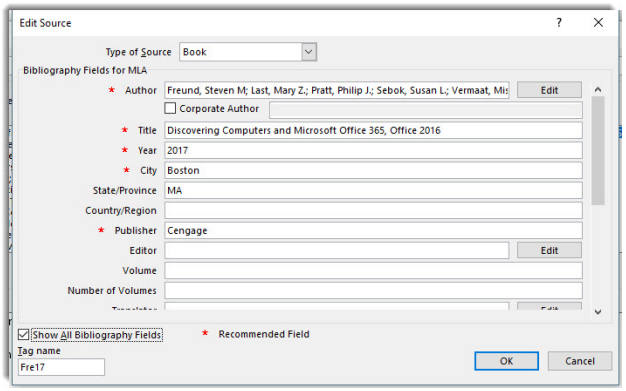
CITATIONS WITH MULTIPLE AUTHORS

Step 8. If your source has multiple authors, you should list all names. To do this ***Click*** on the ***Edit*** option *next to the Author Field*

Step 9. The illustration shows a list of authors that have been entered for a book. Each name is entered in the appropriate field and then the ***Add*** option appears.

Step 10. Once all the authors have been listed in the Names section, ***Click OK***. The list of names now appears in the correct format for the book that has been used.





SAVE YOUR UPDATES

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MANAGING EDITOR - COMBINING REPORTS

If all members of the group use the reference feature, space their reports properly and upload them to the discussion area in a timely manner; it will be easy for the Managing Editor to combine the information submitted. This is what should happen:

Step 1. The group agrees to a designated day in the week for the draft documents to be submitted. Look at this as a **cutoff date**. If you want to receive credit for this assignment, you must submit to the discussion area (***u02d1 – GROUP PROJECT: Discussion***) by the submission date and time the group has agreed.

Step 2. Once the reports are submitted, the ***Managing Editor*** will **upload the reports** from all the participants to their computer. Each Draft report should have at least one reference.

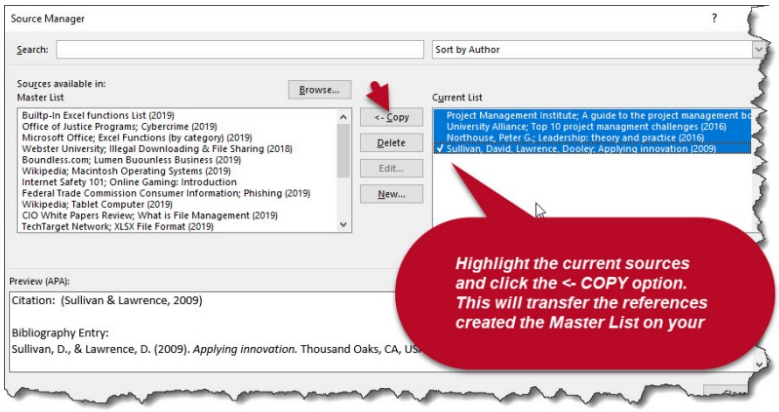
The **Managing Editor will merge the references and content** into one final document.

COMBINING THE REPORTS

Step 1. Use one of the reports submitted as your **initial template**. Save the file and make any edits necessary to the grammar, punctuation or spelling. If you see any obvious formatting mistakes correct them as well. **Save the file** as **u02a1 Final Report**.

Step 2. Open another report submitted and copy the reference used to your initial template.

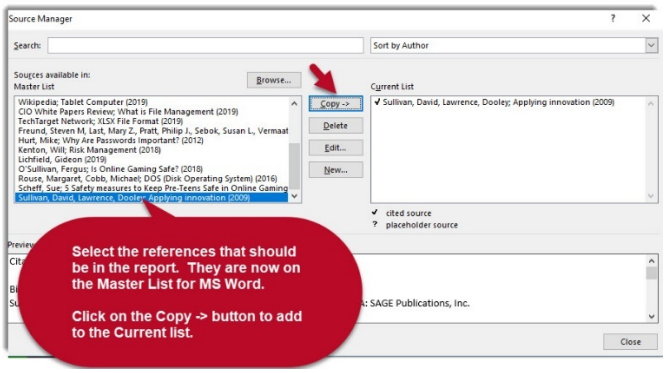
a. **Click** the **References** tab to show the References ribbon
b. In the Citations & Bibliography Group, **Click Manage Sources**
c. Refer to the **Current List**
d. Highlight all the references listed and **Click <-Copy.** This will copy the references to your Master List on your computer.



Step 3. ***Open*** your ***u02a1 Final Report*** created.

Step 4. ***Select*** the references from the ***Master List*** that should be copied to the Current List

Step 5. **Click** the **Copy ->** option. This will copy the reference from the Master list to the Current List



Step 6. **Click Close** to return to the document.

Step 7. **In the document,** make sure you have copied all the text you need for the group report

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

GENERATE AND FORMAT - WORK CITED PAGE

The works cited page alphabetically lists sources that are referenced directly in the paper. MLA requires the list of sources to begin on a new page. These are some of the requirements:

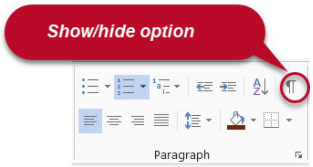
- **Center** the title "**Work Cited**". Do not underline, bold or italicize it.
- The **font** should be the same as the title of the report (**Times New Roman, 12 points, black**)
- The first line of the citation is **outdented**
- The entire list of references is **double spaced**

CREATE WORK CITED PAGE

Step 1. Make sure all applicable ***references*** have been included in the ***Current List*** of sources.

Step 2. Hold down your **CTRL** key and hit the **END** key. This will take you to the end of the document.

Step 3. If your document has extra returns that are not visible, this is a good time to delete those extra returns. Turn on your show/hide button ***Click*** on the ***Home*** tab.



Step 4. In the paragraph group click on the paragraph symbol or use the key stroke method **CTRL + ***

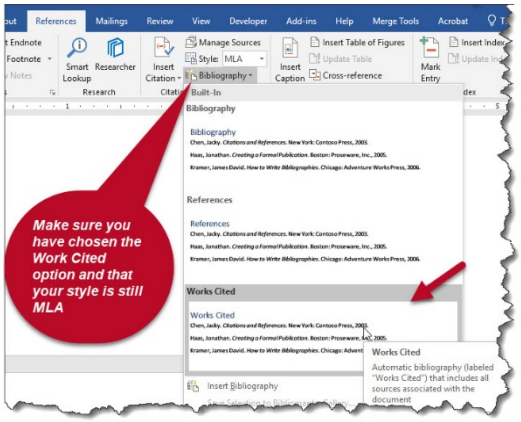
Step 5. Remove any unnecessary returns with your delete key.

Step 6. Insert a page break hold down the ***CRTL*** key and hit ***ENTER*** or Click the Insert tab and select the page break option.

Step 7. Navigate to the ***top*** of ***the new blank*** page just created.

Step 8. ***Click*** the ***References*** tab to display the references ribbon band

Step 9. In the Citations & Bibliography group, **click the down arrow** next to the word **Bibliography**



Step 10. ***Choose*** the ***Works Cited*** Option

Step 11. Word will automatically generate the Works Cited; however, for MLA educational reports you need to format information that is generated.

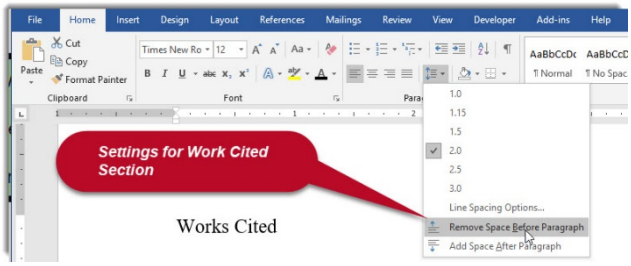
Step 12. ***Select*** the ***entire Works Cited*** including the title

Step 13. ***Click*** the ***Home*** tab to display the home ribbon

Step 14. ***Change*** the **font to *Times New Roman 12 Points***

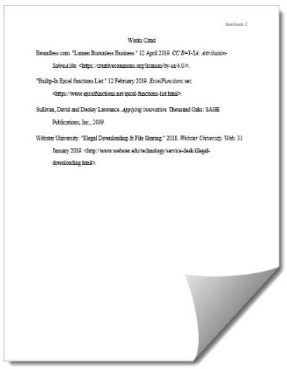
Step 15. With the entire Work Cited still selected, change the **text color to black** or ***automatic***

Step 16. Change the ***line spacing to 2.0*** and ***remove space before***



Step 17. Place your cursor on the words ***Work Cited*** and ***click*** on the ***center*** option

Step 18. Click away from the update Citations and Bibliography menu. Your Work Cited should look like the picture to the right.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CREATING THE COVER PAGE

Once the report is complete, it is easy to create the cover page. The cover page is important in that it contains the names of everyone in your group that participated in this activity. Please ***DO NOT*** include names of students that did not participate. These are the steps to creating the cover page:

Step 1. Navigate to the top of the document. Hold down the ***CTRL*** key and hit the ***HOME*** key.

Step 2. ***Click*** the ***Insert*** tab to display the Insert Ribbon

Step 3. In the Pages group, ***Click Cover Page***.

Step 4. ***Click*** on ***your desired cover page***. It will automatically insert above the first page of the report.

Step 5. Fill out the template. ***Make sure you list all the members of our group that worked on the report.***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

Navigate to the u02a2 assignment and submit the file. Make sure only one submission is made for your group. The group members listed on the cover page will be the members that get credit for the submission.

UNIT 03 – CREATING A RESEARCH PAPER WITH REFERENCES AND SOURCES

In Unit 02 you learned how to adjust line and paragraph spacing, use headers to number pages and create bibliographical list of sources. Unit 03 will expand on those lessons by establishing a roadmap to the following activities:

1. Change the Document Settings
2. Create the Header for each page of the research paper
3. Type the Research Paper with Citations
4. Create an Alphabetical Works Cited page
5. Proofread and Revise the Research Paper

WRITING STYLES FOR REPORTS

When writing a report, the question is often what type of report style to use. The citation style you choose will largely be dictated by the discipline in which you're writing, and for most assignments your instructor will assign a style to you. However, as you progress through your academic career, you may find more flexibility in choosing a style that works for you. It's always best to check with your instructor and colleagues as to what style is appropriate. If you have flexibility, use the guide below to help you decide.

Modern Language Association (MLA)	**American Psychological Association (APA)**	**Chicago**
Humanities: English, Art History, Philosophy, Music, Religion, Language, Linguistics, Etc.	Social Sciences, Education, Engineering, etc.	History, or the Humanities
The humanities place emphasis on **authorship** and interpreting primary sources in a historical context. The **author's name** is the first piece of information preceding title and publication information on the "Works Cited" list at the end of the work.	These disciplines place emphasis on the **date** of creation or publication, to track currency and relevancy. The **date** is listed immediately following the author's name in the "References" list.	Typically accompanied by a "Bibliography" page.

AMERICAN PSYCHOLOGICAL ASSOCIATION (APA)

The American Psychological Association (APA) style is, originally, a set of rules that authors use when submitting papers for publications in the journals of the APA. Established in 1929, the style has since been used to guide research writers and help them achieve – through the use of established standards for language, the construction of correct reference citations, the avoidance of plagiarism, the proper use of headers, among many others – "minimum distraction and maximum precision".

As a complete style and guideline for writing, the APA is a valuable tool for writing scientific papers, laboratory reports, and papers covering topics in the field of psychology, education, and other social sciences. The APA style allows for in-text citations, direct quotations, and endnotes and footnotes. It is also enables the author to use the past tense of verbs in the reportage.

MODERN LANGUAGE ASSOCIATION (MLA)

The Modern Language Association (MLA) style is the leading style of documentation for literary research, as well as academic papers in the humanities field. It follows a specific set of rules for formatting manuscripts, and is considered, along with the APA style, a standardized reference format in college. Compared to the APA style, however, the MLA style focuses on the citation of books, anthologies, literary works, audio-visual material, multimedia, and similar works with much more detail.

Unlike the APA style, the present tense of verbs is most used in the MLA style.

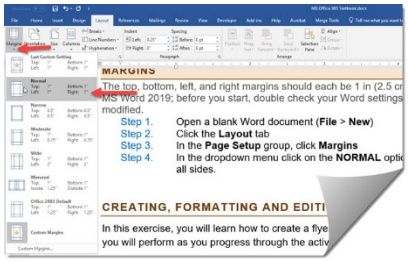
CHICAGO MANUAL STYLE REPORTS

The Chicago Style of writing is used for academic writing in the field of Humanities, especially history. Specific guidelines for formatting a paper in Chicago Style are outlined in manuals such as the 16th edition of the Chicago Manual of Style, which was issued in September 2010, and the 7th edition of A Pocket Guide to Writing in History by Mary Lynn Rampolla, which was issued in 2012.

CHANGE DOCUMENT SETTINGS

MARGINS

The top, bottom, left, and right margins should each be 1 in (2.5 cm) wide. This is the default setting for MS Word 2019; before you start, double check your Word settings to make sure they have not been modified.

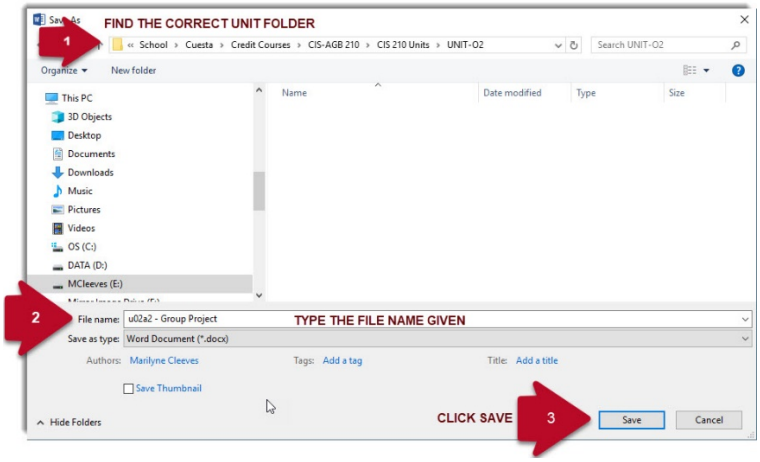


Step 1. Open a blank Word document (**File** > **New**)
Step 2. Click the **Layout** tab
Step 3. In the **Page Setup** group, click **Margins**
Step 4. In the dropdown menu click on the **NORMAL** option. This will set your margins at 1" on all sides.

SAVE THE FILE

Step 5. Now that the margins are set, you should save your file. An easy saving method is to use your **CTRL** key with the letter **S**. In a new document, if you hold down **CTRL** and hit the letter **S**, you will receive a Save As dialog box.

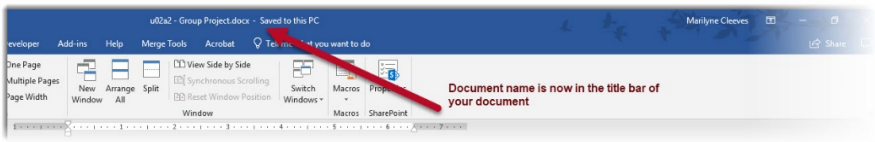
Step 6. Click on the ***Browse*** option and navigate to your folders for this class. In the illustration my folder is in School\Cuesta\Credit Courses\CIS-AGB 210\CIS 210 UNITS\ **UNIT-03**



Step 7. In the section marked **File name**, type your file name as:

u03a1 Headphones and Earbuds

Step 8. ***Click Save***. You will see the new file name appear in the title bar of your document.



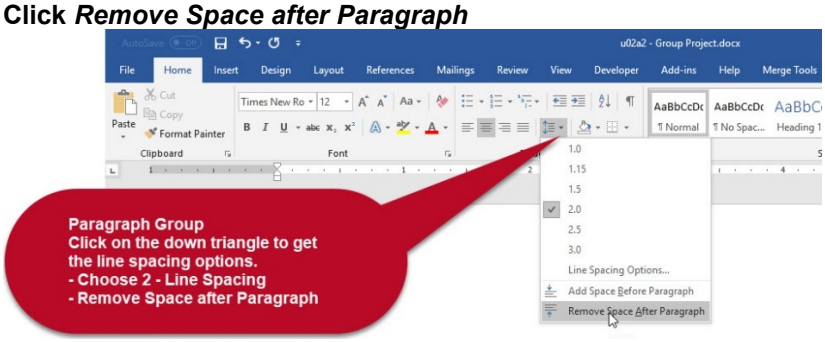
ADJUST LINE AND PARAGRAPH SPACING

Line spacing is the amount of vertical space between lines of text in a paragraph. Paragraph spacing is the amount of space above and below a paragraph. By default, the normal style places 8 points of blank space after each paragraph and inserts a vertical space equal to 1.08 lines between each line of text.

The MLA and APA documentation styles requires that you double-space the entire research paper. Double-space means that the amount of vertical space between each line of text above and below the paragraph should be equal to one blank line.

Use these steps when adjusting the line spacing:

Step 9. **Click** the **Home** tab to bring the Home ribbon into view
Step 10. Navigate to the Paragraph group. In the group, you should notice a small triangle pointing down. You will **click on the *down triangle*** next to the line spacing option
Step 11. **Click *2.0*** for the spacing
Step 12. **Click *Remove Space after Paragraph***



You should now have the proper spacing for the report.

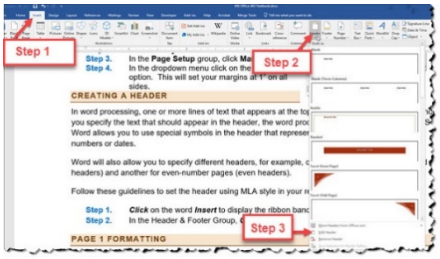
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CREATING A HEADER

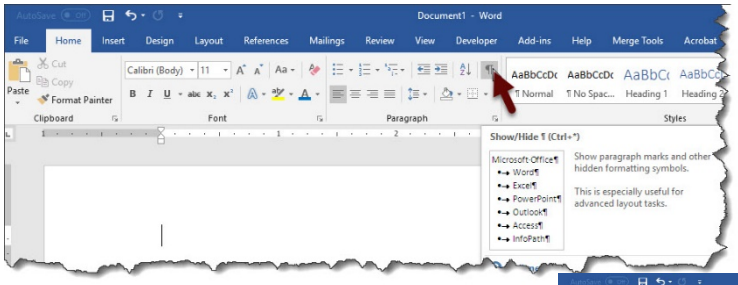
In word processing, one or more lines of text that appears at the top of each page of a document. Once you specify the text that should appear in the header, the word processor automatically inserts it. MS Word allows you to use special symbols in the header that represent changing values such as page numbers or dates.

Word will also allow you to specify different headers, for example, one for odd-numbered pages (odd headers) and another for even-number pages (even headers).

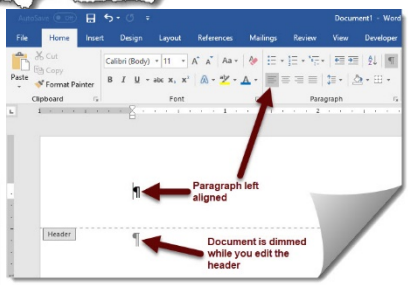


Follow these guidelines to set the header using MLA style in your report.

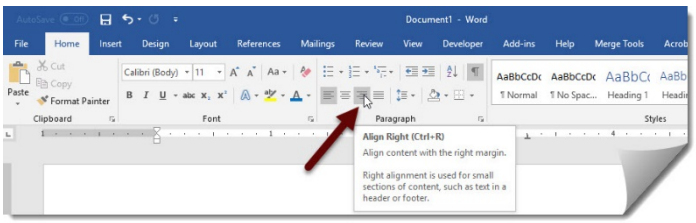
Step 1. ***Click*** on the word ***Insert*** to display the ribbon band.
Step 2. In the Header & Footer Group, ***Click Header***
Step 3. In the drop-down menu**,** ***Click Edit Header***
Step 4. **Click** the **Home** tab to display the home ribbon band.
Step 5. While editing the header**, click the show/hide** option.



The show/hide button shows the paragraph marks for the activity. Note that the paragraph is now left aligned.



Step 6. ***Click*** on the ***Align Right*** Option.



Step 7. When writing an MLA paper, you would usually put your last name and then insert the page number. Because this is a group project, I am expecting to see your group name and the page number. ***Type*** your ***last name*** and hit the ***space*** bar.

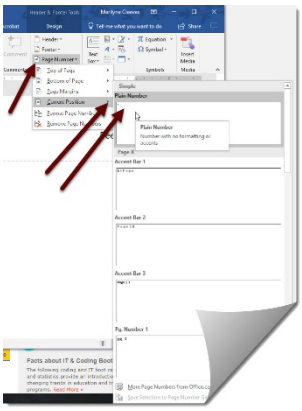
Step 8. ***Click*** on the ***Insert*** tab to display the Insert ribbon band.

Step 9. In the Header & Footer Group, ***Click*** on ***Page Number.***

Step 10. Choose ***Current Position***. ***Click*** on the ***Plain Number*** option. Word will automatically place the page current page number next to the space after the name. This is a code. As your paper progresses, you will note that all the pages are automatically numbered with the current page number for that page.

Step 11. Next ***Click*** on the contextual tab labeled ***Header and Footer Tools***. This menu only appears when you are in the header & footer option of MS Word.

Step 12. You will notice a red X at the end of the menu. ***Click*** on the option to ***Close Header and Footer***.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

NAME AND COURSE INFORMATION (PAGE 1)

MLA style does not require a separate title page for research papers. Since we are learning MLA format, you will be following all the guidelines for the style. The title page added after the report will be completed for your instructor to identify which members of your group helped with the activity.

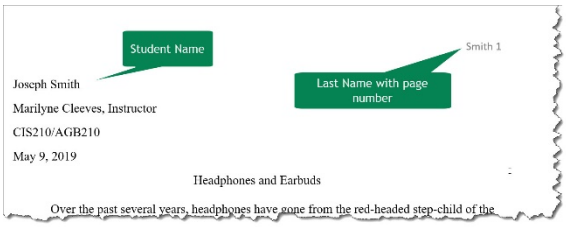
You will be placing your name and course information in a block at the top of the first report page. This is the format used in this section:

Student Name

Instructor Name

Course Number

Date (use month day, year option)



SAVE YOUR UPDATES

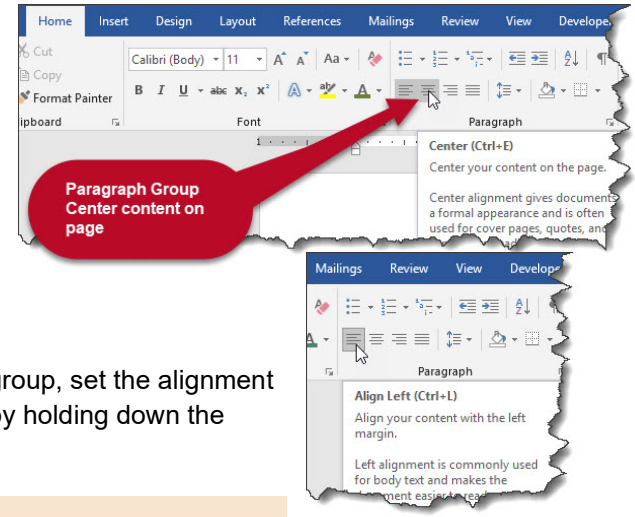
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CLICK AND TYPE

After you have configured the first page information using your name and current date, hit the enter key 1 time. Double check the following settings:

1. Font is Times New Roman 12 points
2. Line spacing is 2.0 with no extra spacing before or after the paragraph

You are now ready to begin the report. The title of the report is centered on the page. Follow these steps to center the title.



Step 1. ***Click*** on the ***Home*** tab to display the Home Ribbon

Step 2. Navigate to the ***paragraph group***

Step 3. ***Click*** on the ***Center*** option or hold down your **CTRL** key and tap the letter **E**

Step 4. ***Type*** the title of the report
Headphones and Earbuds

Step 5. ***Hit Enter***

Step 6. Using the Home-ribbon; paragraph-group, set the alignment back to left. This can also be done by holding down the CRTL key and hitting the letter L

DISPLAY THE RULERS

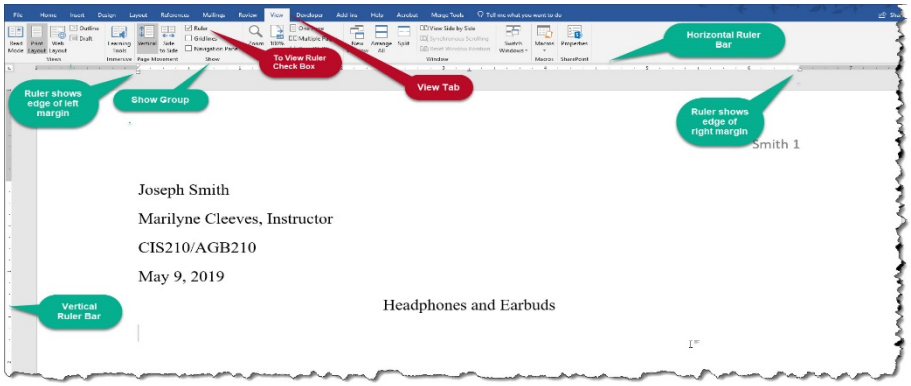
Word's rulers let you control the margins of your page and the indentation of paragraphs. They're great for precisely lining up images, text, and other elements. If you're printing a document, the rulers can help ensure that what you see on your screen translates into what you'll get on the printed page.

The trouble is, rulers aren't even visible by default in Word anymore. Here's how to turn them on, and how to make the most out of them.

Step 1. ***Click*** on the ***View*** option to display the View Ribbon band

Step 2. Navigate to the ***Show group***. This group has 3 options Ruler, Gridlines and Navigation Pane.

Step 3. ***Click*** on ***Ruler*** this will display both the horizonal and vertical rulers of the page.



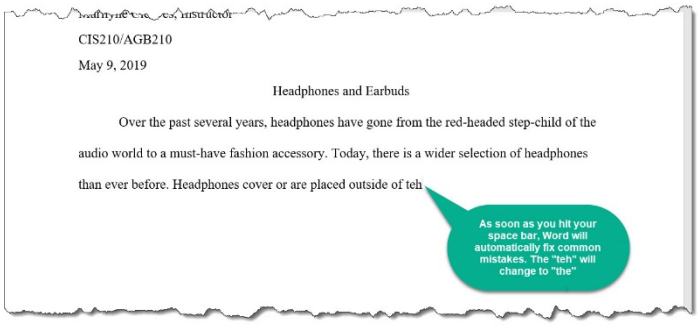
WORD WRAP

The word processor has a feature called ***Word Wrap***. *Word Wrap* is used to force all text to fit within the defined margins. When you fill one line with text, the word processor automatically jumps to the next line. You are not required to keep track of line lengths or to press the Enter key after each line.

Step 1. With the insertion point below the title, **HIT** your **TAB** one time. This will automatically indent the first line of the paragraph .5 inch. For MLA papers, paragraphs should be indented .5 inch unless after a level B heading. We will not be creating any level B

headings in this document; therefore, all new paragraphs will have a first line indent of .5 inch.

Step 2. Type ***Over the past several years, headphones have gone from the red-headed step-child of the audio world to a must-have fashion accessory. Today, there is a wider selection of headphones than ever before.***



Step 3. Hit your space bar and then type the beginning of the next sentence, misspelling the word, the as follows: ***Headphones cover or are placed outside of teh***

Step 4. Press the spacebar and watch Word automatically correct the misspelled word. Type the rest of the sentence: ***ear, whereas earbuds rest inside the ear canal.***

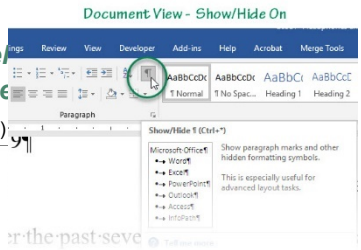
Step 5. Finish the paragraph with the following misspelled words: ***With these listening devices, only the individual wearing the devices hears the sould. Using headphones or earbuds improperly can lead to permanent hearing loss. Items that may protect hearing include quality of these devices and volume levels.***

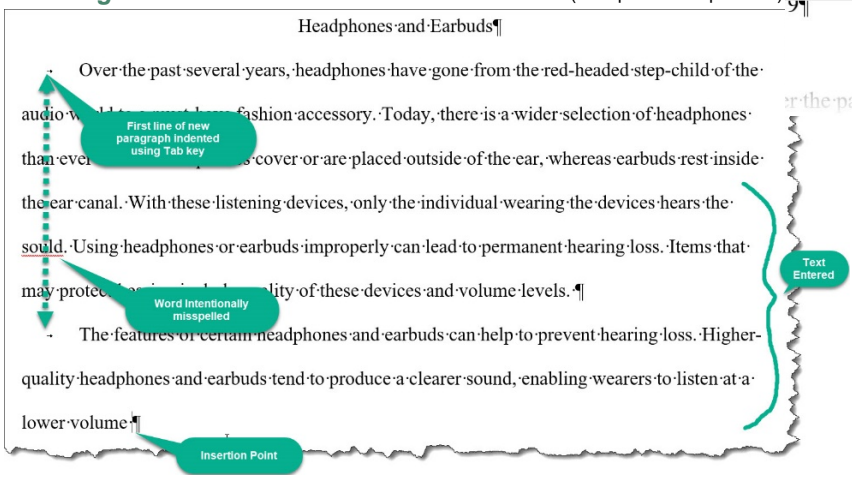
NOTE: Some of the words are intentionally spelled incorrectly. You will be using the Word spelling and grammar check to fix the errors later in the activity.

Step 6. ***Hit Enter*** to start a new paragraph

Step 7. Remember the first line of the new paragraph is indented .5 inch. ***STRIKE*** your ***TAB*** key one time.

Step 8. Type ***The features of certain headphones and earbuds can he loss. Higher-quality headphones and earbuds tend to produce enabling wearers to listen at a lower volume*** (then press the spacebar)





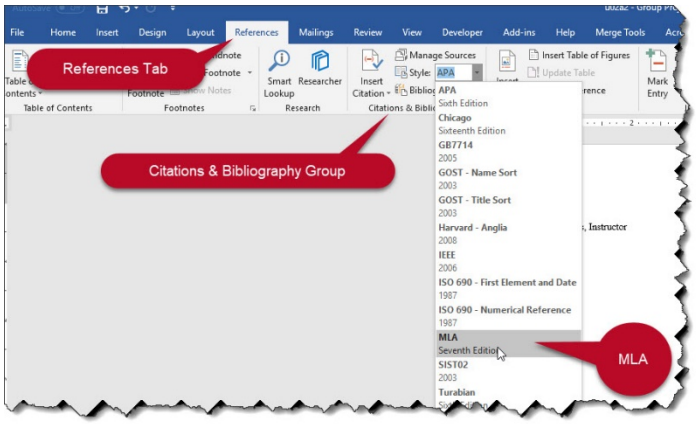
CREATE CITATION #1

Step 1. **Click** on the **References** option to open the References ribbon band.

Step 2. ***Find*** the ***Citations & Bibliography group***

Step 3. In the ***Style*** option choose ***MLA.***

NOTE: *Word 2019 is using the Seventh Edition. When writing a report, it is important to ask your instructor which style and edition he or she requires. The rules change over time and many instructors follow rigid guidelines.*

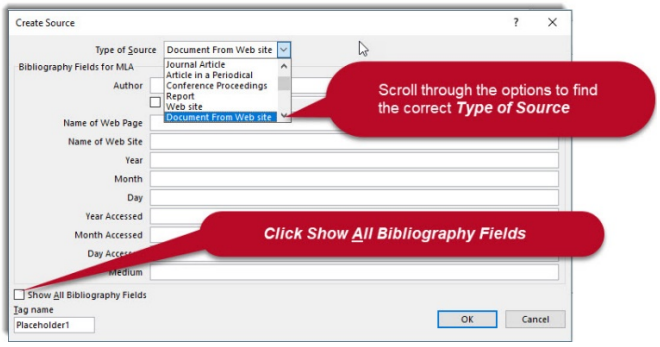


Step 4. Now that the style has been determined, you ***Click*** on ***Manage Sources***

Step 5. This opens the ***source manager***. Since this is new source you ***Click*** on ***New…***

Step 6. When creating a source, it is important to pay close attention to detail. First choose the ***type of source***. This will give you the important fields for citing the document you are referencing.

Step 7. Make sure the ***Show All Bibliography Fields*** option is ***checked***. This will illustrate more available options. It is not necessary to fill in every field but the more detail the better. This gives you the option to record the reference in detail. You may need to refer to this source for a different document.



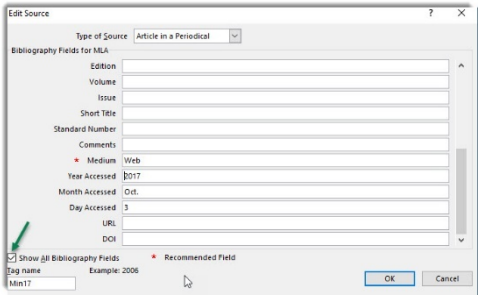
Step 8. **CITATION #1**

a. TYPE OF SOURCE: ***Article or Periodical***
b. AUTHOR: ***Mingzhu Lin Tu***
c. TITLE: ***Headphones and Earbuds***
d. PERIODICAL: ***Technology and Trends Today***
e. YEAR: ***2017***

f. MONTH: ***Aug.***
g. PAGES: ***n. pag.***
h. MEDIUM: ***Web***

CHECK SHOW ALL BIBLIOGRAPHY FIELDS

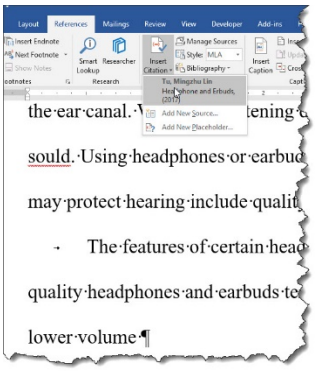
i. YEAR ACCESSED: ***2017***
j. MONTH ACCESSED: ***Oct.***
k. DAY ACCESSED: ***3***



NOTE: MLA documentation abbreviates all months, except May, June, and July
n. pag. means there is no pagination

INSERT CITATION AND TEXT

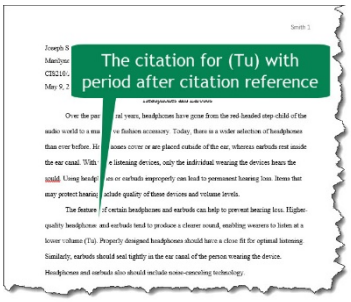
With your insertion point after space in the word volume (second paragraph), you are ready to insert the citation you created. Follow these steps:



Step 1. ***Click*** on the ***References*** tab to display the reference ribbon
Step 2. In the *Citations and Bibliography* group, **Click Insert Citation**
Step 3. Navigate to the citation by ***Tu*** and ***Click*** on it.

NOTE: Word automatically set the last name of the author first. This is a convenient feature. If you type the name in the regular format (First name Last name), word knows to search for the last name and use that name for the reference.

Step 4. Type a ***period with a space after it*** at the end of the citation.
Step 5. Type more text: ***Properly designed headphones should have a close fit for optimal listening. Similarly, earbuds should seal tightly in the ear canal of the person***



wearing the device. Headphones and earbuds also should include noise-canceling technology.

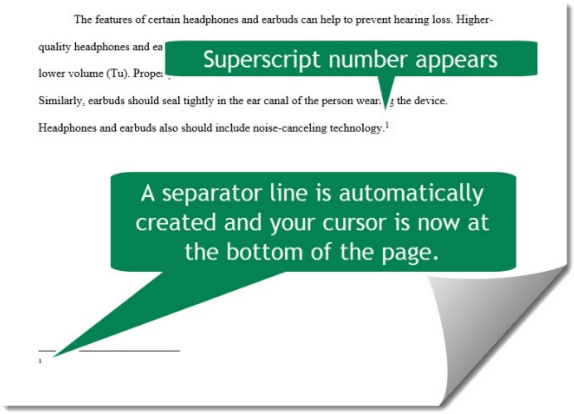
INSERT FOOTNOTE

The MLA documentation style specifies that a superscript ((raised number) be used for a note reference mark to signal that a note exists either at the bottom of the page as a footnote or at the end of the document as an endnote.

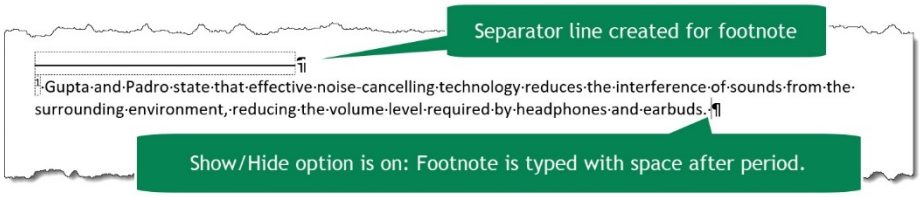
Footnotes appear at the bottom of the page and endnotes come at the endo of the document. A number or symbol on the footnote or end note matches up with a reference mark in the document.

**** IMPORTANT NOTE:*** Once you have created the footnote it is important that you click back into the main portion of the document. Please follow these detailed instructions:

Step 1. ***Click*** on the ***References*** tab to display the references ribbon
Step 2. Look for the ***Footnotes group***.
Step 3. After the period (no space) in the word technology, ***Click Insert Footnote***.
Step 4. A number ***superscript number will appear***, and ***your mouse will be directed down to the bottom of the page.*** *Notice there is a separator line that has been automatically created. The footnote is numbered in the document and at the bottom of the page.*



Step 5. Type the footnote: ***Gupta and Padro state that effective noise-cancelling technology reduces the interference of sounds from the surrounding environment, reducing the volume level required by headphones and earbuds.*** HIT YOUR SPACE BAR AFTER THE PERIOD.

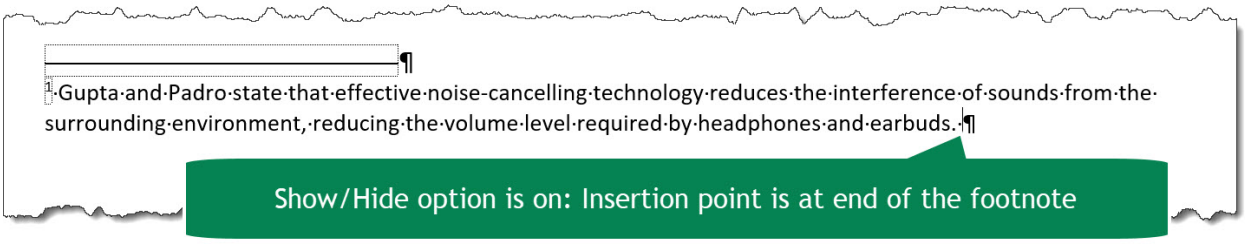


SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

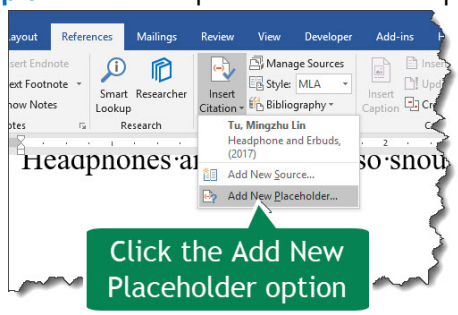
INSERT CITATION PLACEHOLDER

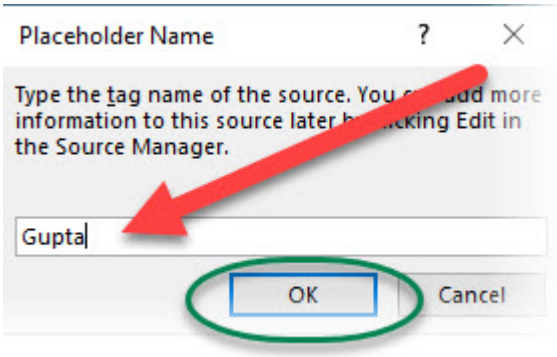
With your cursor insertion point at the end of the footnote, you are going to insert a citation placeholder following these instructions:



Step 1. ***Click*** on the ***References*** tab to display the references ribbon
Step 2. In the Citations & Bibliography group, ***Click*** on ***Insert Citation***

Step 3. The drop-down menu will display several options. ***Click*** on ***Add New Placeholder***.





Step 4. Type ***Gupta*** as the tag name for the source

Step 5. ***Click OK***

[1] Gupta and Padro state that effective noise-cancelling technology reduces the interference of sounds from the surrounding environment, reducing the volume level required by headphones and earbuds (Gupta).

Footnote with Placeholder (Gupta).
Make sure the period is after the placeholder

MODIFY FOOTNOTE STYLE

The default Footnote Text style specifies left-aligned single-spaced paragraphs with a 10-point font size for text. To meet MLA document style, the footnotes should be double-spaced with a first-line indent and Times New Roman 12-point font. Follow these instructions to change the format for the footnote style:

Step 1. ***Right-click*** anywhere in the ***footnote***

Step 2. ***Click*** the ***Style. . .*** option

Step 3. Because you chose the style option while in the footnote, the style menu opens to edit the ***footnote text. Click Modify***

Step 4. Change the ***font*** to ***Times New Roman***

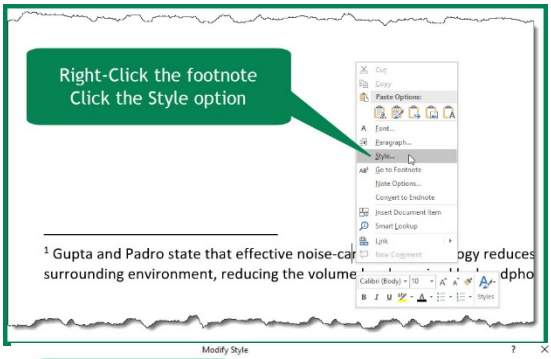
Step 5. Change the ***size*** to ***12***

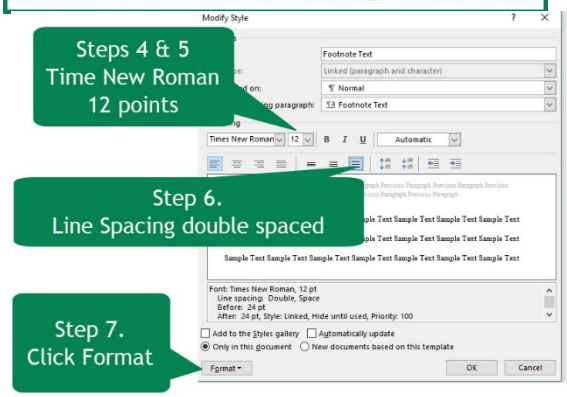
Step 6. Click the ***Line spacing*** option (image below) to ***double***

Step 7. ***Click*** the ***Format*** option

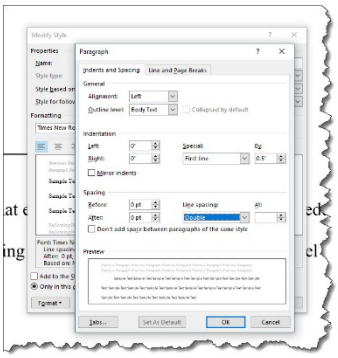
Step 8. ***Click*** the ***Paragraph*** option

Step 9. ***Click*** the tab for ***Indents and Spacing***





Check the settings. You should have the following set for your footnote text



i. ALIGNMENT: **left**
ii. OUTLINE LEVEL: **Body Text**
iii. INDENTATION LEFT: **0”**
iv. INDENTATION RIGHT: **0”**
v. INDENTATION SPECIAL: **First line**
   1. By: **0.5”**
vi. SPACING BEFORE: **0 pt**
vii. SPACING AFTER: **0 pt**
viii. LINE SPACING: **Double**

Step 10. Once your paragraph settings are complete, ***Click OK***

Step 11. In the Modify Style dialog box, ***Click*** on ***Apply***

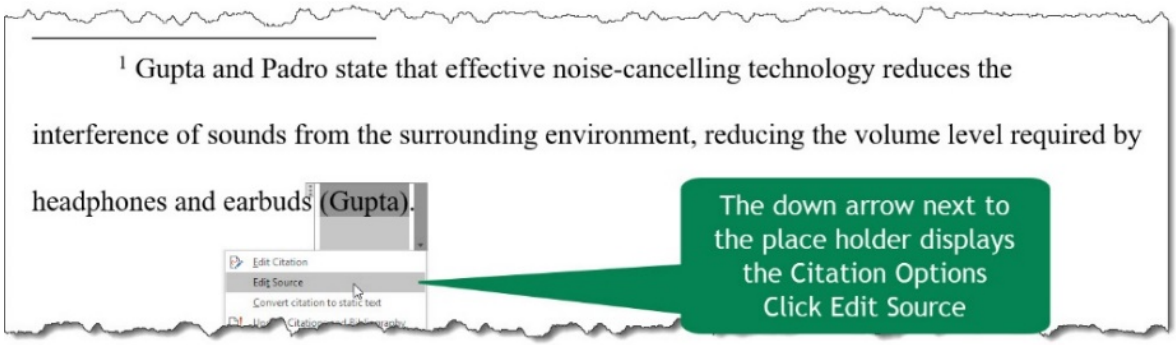
NOTE: Changing style for the footnote changes the settings throughout the document. If you create a second footnote, it will use the new style. Keep in mind, unless you change the default style, your style changes stay with the current document.

EDIT A SOURCE

Step 1. ***Click*** the ***placeholder*** (Gupta) for the citation.

Step 2. ***Click*** the ***Citation Options*** arrow (next to the placeholder)

Step 3. ***Click Edit Source***



Step 4. ***Click*** on the ***Edit*** option *next to the Author Field*. Each name is entered in the appropriate field and then the **Add** option appears.

Step 5. Enter the following information for each author

a. AUTHOR #1
   i. **LAST:** ***Gupta***
   ii. **FIRST**: ***Elena***
   iii. **MIDDLE:** ***Maia***

Step 6. **Click Add**

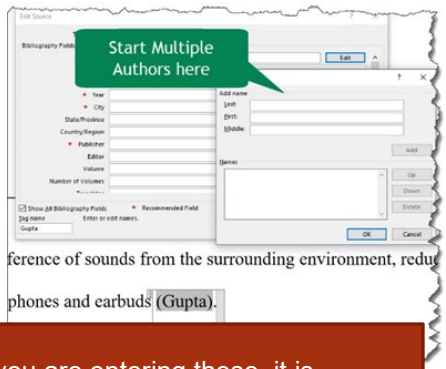
a. AUTHOR #2
   i. **LAST:** ***Padro***
   ii. **FIRST:** ***Adelbert***
   iii. **MIDDLE:** ***Luis***

Step 7. ***Click Add***

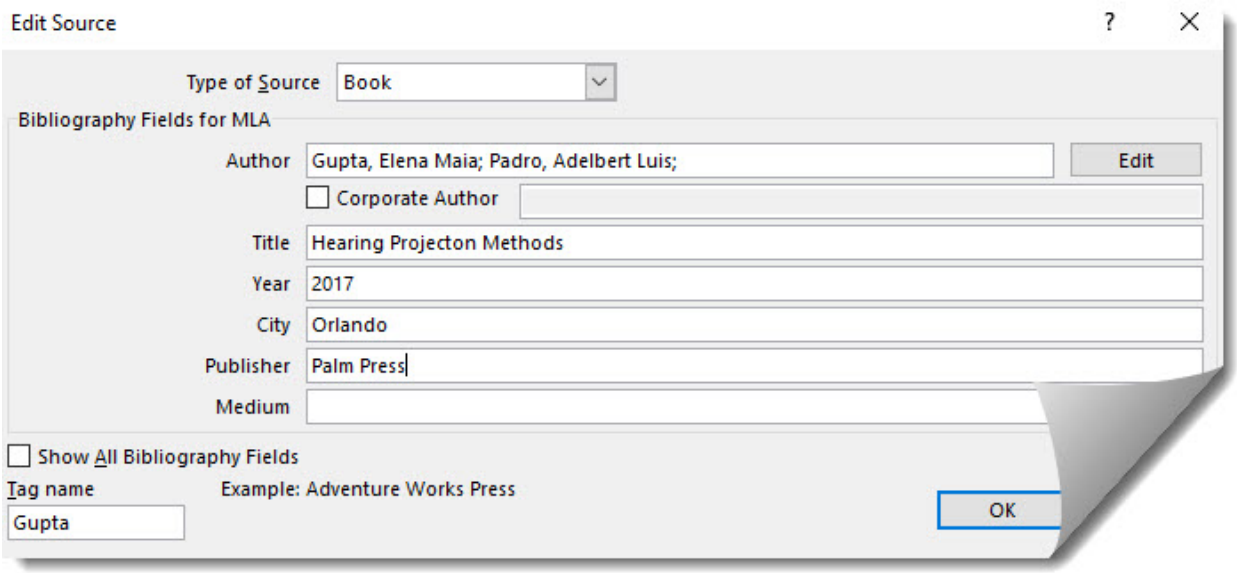
Step 8. ***Click OK***

Step 9. You are now ready to enter the book information. In each field enter the following (tab to each entry):

a. TYPE OF SOURCE: ***Book***
b. ***AUTHOR:*** *Tab to the title field*
c. TITLE: ***Hearing Projection Methods***
d. YEAR: ***2017***
e. CITY: ***Orlando***
f. PUBLISHER: ***Palm Press***



NOTE: When you are entering these, it is easiest to tab after each entry. That will automatically take you to the next field. (ie: Enter last name, tab; Enter first name, tab; Enter middle, Add)



Step 10. ***Click OK***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

EDIT A CITATION

The citation in the report now has two authors listed. MLA document style requires the page numbers are included with citation. This is the process you should follow to insert the page numbers into the citation we just created:

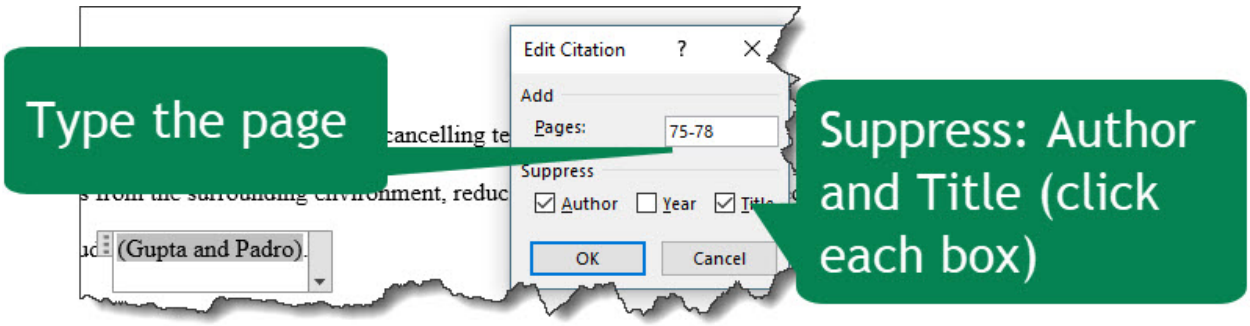
Step 1. ***Select*** the ***citation drop-down menu*** to reveal the options.

Step 2. ***Click Edit Citation***

Step 3. Our citation is only going to show the page number. In the Edit Citation display box, Click the following:

a. **SUPPRESS:** Author and Title
Type the entries for the pages as follows (NUMBERS ONLY)

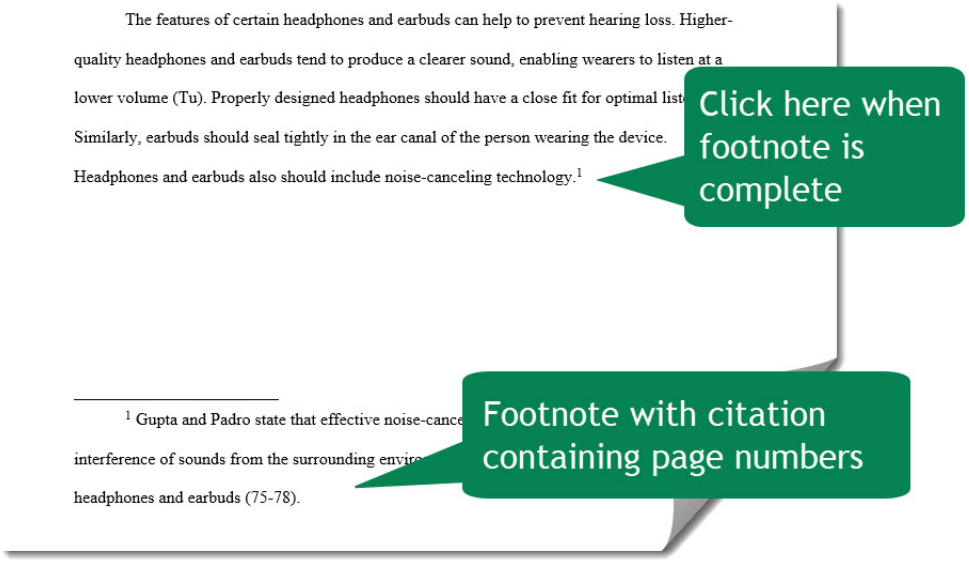
b. **PAGES:** ***75-78***



Step 4. **Click OK**

The footnote will look like the following screen. After you have verified the screen is information is correct, you need to make sure you have exited the footnote feature. This is done by following these guidelines:

Step 5. In the document, ***Click*** into the text area ***after the footnote reference*** (number).



SAVE YOUR UPDATES

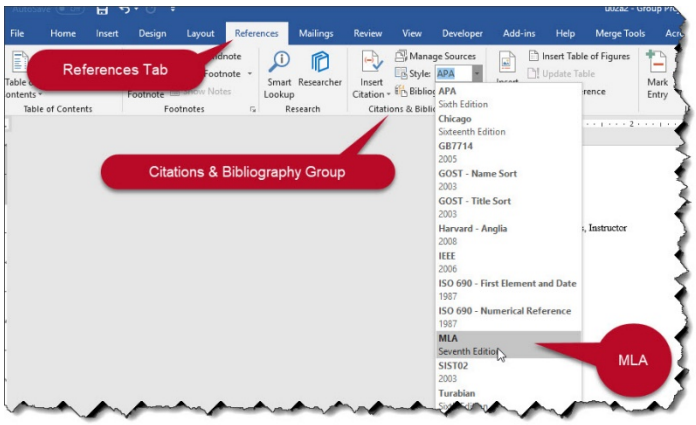
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ENTER CITATION #3 AND TEXT

With your insertion point after the reference number in the document, follow these steps:

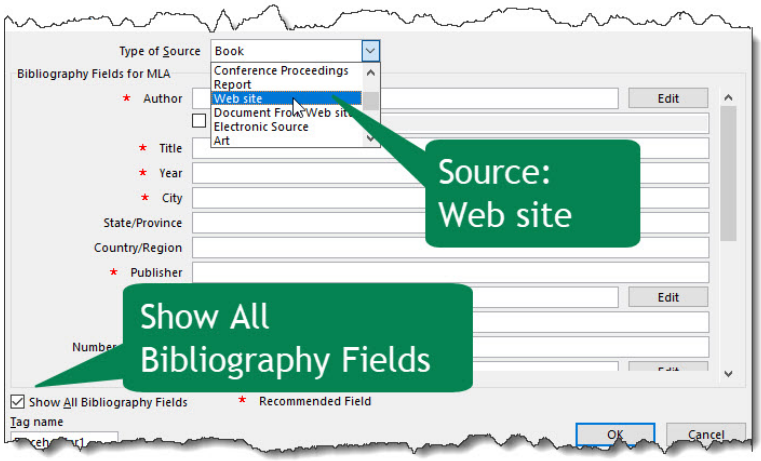
Step 1. ***Hit*** your ***Enter*** key to start a new paragraph
Step 2. ***Tab*** to indent the first line of the paragraph
Step 3. Type ***The volume level of the sound that transmits from headphones or earbuds into the ear of a person we4aring this type of device has been linked to hearing loss. The volume should be set low enough that other people nearby cannot hear the sound being transmitted. The quieter the sounds, the less possibility of hearing damage. Further, listening at a higher volume for extended periods of time could be unsafe. One expert suggests people should listen at only 30 percent maximum***
Step 4. ***Hit*** your ***Spacebar*** after the word maximum
Step 5. **Click** on the **References** option to open the References ribbon band.
Step 6. ***Find*** the ***Citations & Bibliography group***
Step 7. In the ***Style*** option choose ***MLA.***

NOTE: *Word 2019 is using the Seventh Edition. When writing a report, it is important to ask your instructor which style and edition he or she requires. The rules change over time and many instructors follow rigid guidelines.*



Step 8. Now that the style has been determined, you ***Click*** on ***Manage Sources***
Step 9. This opens the ***source manager***. Since this is new source you ***Click*** on ***New…***
Step 10. When creating a source, it is important to pay close attention to detail. First choose the ***type of source***. This will give you the important fields for citing the document you are referencing.
Step 11. Make sure the ***Show All Bibliography Fields*** option is ***checked***. This will illustrate more available options. It is not necessary to fill in every field but the more detail the better. This gives you the option to record the reference in detail. You may need to refer

to this source for a different document.



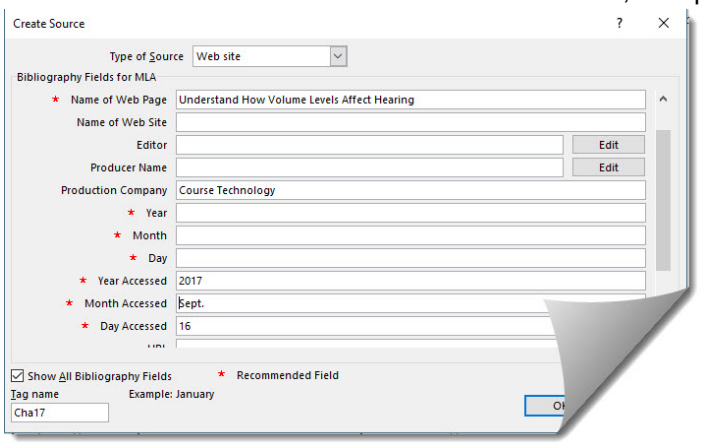
Step 12. **CITATION #3**

a. TYPE OF SOURCE: ***Website***
b. AUTHOR: ***Megan Lynn Chamberlain***
c. TITLE: ***Understand How Volume Levels Affect Hearing***
d. COMPANY: ***Course Technology***
e. YEAR:
f. MONTH:

CHECK SHOW ALL BIBLIOGRAPHY FIELDS

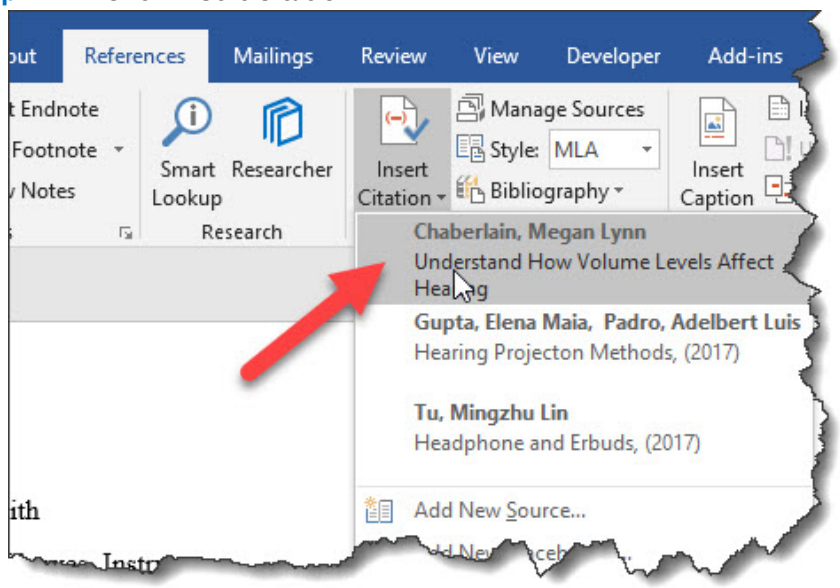
g. YEAR ACCESSED: ***2017***
h. MONTH ACCESSED: ***Sept.***
i. DAY ACCESSED: ***16***
j. MEDIUM: ***Web***

NOTE: MLA documentation abbreviates all months, except May, June, and July



Step 13. ***Click OK*** (your citation is now complete)

Step 14. ***Click Insert Citation***



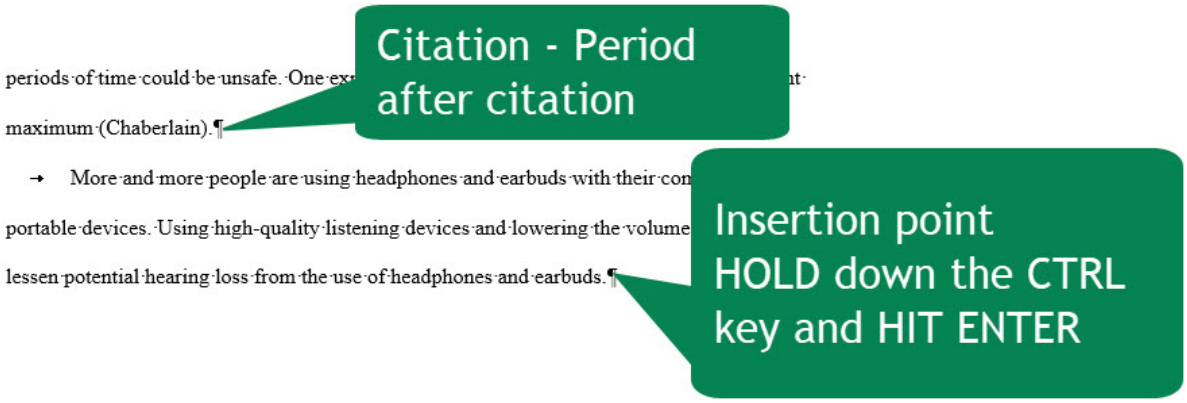
Step 15. ***Choose the Chamberlain*** citation and ***Click*** on it

Step 16. Place your punctuation after the citation. ***Enter a period.***

Step 17. **Hit enter** to advance to the next paragraph

Step 18. ***Hit Tab*** to indent the first line of the paragraph

Step 19. Type ***More and more people are using headphones and earbuds with their computers and portable devices. Using high-quality listening devices and lowering the volume can help to lessen potential hearing loss from the use of headphones and earbuds.***



Step 20. Enter a manual page break by holding down your ***CTRL*** key and ***HIT ENTER***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

BIBLIOGRAPHICAL LIST – MLA WORK CITED

The next task is to use Word to format the list of sources and alphabetize them in a biographical list. The following steps are for creating an MLA-styled biographical list from the sources previously entered.

The works cited page alphabetically lists sources that are referenced directly in the paper. MLA requires the list of sources to begin on a new page. These are some of the requirements:

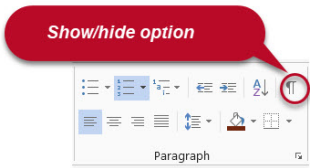
- **Center** the title "**Work Cited**". Do not underline, bold or italicize it.
- The **font** should be the same as the title of the report (**Times New Roman, 12 points, black**)
- The first line of the citation is **outdented**
- The entire list of references is **double spaced**

CREATE WORK CITED PAGE

Step 1. Make sure all applicable ***references*** have been included in the ***Current List*** of sources.

Step 2. Hold down your **CTRL** key and hit the **END** key. This will take you to the end of the document.

Step 3. If your document has extra returns that are not visible, this is a good time to delete those extra returns. Turn on your show/hide button ***Click*** on the ***Home*** tab.



Step 4. In the paragraph group click on the paragraph symbol or use the key stroke method **CTRL + ***

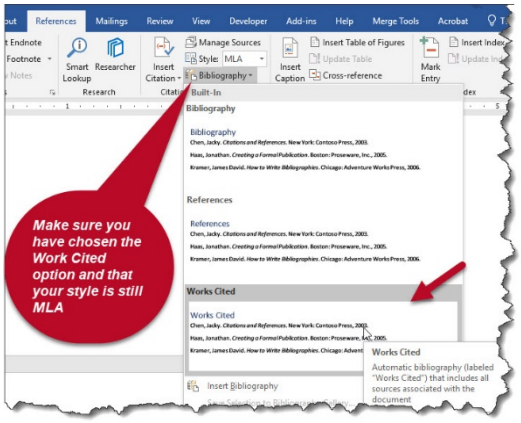
Step 5. Remove any unnecessary returns with your delete key.

Step 6. Insert a page break hold down the ***CRTL*** key and hit ***ENTER*** or Click the Insert tab and select the page break option.

Step 7. Navigate to the ***top*** of ***the new blank*** page just created.

Step 8. ***Click*** the ***References*** tab to display the references ribbon band

Step 9. In the Citations & Bibliography group, **click the down arrow** next to the word **Bibliography**



Step 10. ***Choose*** the ***Works Cited*** Option

Step 11. Word will automatically generate the Works Cited; however, for MLA educational reports you need to format information that is generated.

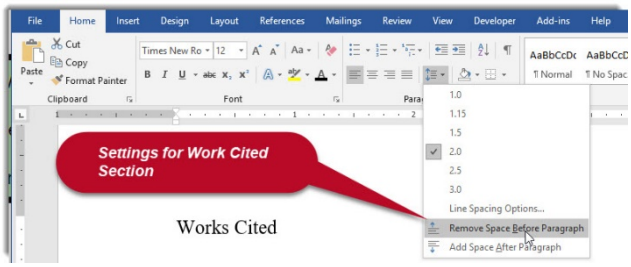
Step 12. ***Select*** the ***entire Works Cited*** including the title

Step 13. ***Click*** the ***Home*** tab to display the home ribbon

Step 14. ***Change*** the **font to *Times New Roman 12 Points***

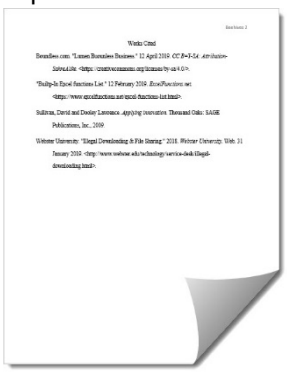
Step 15. With the entire Work Cited still selected, change the **text color to black** or ***automatic***

Step 16. Change the ***line spacing to 2.0*** and ***remove space before***



Step 17. Place your cursor on the words ***Work Cited*** and ***click*** on the ***center*** option

Step 18. Click away from the update Citations and Bibliography menu. Your Work Cited should look like the picture to the right.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

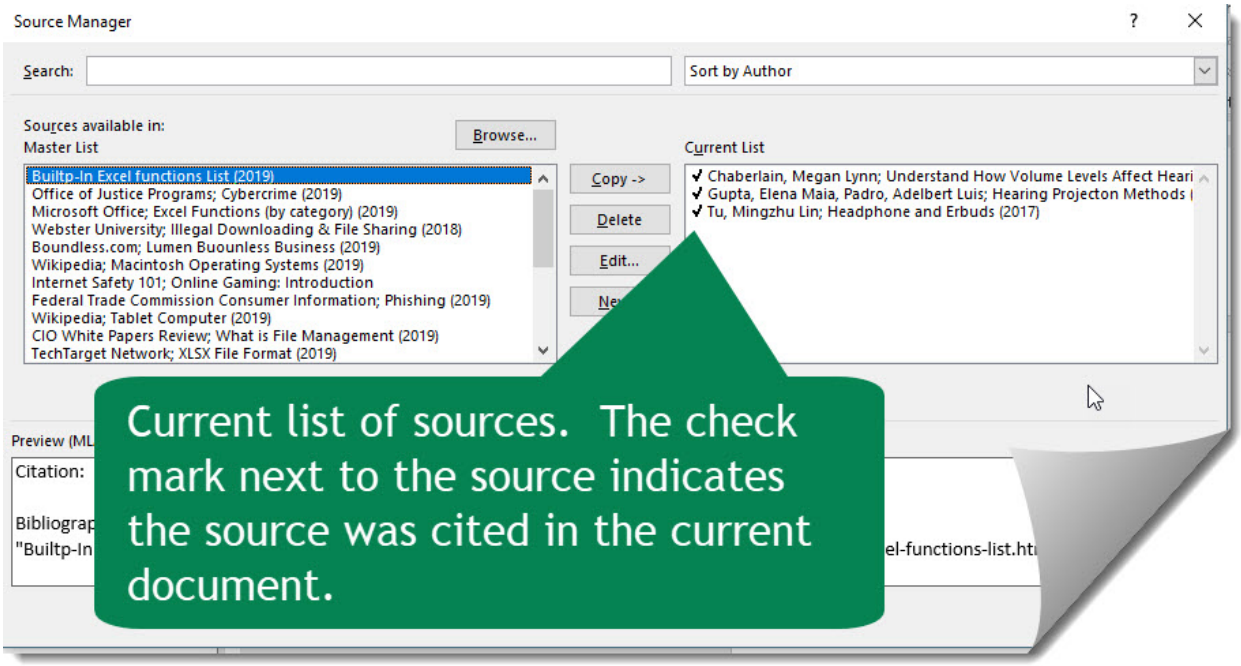
MODIFY A SOURCE

As you proofread your paper, you may find errors with the sources that should be revised. If you modify the contents of any source, the list of sources automatically updates. Follow these steps to modify the sources in this document:

Step 1. ***Click*** the ***References*** tab to display the References ribbon band

Step 2. In the Citations & Bibliography group, ***Click Manage Sources***

You may have many sources from previous papers; however, the sources for this paper will appear in the right panel of the page.



Step 3. ***Click*** on the ***Current List*** reference for ***Tu***

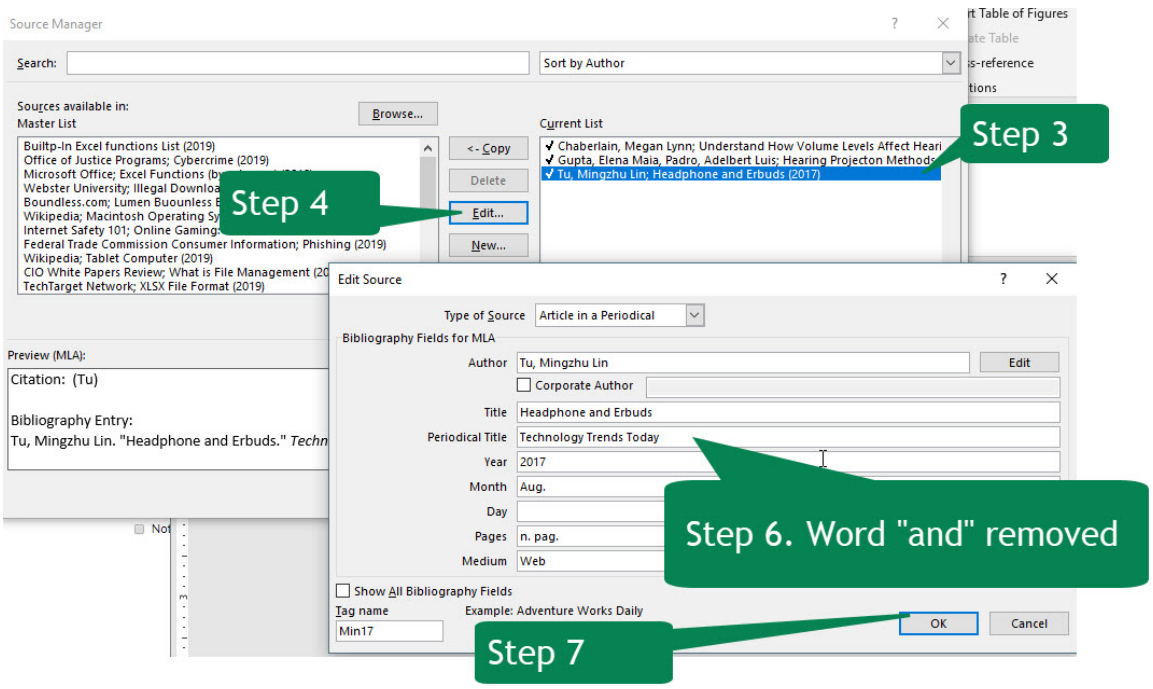
Step 4. ***Click Edit***

Step 5. ***Change*** the reference for the **Periodical Title**

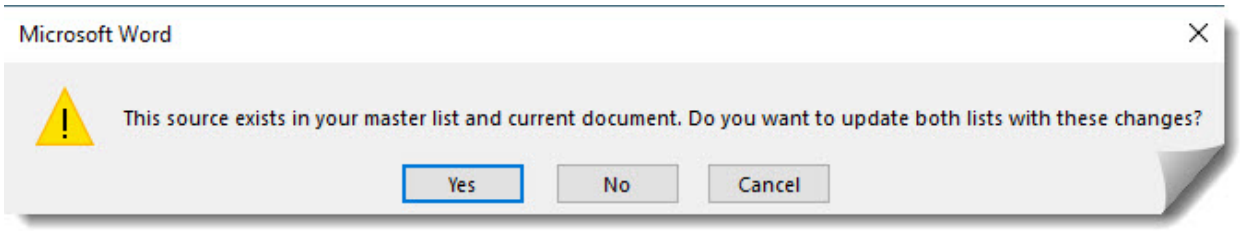
Step 6. ***Remove*** the word ***and***

a. **PERIODICAL TITLE:** ***Technology Trends Today***

Step 7. ***Click OK***



Step 8. Whenever you change the current list of references, you are prompted to change the Master List as well. ***Click Yes*** to confirm the change to the Master list.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

UPDATE THE WORK CITED

Once you have made changes to the sources in the document, you can update the sources generated very easily. Follow these steps to update the Work Cited references:

Step 1. ***Right-click*** anywhere in the ***Work Cited bibliography text***. This will display the shortcut menu

Step 2. ***Click Update Field***

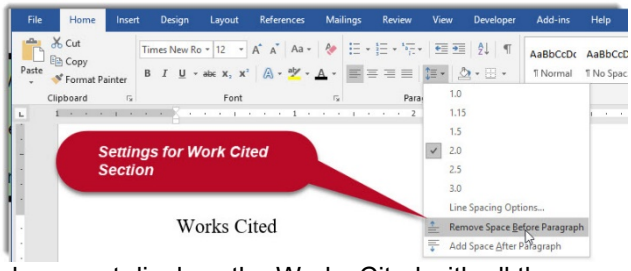
Step 3. If your font and spacing changed, make sure you change it back to the correct settings. ***Select*** the ***entire Works Cited*** including the title

Step 4. ***Click*** the ***Home*** tab to display the home ribbon

Step 5. ***Change*** the **font to *Times New Roman 12 Points***

Step 6. With the entire Work Cited still selected, change the **text color to black** or ***automatic***

Step 7. Change the ***line spacing to 2.0*** and ***remove space before***



The following document displays the Works Cited with all the new adjustments made:

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

COPYING, CUTTING, AND PASTING

The Office Clipboard allows you to copy up to 24 items from Office documents or other programs and paste them into another Office document. For example, you can copy text from an email message, data from a workbook or datasheet, and a graphic from a presentation, and then paste them all into a document. By using the Office Clipboard, you can arrange the copied items the way that you want in the document.

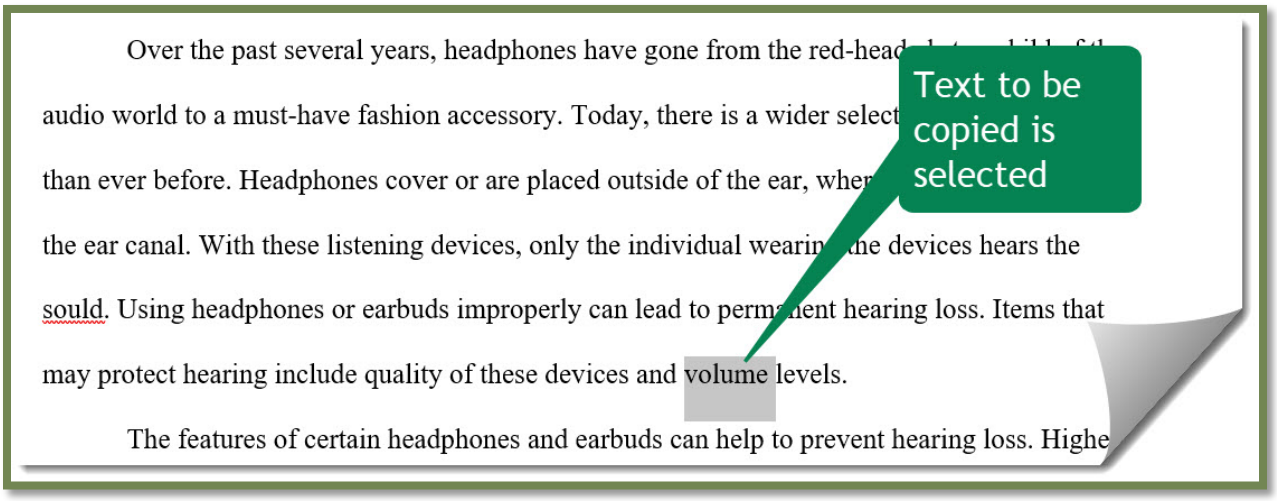
You're not limited to only pasting the last item you copied or cut when you use the Clipboard task pane. The Clipboard task pane holds many of the last images and text you copied or cut.

NOTE: You can still do simple cut, copy, and paste the way you're used to, either by using the buttons on the ribbon or the keyboard shortcuts **CTRL+X (Cut), CTRL+C (Copy), or CTRL+V (Paste)**.

- **Copy (CTRL+C) –**The copy command places items on the Office Clipboard, leaving the item in the document.
- **Cut (CTRL+ X)** – This removes the item from the document before placing it on the Office Clipboard.
- **Paste (CTRL+V)** – The process of copying an item from the Office Clipboard into the document at the location of the insertion point.

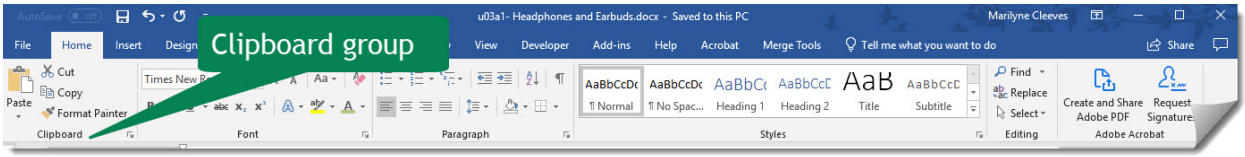
For the activity, you will be copying the word volume from the report you created and pasting it into another location. Follow these steps:

Step 1. ***Click*** the ***Home*** tab to display the Home Ribbon

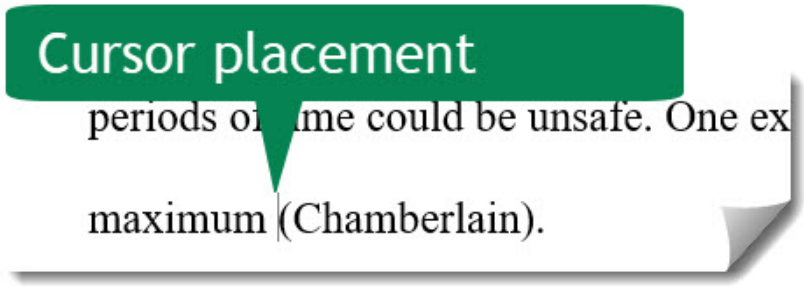


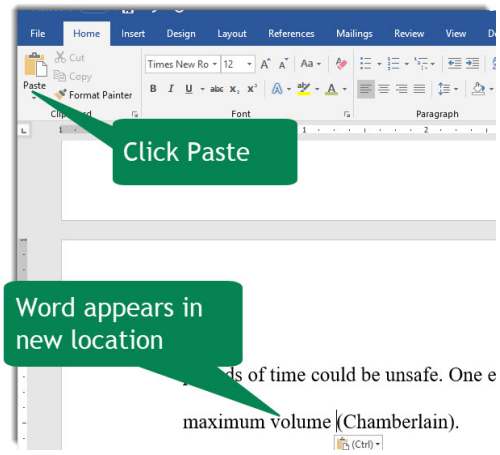
Step 2. ***Double-click*** the word "***volume***" at the end of the first paragraph

Step 3. Once you highlight the word, the copy command appears on the ribbon band. In the Clipboard group, ***Click Copy*** or hold down the ***CTRL*** key and hit the letter ***C*** (CTRL+C)



Step 4. Place your cursor in the space after the word maximum in paragraph 3.





Step 5. In the Clipboard group, **Click Paste** or hold down the **CTRL** key and hit the letter **V** (CTRL+V)

SAVE YOUR UPDATES

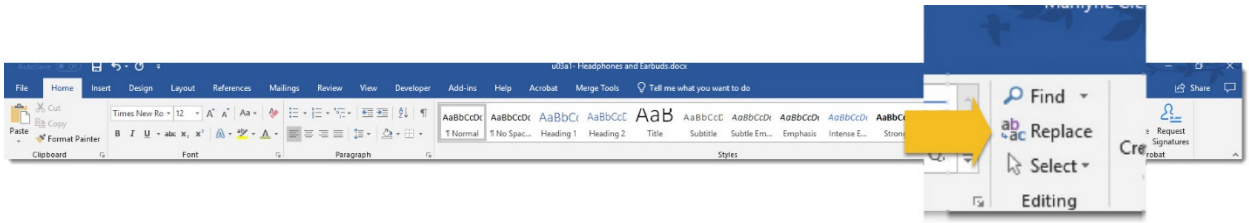
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

FIND AND REPLACE

All editions of Microsoft Word offer a feature called Find and Replace. You use this when you need to search for a specific word, number, or phrase in a document and replace it with something else. This is quite useful if you need to make a lot of replacements at once like changing the name of the main character in a novel you've written or something you've consistently misspelled.

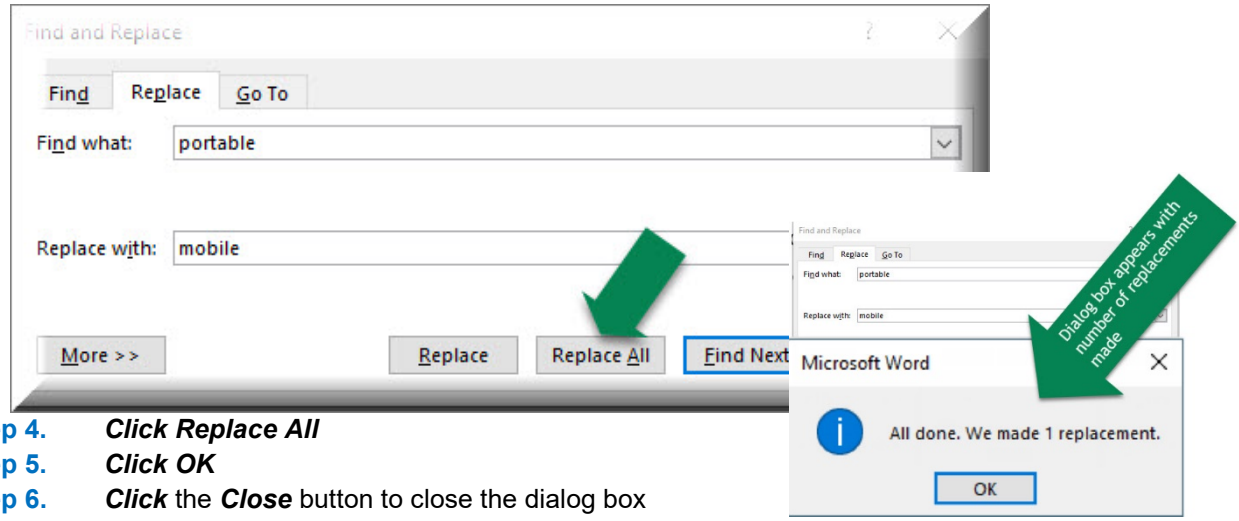
Fortunately, you can tell Word to make all of the changes automatically. You can also replace numbers, punctuation, and even cap or uncap words; just type what to find and what to replace it with and let Word do the rest.

Step 1. *With your report open,* ***Click*** the ***Home*** tab to display the Home Ribbon
Step 2. In the Editing group, ***Click*** on the ***Replace*** option



Step 3. Using the Find and Replace dialog box type the following:
a. FIND WHAT: ***portable***

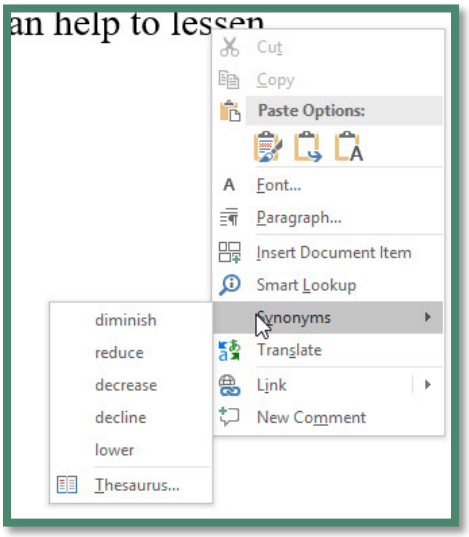
b. REPLACE WITH: ***mobile***



Step 4. ***Click Replace All***
Step 5. ***Click OK***
Step 6. ***Click*** the ***Close*** button to close the dialog box

USING SYNONYMS

In addition to the spell checking and grammar checking tools that Microsoft Word offers, there is also the Word thesaurus we can take advantage of to improve our documents. Using the thesaurus, you can find synonyms (different words with the same meaning) and antonyms (words with the opposite meaning).



Step 1. In your open report, navigate to the word ***lessen*** in the last paragraph
Step 2. ***Right-click lessen***
Step 3. ***Point*** to the word ***Synonyms***. A shortcut menu will appear to display the Synonyms in the MS Word Thesaurus.
Step 4. ***Choose*** the alternate word ***diminish.*** Your sentence now reads "*Using high-quality listening devices and lowering the volume can help to diminish potential hearing loss from the use of headphones and earbuds.*"

CHECK SPELLING AND GRAMMAR

All Microsoft Office programs can check the spelling and grammar. You can check spelling and grammar all at once by running the spelling and grammar checker, or you can check spelling and grammar automatically and make corrections as you work. You can also turn the automatic spelling and grammar off if you'd like.

The Microsoft Word spelling and grammar check will run a basic spell check and will correct basic punctuation errors. But that's as far as it goes. It doesn't check for proper sentence structure and it doesn't check context.

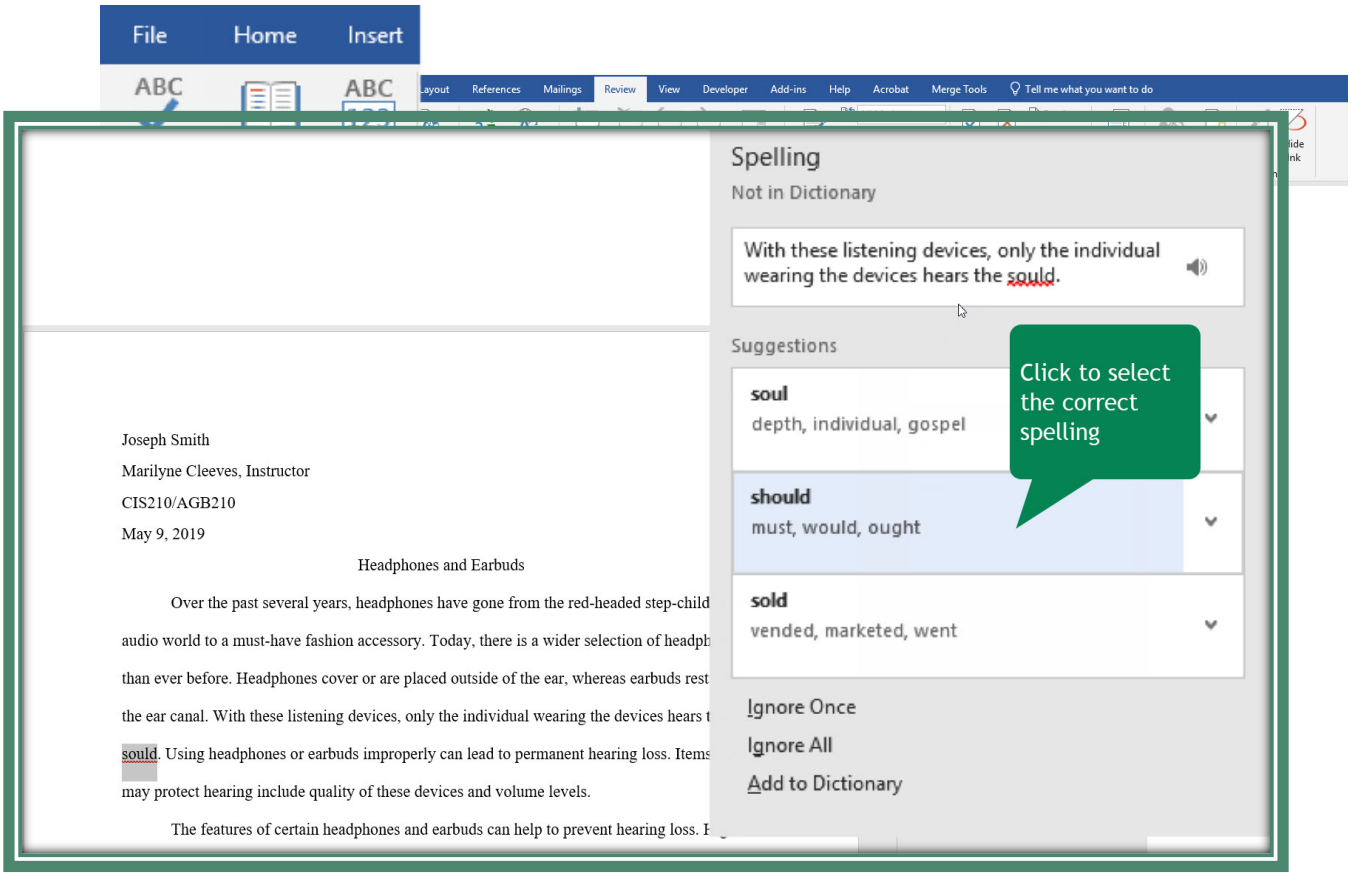
> For example, if you use the wrong "***there***" a basic spelling check will show that the word is correct. It won't use context checking to ensure it's the actual correct word usage.
>
> While in theory, you're spelling is correct, **if you use the wrong words, you will still make the wrong impression on professors, potential employers or prospective clients**.

Follow these steps to complete the spell check in your report:

Step 1. Start at the top of the document by holding down your ***CTRL*** key and hitting the ***HOME*** key (CTRL+HOME). This technique will take you to the first position of the document.

Step 2. ***Click*** the ***Review*** tab to reveal the Review Ribbon. Note that this menu has several options to choose from.

Step 3. In the Proofing group***, Click Spelling & Grammar***



Step 4. The first word found is the misspelling of should (sould). Note that the word is highlighted and three options to choose from appear. ***Click*** on ***should.*** The word is replaced with the correct spelling.

Step 5. You will then receive a message to ***Click*** on ***OK***. This completes the spelling and grammar check in Word; however, there is another obvious typing error in the document. It is further down the page in paragraph 3.

Step 6. The error was a typing mistake, but Word missed the problem. It is recommended that you proof read all documents before you confirm your document is complete. To fix the error, ***Click between*** the ***4*** and ***a***

Step 7. ***Hit*** your ***Backspace key***

NOTE: Most keyboards have a backspace key, but it may not have the word *Back Space* on it. The key may be a symbol or just an arrow pointing to the left.

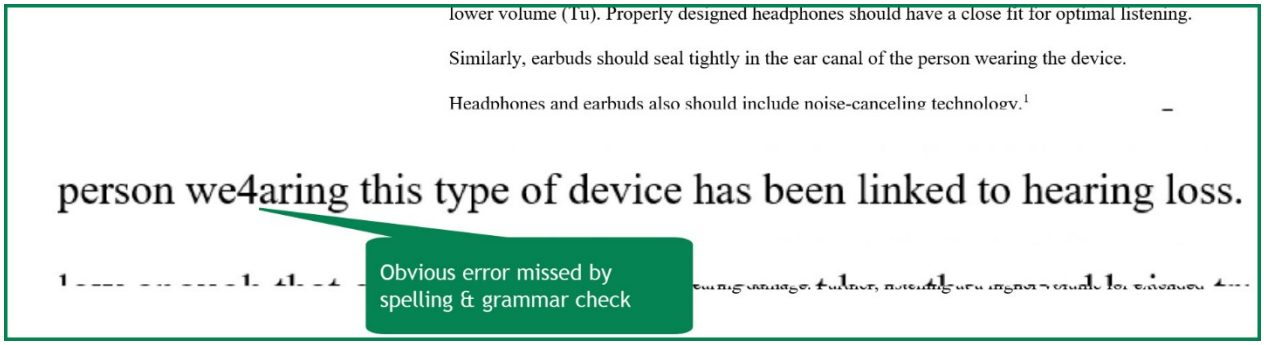
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SMART LOOKUP IN MICROSOFT WORD

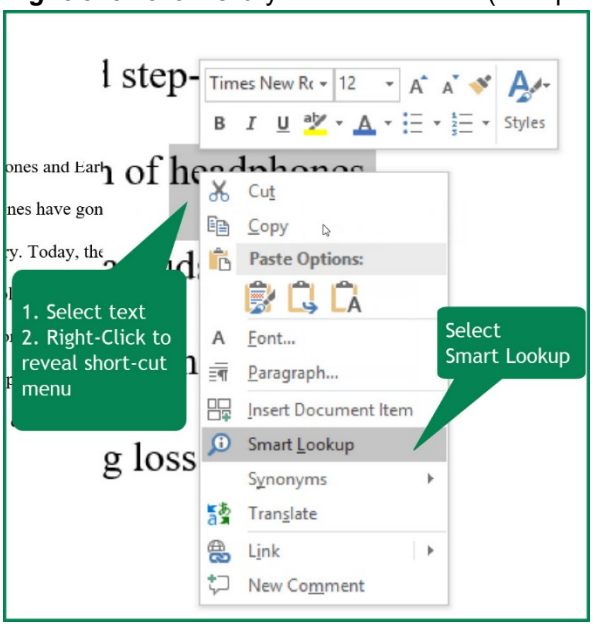
Get more insight into what you're working on by using Smart Lookup. Just follow a few simple steps to find articles, top searches from the web, and more.

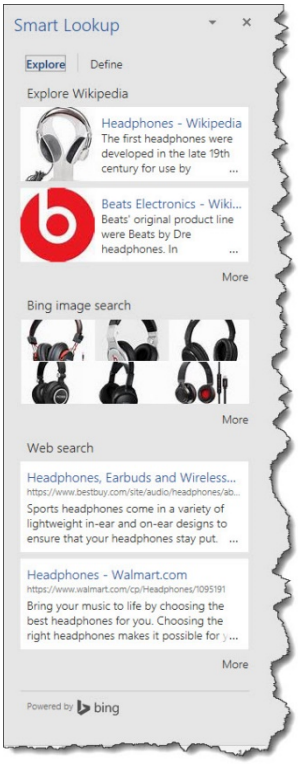
Step 1. In the first paragraph of your paper, ***double-click*** the word ***headphones*** in the first



paragraph. The double click will select the word.

Step 2. ***Right-click the word*** you have selected (headphones).





Step 3. If you receive a prompt regarding intelligent services, ***Click Turn on***

Step 4. Word will display definitions, images and web sources for purchase. This is an example of the result for the word headphones:

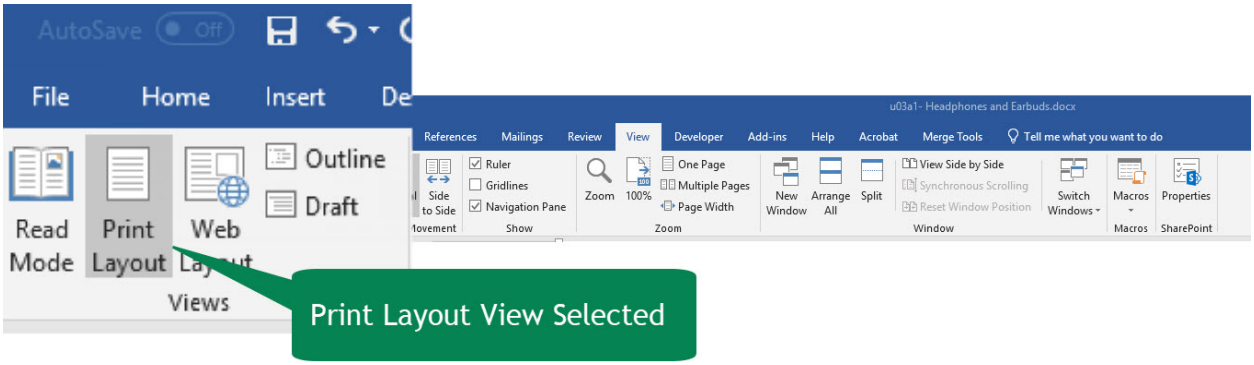
ZOOM MULTIPLE PAGES

When laying out your document in Word, it's sometimes helpful to view multiple pages on the screen at one time, especially if you have a large monitor. Seeing multiple pages at a time allows you to get a sense of how your overall layout looks.

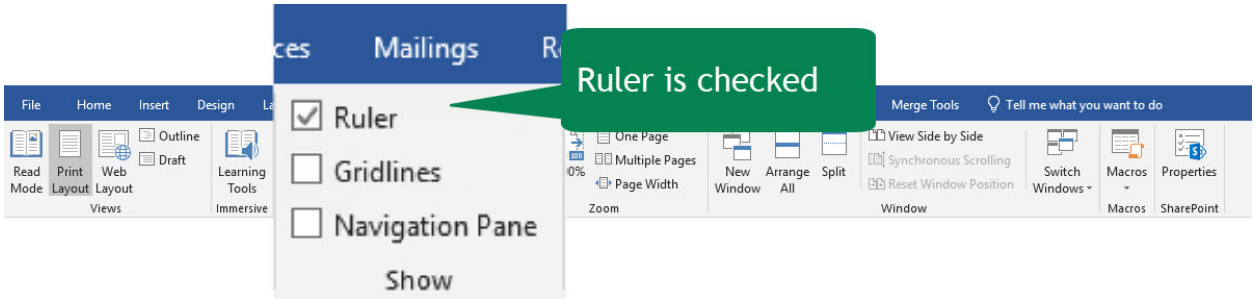
The Zoom feature allows you to view your text in different sizes without adjusting any fonts in the document. For a research paper, it is good practice to zoom out and view multiple pages at once.

Step 1. ***Click*** on the ***View*** tab to display the View Ribbon

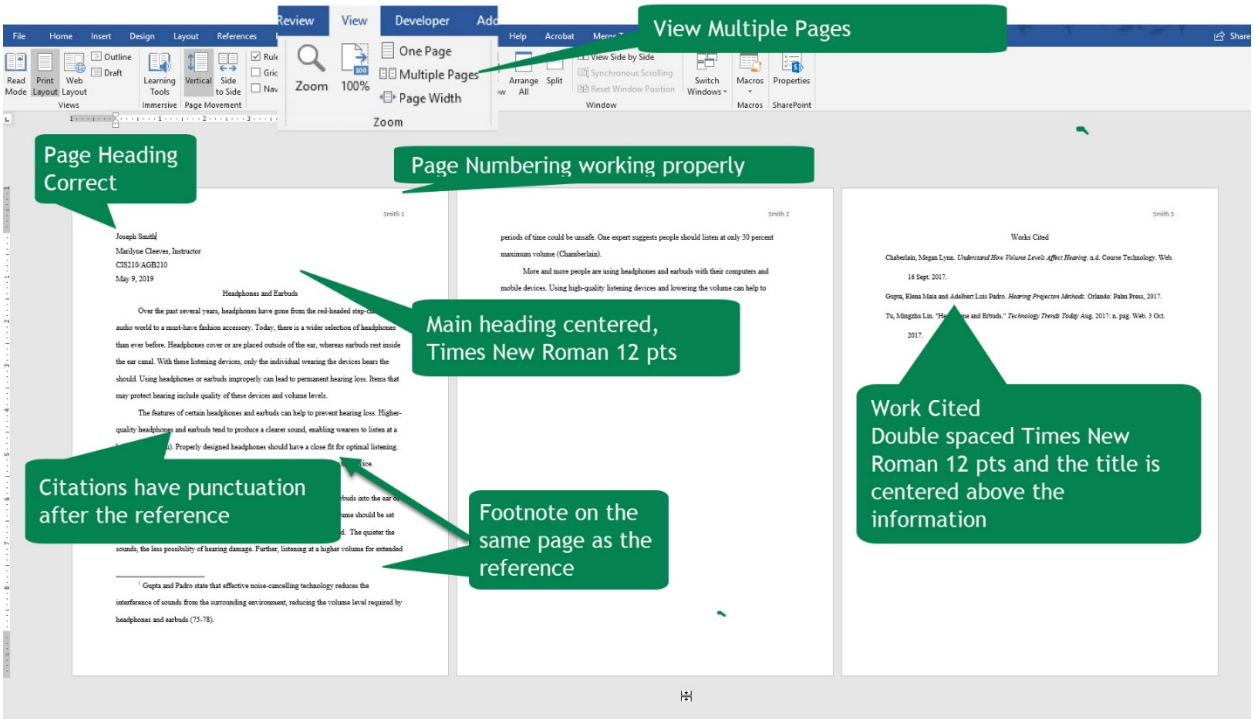
Step 2. In the Views Group, ***Click Print Layout***



Step 3. In the Show Group, ***Click*** the ***Ruler*** option. All other options should be unchecked.



Step 4. In the Zoom Group, ***Click Multiple Pages.*** Check for all the MLA format changes that should be in the document. When you are satisfied with your report format, save the file and submit it in the assignment are for u03a1 Headphones and Earbuds.



SAVE YOUR UPDATES

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SUBMIT ASSIGNMENT: ***u03a1 Headphones and Earbuds***

ON YOUR OWN ACTIVITY

For this activity you are creating a short research paper with a footnote and 3 references. The research paper should be in MLA format with your name as the student name. You will be following the MLA formatting guidelines you learned in the tutorial for UNIT 03. Follow these guidelines; however, refer back to the lessons for details on how to apply the processes:

Step 1. Open a new Word document

Step 2. Change your document settings to the MLA format
Step 3. Create the Report Header using your last name
Step 4. Format the first page of the report with the MLA guidelines for educational reports
Step 5. Click and type your heading for the report in the center of the page
a. HEADING: ***Two-Step Verification***
Step 6. Save your report as ***u03a2 Two-Step Verification***
Step 7. Show your ruler bars
Step 8. Remember to tab in the first line of the new paragraphs. Type the following text:

Two-Step Verification

In an attempt to protect personal data and information from online thieves, many organizations, such as financial institution or universities, that store sensitive or confidential items use a two-step verification process. With two-step verification, a computer or mobile device uses two separate methods, one after the next, to verify the identity of a user.

ATMs automated teller machines) usually require a two-step verification. Users first insert their ATM card into the ATM (Step 1) and then enter a PIN, or personal identification number, (Step 2) to access their bank account. If someone steals these cards, the thief must enter the user's PIN to access the account

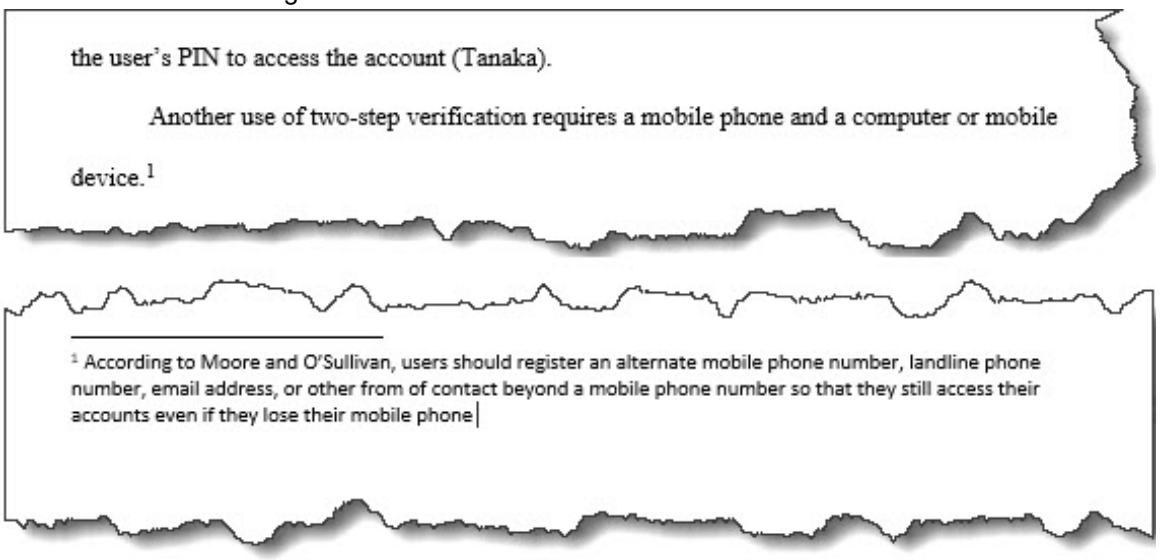
Step 9. Leave your cursor one space after the word account

Step 10. In the References tab, and enter the following reference source:

a. TYPE OF SOURCE: ***Article in Periodical***
b. AUTHOR: ***Hana Kei Tanaka***
c. ARTICLE TITLE: ***Safeguards against Unauthorized Access and Use***
d. PERIODICAL TITLE: ***Technology Today***
e. YEAR: ***2017***
f. MONTH: ***Sept.***
g. PAGES: ***no pages used*** (refer to Citation #1 tutorial)
h. MEDIUM: ***Web***
i. YEAR ACCESSED: ***2017***
j. MONTH ACCESSED: ***Oct.***
k. DAY ACCESSED: ***3***

Step 11. Insert the citation after the word account using the proper punctuation after the citation.

Step 12. Add the following text and footnote to the document:


the user's PIN to access the account (Tanaka).

Another use of two-step verification requires a mobile phone and a computer or mobile device.[1]

[1] According to Moore and O'Sullivan, users should register an alternate mobile phone number, landline phone number, email address, or other from of contact beyond a mobile phone number so that they still access their accounts even if they lose their mobile phone

Step 13. Add a reference to this document in the sources:

a. TYPE OF SOURCE: ***Book***
b. AUTHORS: ***Aaron Bradley Moore***
Brianna Clare O'Sullivan
c. TITLE: ***Authentication Techniques***
d. YEAR: ***2017***
e. CITY: ***Detroit***
f. PUBLISHER: ***Great Lakes Press***
g. MEDIUM: ***Print***

Step 14. Insert the new citation at the end of the footnote.

Step 15. Modify the footnote style to the correct style for MLA documents

Step 16. Edit the citation with following settings:

a. SUPPRESS: ***Author and Title***
b. PAGES: ***54***

Add text after reference number

quires a mobile phone and a computer or mobile device.[1] When users sign in to an account on a computer or mobile device, they enter a user name and password (Step1). Next, they are prompted to enter another authentication code (Step 2), which is sent as a text or voice message or via an app on a smartphone. This second code generally is valid for a set time, sometimes only for a few minutes or hours. If users do not sign in during this time limit, they must repeat the process and request another verification code

New format for footnote.

[1] According to Moore and O'Sullivan, users should register an alternate mobile phone number, landline phone number, email address, or other from of contact beyond a mobile phone number so that they still access their accounts even if they lose their mobile phone (54)

Step 17. Click back into the document, and type the following text after the footnote marker:

Step 18. Add a third reference to the document in the sources:

- ***a.*** TYPE OF SOURCE: ***Website***
- ***b.*** AUTHOR: ***Fredrick Lee Marcy***
- ***c.*** NAME OF WEBPAGE: ***Two-Step Verification***
- d. YEAR/MONTH/DAY: none given
- ***e.*** PRODUCTION COMPANY: ***Course Technology***
- ***f.*** MEDIUM: ***Web***
- ***g.*** YEAR ACCESSED: ***2017***
- ***h.*** MONTH ACCESSED: ***Sept.***
- ***i.*** DAY ACCESSED: ***18***

Step 19. Insert the citation at the end of the new paragraph and add the proper punctuation.

Step 20. Type the remainder of the paragraph and add a citation from Moore and O'Sullivan and add the last paragraph shown in the illustration below:

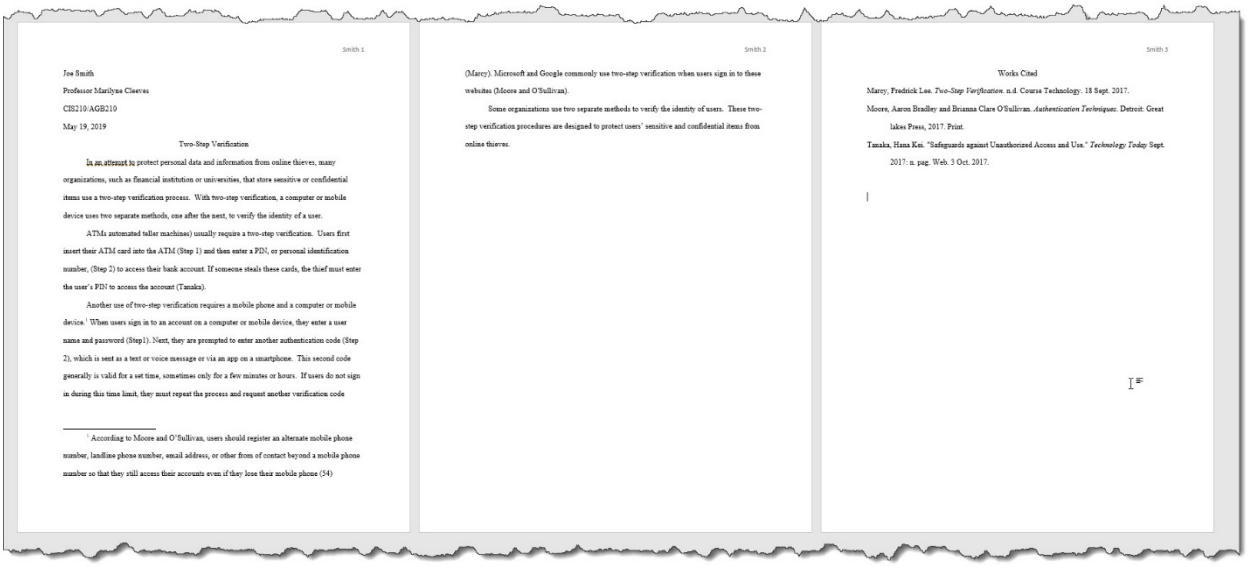
(Marcy). Microsoft and Google commonly use two-step verification when users sign in to these websites (Moore and O'Sullivan).

Some organizations use two separate methods to verify the identity of users. These two-step verification procedures are designed to protect users' sensitive and confidential items from online thieves.

Step 21. Insert a hard page break and generate the bibliographical list for the Work Cited

Step 22. Format the Work Cited using the MLA guidelines outlined in the tutorial.

Step 23. Save your work and submit your completed report to the u03a2 assignment area.



Smith 1

Joe Smith
Professor Marilyna Cleeves
CIS210/AGB210
May 19, 2019

Two-Step Verification

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Another use of two-step verification requires a mobile phone and a computer or mobile device.[1] When users sign in to an account on a computer or mobile device, they enter a user name and password (Step 1). Next, they are prompted to enter another authentication code (Step 2), which is sent as a text or voice message or via an app on a smartphone. This second code generally is valid for a set time, sometimes only for a few minutes or hours. If users do not sign in during this time limit, they must repeat the process and request another verification code

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Smith 2

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Smith 3

Works Cited

Marcy, Fredrick Lee. *Two-Step Verification*. n.d. Course Technology. 18 Sept. 2017.

Moore, Aaron Bradley and Brianna Clare O'Sullivan. *Authentication Techniques*. Detroit: Great lakes Press, 2017. Print.

Tanaka, Hana Kei. "Safeguards against Unauthorized Access and Use." *Technology Today* Sept. 2017: n. pag. Web. 3 Oct. 2017.

UNIT 04 - CREATING, FORMATTING AND EDITING A WORD DOCUMENT WITH A PICTURE

In this exercise, you will learn how to create a flyer. The following roadmap identifies general activities you will perform as you progress through the activity.

A. **ENTER TEXT** in a new document
B. **FORMAT** the **TEXT** in the flyer
C. **INSERT** a **PICTURE**, called Mountain Trail, in the flyer
D. **FORMAT** the **PICTURE** in the flyer
E. **ENHANCE** the **PAGE** with a border and spacing.
F. **CORRECT** errors **AND REVISE** text in the flyer
G. **PRINT OR READ** the flyer.

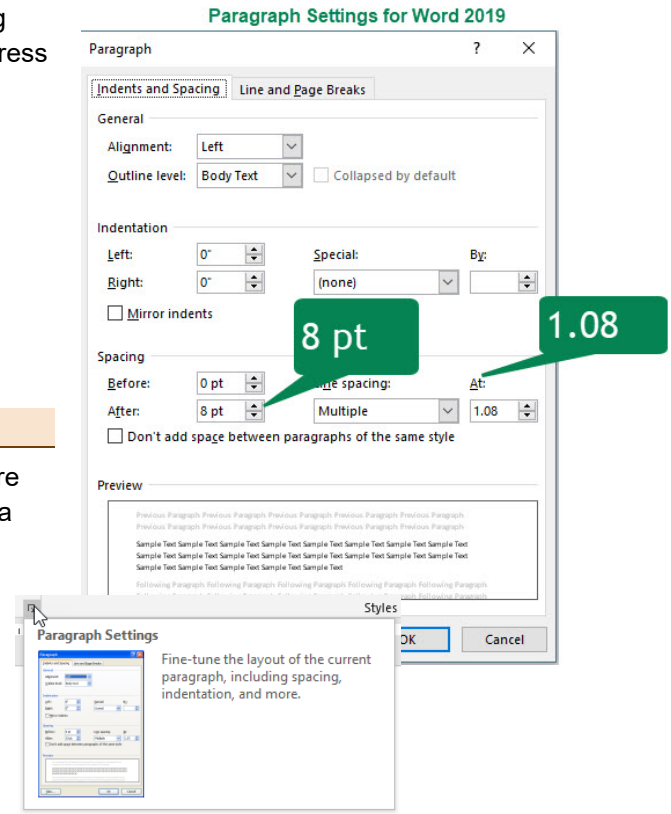


Figure 1 : Paragraph Settings Dialog Box and icon

CHECK YOUR SETTINGS

To complete the activity, it is important to check the settings before you begin the activity. After you have completed step 1 (opening a blank Word document), please verify the following:

Verification Step 1. Click **Design** to expose the Design Ribbon

Verification Step 2. Click ***Themes*** choose ***Office***

Verification Step 3. Click **Home** to show the Home Ribbon

Verification Step 4. In the Font group, ***Font*** choose ***Calibri 11*** points

Verification Step 5. From Home tab, click the paragraph group dialog box (lower right corner of the group) to expose the paragraph settings

Verification Step 6. Click the ***Indents and Spacing*** tab

Verification Step 7. These are the settings you should see:

a. GENERAL
   i. ALIGNMENT: Left
   ii. OUTLINE LEVEL: Body Text
   iii. INDENTATION:
      1. LEFT: 0”
      2. RIGHT: 0”
      3. SPECIAL: (NONE)
   iv. SPACING:
      1. BEFORE: 0 pt
      2. AFTER: ***8 pt***
      3. LINE SPACING: Multiple
      4. AT: ***1.08***

Verification Step 8. Once you have verified the paragraph settings, you should check the margin settings. ***Click Layout*** to display the layout ribbon

Verification Step 9. In the page setup group, ***Click Margins***

Verification Step 10. The Normal setting of ***1" for the left, right, top and bottom margins*** should be selected.

NOTE: The reason why this is important is that many times the default settings for your program have been altered. These should be the default settings for every Word 2019 document; however, if they were arbitrarily set at something different on your computer the instructions for the assignment may not produce the correct result.

U04A1 ADVENTURE FLYER

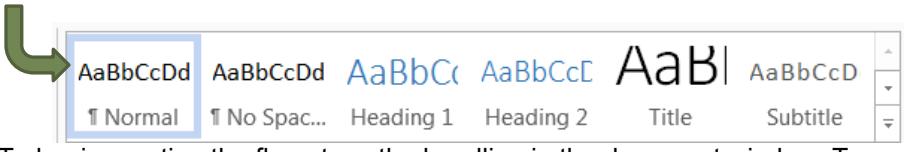
Step 1. **Open MS Word –** Click on the Word icon on your Windows desktop. If the icon is not on your desktop, ask your instructor how to set it up.

Step 2. **Click File > New –** Choose the FILE ribbon can click on New. This will open a blank Word document.

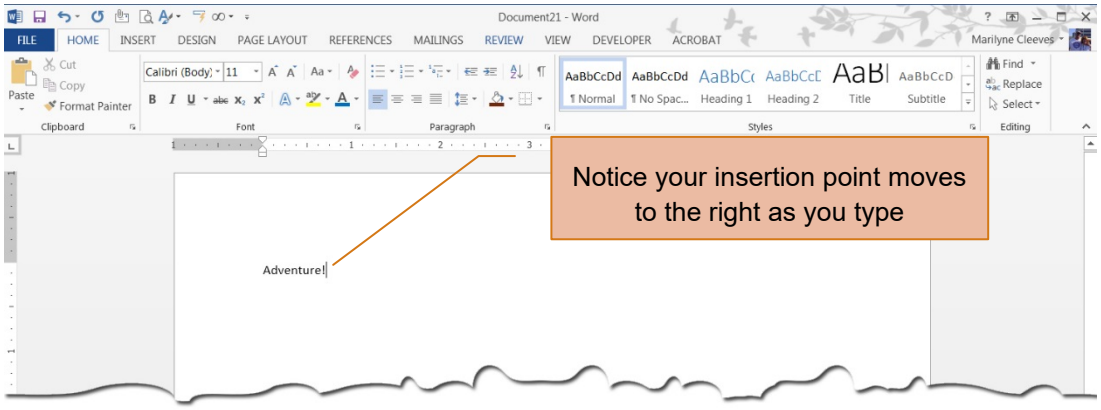
Step 3. **Print Layout --** If the Print Layout button on the status bar (page 3) is not selected, tap or click it so that your screen is in Print Layout view

Step 4. **Click** the **Home** Tab to display the home ribbon band

Step 5. In the styles group, check that **Normal Style** is active **–** If Normal (HOME tab | Styles group) is not selected in the Styles gallery, tap or click it so that your document uses the Normal style.



Step 6. To begin creating the flyer, type the headline in the document window. Type **Adventure!**



What if you make an error while typing? You can press the BACKSPACE key until you have deleted the text in error and then retype the text correctly.

What is the purpose of the Spelling and Grammar Check icon on the status bar? The spelling and Grammar Check icon displays either a check mar to indicate the entered text contains no spelling or grammar errors, or an **X** to indicate that it found potential errors. Word flags potential errors in the document with a red, green or blue wavy underline.

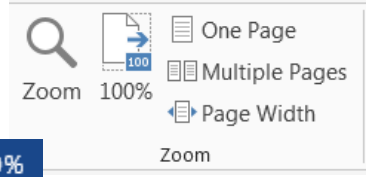
Step 7. Press the **ENTER** key to move the insertion point to the beginning of the next line.

Why did blank space appear between the headline and the insertion point? Each time you press the ENTER key, Word creates a new paragraph and inserts blank space between the two paragraphs. This spacing can be increased or decreased by using the spacing options in the paragraph group of the HOME ribbon band.

Step 8. **Display Formatting Marks** – You may find it helpful to display formatting marks while working in a document. Why? Formatting marks indicate where in a document you press the ENTER key, SPACEBAR, and other nonprinting characters. A formatting mark is a character that WORD displays on the screen but is not visible on a printed document. For example, the paragraph mark (¶) is a formatting mark that indicates where you pressed the ENTER key. A raised dot (·) shows where you pressed the SPACEBAR. Dis7play the marks on your document my clicking on the Show/Hide ¶ button on the (HOME tab | Paragraph group) to display the formatting marks.

Step 9. **Click on, Click off** – Many of the options on the ribbon bands are turn off the same way you turn them on. This means you click on them to turn them on and click again to turn them off. To turn off the formatting marks, simply click the Show/Hide ¶ button again.

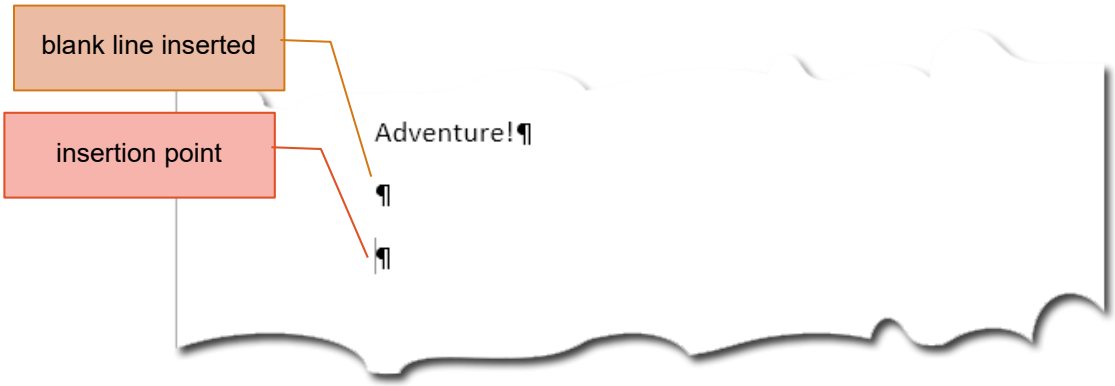
Step 10. **Zooming –** If text is too small for you to read on the screen, you can zoom the document by dragging the Zoom slider on the status bar or tapping or clicking the Zoom Out or Zoom in buttons on the status bar. Changing the zoom has no effect on the printed document.



Zoom from the status bar

Zoom from the VIEW Ribbon

Step 11. **Insert a Blank Line** – In the flyer, the digital picture of the mountain trial appears between the headline and body copy. You will not insert this picture until you enter and format all the text. **Why?** In order to learn the formatting techniques first we will be inserting the image later in the exercise; therefore, you need a place holder for the future picture. Press **ENTER** to insert a blank line in the document.



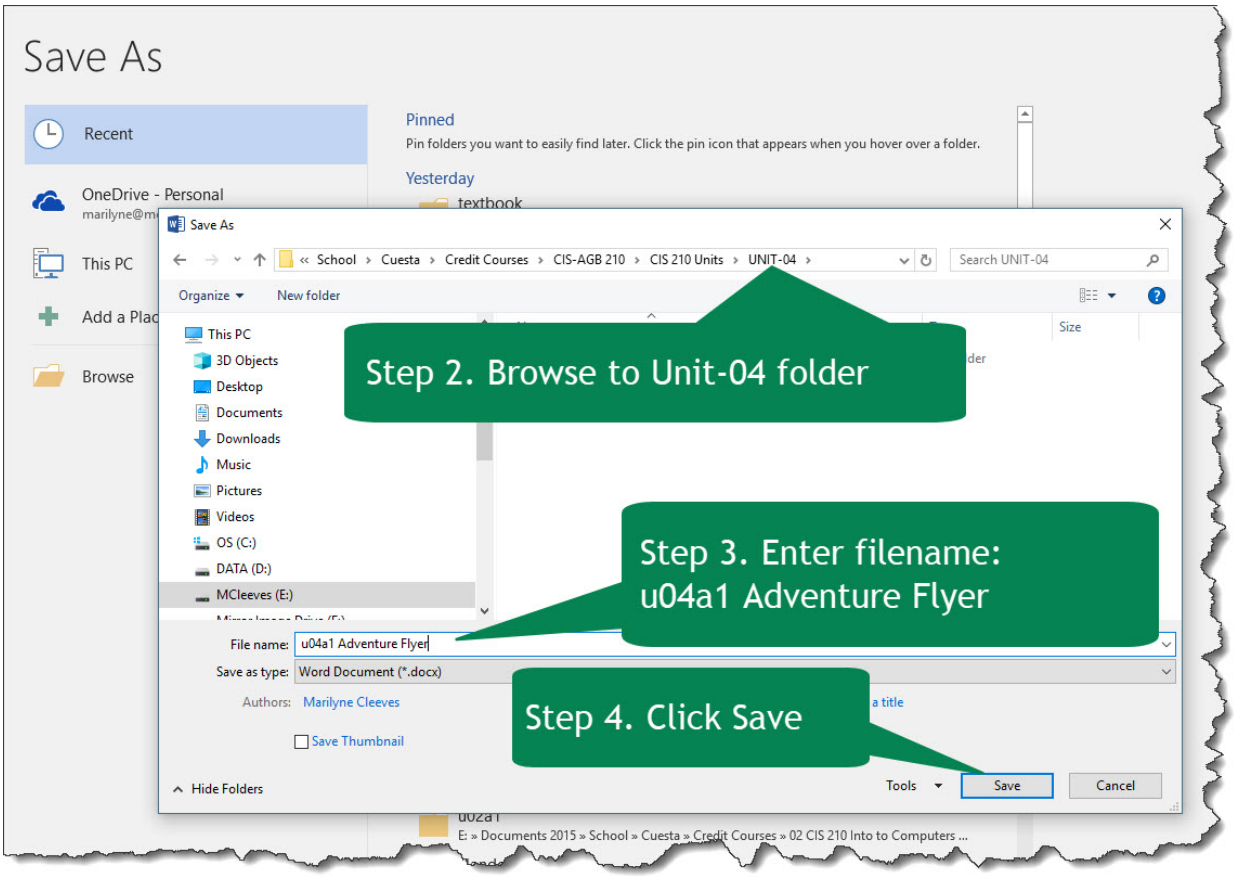
Step 12. **VIEW tab | Zoom group** – Tap or click the Page Width button (VIEW tab | Zoom group) to display the page the same width as the document window.

If I change the zoom, will the document print differently? Changing the zoom has no effect on the printed document.

What are the other predefined zoom options? Through the VIEW tab | Zoom group or the Zoom dialog box (Zoom button in Zoom group), you can zoom to one page (an entire single page appears in the document window), many pages (multiple pages appear at once in the document window), page width, text width, and a variety of set percentages. Whereas page width zoom places the edges of the page at the edges of the document window, text width zoom places the document contents at the edges of the document window.

SAVE YOUR DOCUMENT

Step 1. On your keyboard, ***hit the F12 key***. This will open the Save as dialog box for this activity.



Step 2. Using the ***Browse*** option, ***Open*** your ***UNIT 04*** folder for this class
Step 3. Enter the filename for this assignment: ***u04a1 Adventure Flyer***
Step 4. Click ***Save***

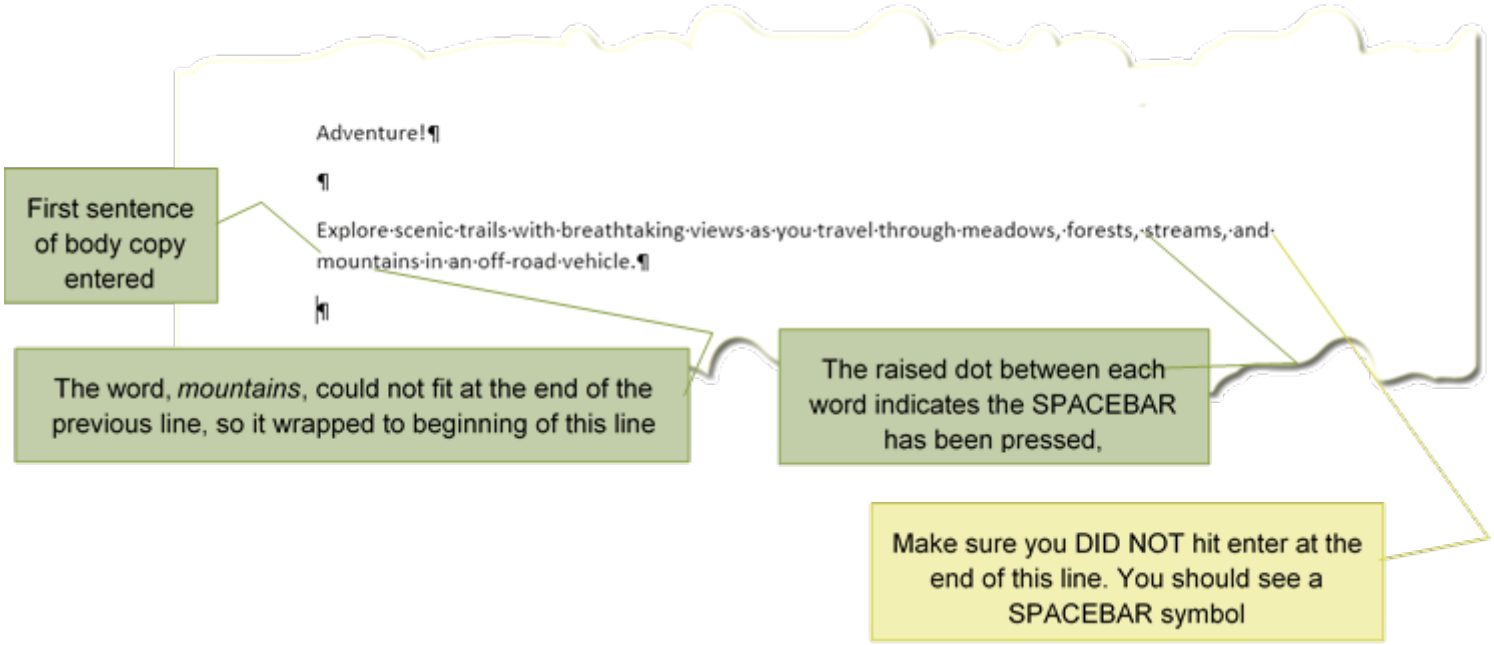
WORDWRAP AND SPELL CHECK

Wordwrap allows you to type words in a paragraph continually without pressing the ENTER key at the end of each line. As you type, if a word extends beyond the right margin, Word also automatically positions that word on the next line along with the insertion point.

Word creates a new paragraph each time you press the ENTER key. Thus, as you type test in the document window, do not press the ENTER key when the insertion point reaches the right margin. Instead, press the ENTER key only in these circumstances:

1. To insert a blank line(s) in a document
2. To begin a new paragraph
3. To terminate a short line of text and advance to the next line
4. To respond to questions or prompts in Word dialog boxes, task panes, and other on-screen objects.

Step 1. With your cursor positioned at the last blank insertion point, type the first sentence of the body: ***Explore scenic trails with breathtaking views as you travel through meadows, forests, streams, and mountains in an off-road vehicle.***



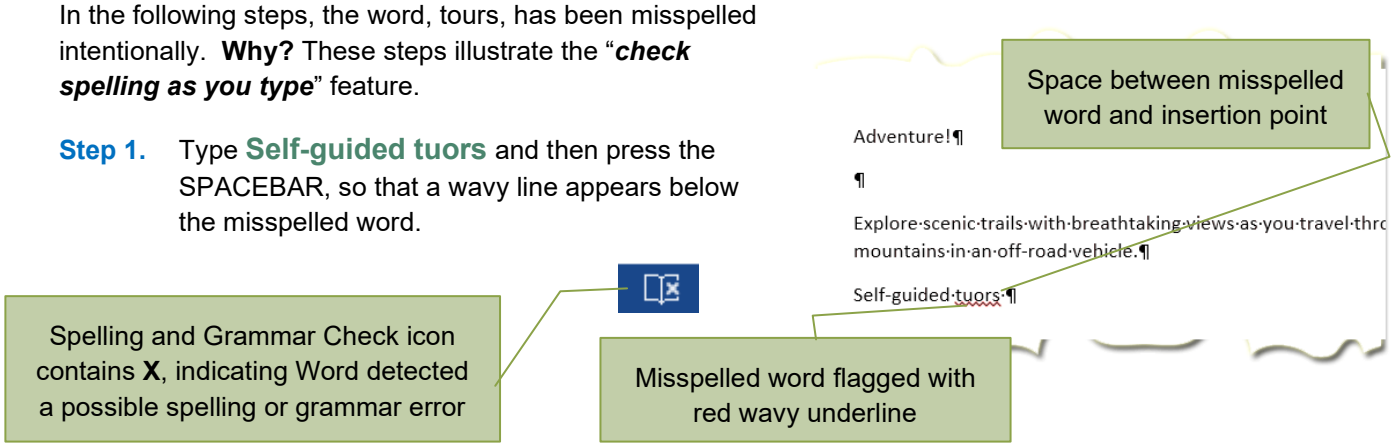
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CHECK SPELLING AND GRAMMAR AS YOU TYPE

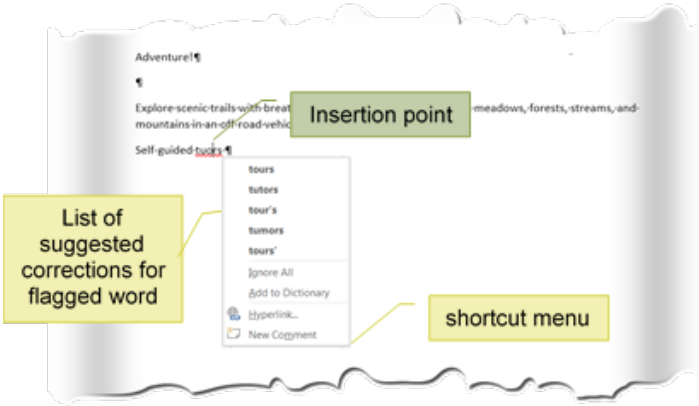
In the following steps, the word, tours, has been misspelled intentionally. **Why?** These steps illustrate the "***check spelling as you type***" feature.

Step 1. Type **Self-guided tuors** and then press the SPACEBAR, so that a wavy line appears below the misspelled word.



Step 2. **Right-click the misspelled word** (tuors, in this case) to display a shortcut menu that presents a list of suggested spelling corrections for the flagged word

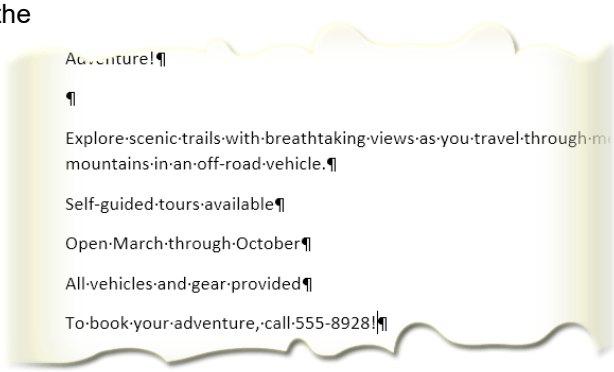
Step 3. **Select the word tours –** Tap or click tours on the shortcut menu to replace the misspelled word in the document with a correctly spelled word.



ENTERING MORE TEXT

After you change the spelling of the word tours, your cursor is on the word and not at the end of the line where you inserted a space. This activity will take to you the end of a line with using only one key.

Step 1. **Press the END key –** Press the END key to move the insertion point to the end of the current line.
Step 2. **Type** ***available***
Step 3. press the **ENTER** key
Step 4. Type ***Open March through October***
Step 5. press the **ENTER** key.
Step 6. Type ***All vehicles and gear provided***
Step 7. press the **ENTER** key.
Step 8. Type the signature line in the flyer: ***To book your adventure, call 555-8928!***



How should you organize text in a flyer?
The text in a flyer typically is organized into three areas: headline, body copy, and signature line.

- **HEADLINE** – The headline is the first line of text on the flyer. It conveys the product or service being offered, such as a car for sale, personal lessons, or sightseeing tours, or the benefit that will be gained, such as a convenience, better performance, greater security, higher earnings, or more comfort, or it can contain a message, such as a lost or found pet.

- **BODY --** The **body copy** consists of text between the headline and the signature line. This text highlights the key points of the message in a few words as possible. It should be easy to read and follow. While emphasizing the positive, the body copy must be realistic, truthful, and believable.
- **SIGNATURE** - The **signature line**, which is the last line of text on the flyer, contains contact information or identifies a call to action.

SAVE YOUR UPDATES

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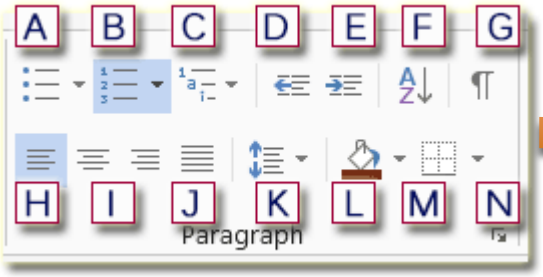
FORMATTING PARAGRAPHS AND CHARACTERS

The headline in the flyer currently is left aligned. Why? Word, by default left-aligns text, unless you specifically change the alignment. You want the headline centered, that is, positioned horizontally between the left and right margins on the page. Recall that Word considers a single short line of text, such as a one-word headline, a paragraph. Thus, you will center the paragraph containing the headline. The following steps center a paragraph.



HOME TAB / PARAGRAPH GROUP

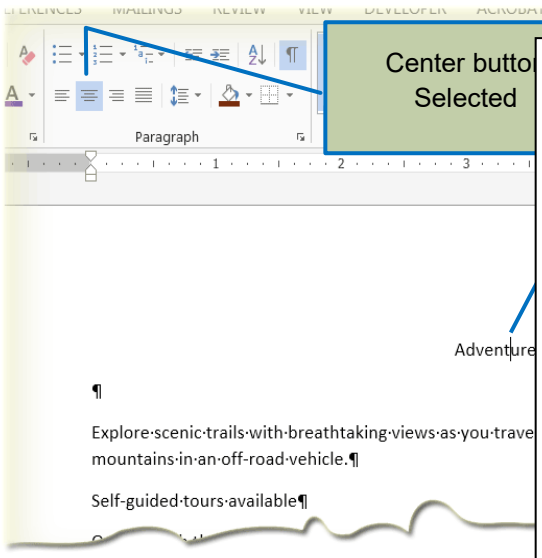
A. Bullets
B. Numbering
C. Multilevel List
D. Decrease Indent
E. Increase Indent
F. Sort
G. Show/Hide
H. Left Align
I. Center
J. Right Align
K. Line and Paragraph Spacing
L. Shading
M. Borders

Step 1. ***Click HOME*** to display the HOME ribbon band

Step 2. ***Click*** somewhere in the ***first paragraph*** to be centered ***(in this case, the headline***) to position the insertion point in the paragraph

Step 3. In the Paragraph Group, ***Click*** the ***Cente***r button

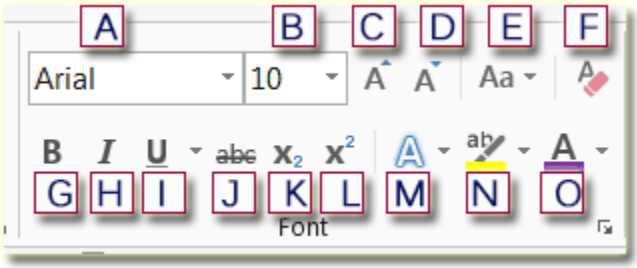
SELECT **A LINE**



HOME TAB / FONT GROUP

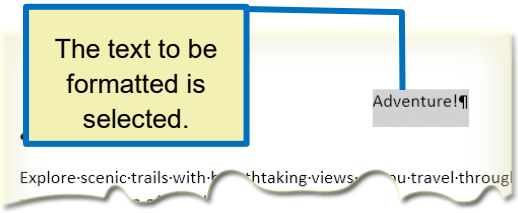
A. Font Selector (shows current font)
B. Font Size Selector (shows current size)
C. Increase Font
D. Decrease Font
E. Change Case
F. Clear all Formatting
G. Bold
H. Italic
I. Underline
J. Strikethrough
K. Subscript
L. Superscript
M. Text Effects
N. Text Highlighter
O.

The default font size of 11 points is too small for a headline in a flyer. To increase the font size of the characters in the headline, you first must select the line of text containing the headline. **Why?** *If you increase font size of text without selecting any text, Word will increase the font size only of the word containing the insertion point.*



Step 4. **Triple Click** - With your insertion point in the centered headline (**Adventure**), triple click your mouse (three quick clicks). This move will select the paragraph.

Step 5. If you are using a mouse, point to **72** in the **Font Size** gallery to display a live preview of the selected text at the selected point size.



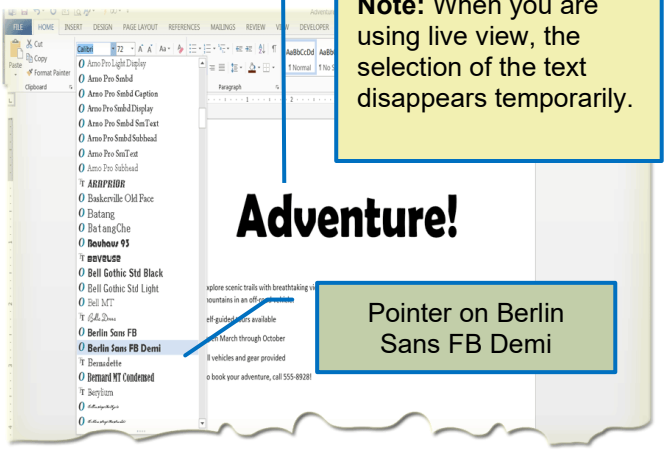
Experiment – Point to various font sizes in the Font size gallery and watch the font size of the selected text change in the document window. When you have finished, keep your final result in the 72 point size and progress onto the next step.

CHANGE FONT OF SELECTED TEXT

The default theme font for headings is Calibri Light and for all other text called body text in Word, is Calibri. Many other fonts are available, however, so that you can add variety to documents. The following steps change the font of the headline from Calibri to Berlin Sans FB Demi. **Why?** *To draw more attention to the headline, you change its font so that it differs from the font of other text in the flyer.*

Font of selected text changes to Berlin Sans FB Demi, showing live preview of font to which you are pointing in the gallery

Note: When you are using live view, the selection of the text disappears temporarily.



Step 1. Check to make sure the Home ribbon band is in view. ***Click*** the ***Home*** tab if necessary.

Step 2. If the word "Adventure!" is still selected, you can proceed to the next step. If not, ***triple-click Adventure!*** to select the entire paragraph

Step 3. If necessary, scroll through the ***Font*** gallery to display ***Berlin Sans FB Demi*** (or similar font).

Step 4. If you are using a mouse, ***Click*** on ***Berlin Sans FB Demi*** (or a similar font

Experiment – Point your mouse to various fonts in the Font gallery and watch the font of the selected text change in the document window. When you have finished, keep your result in the Berlin Sans Demi (or a similar font) that you have chosen.

SAVE YOUR UPDATES

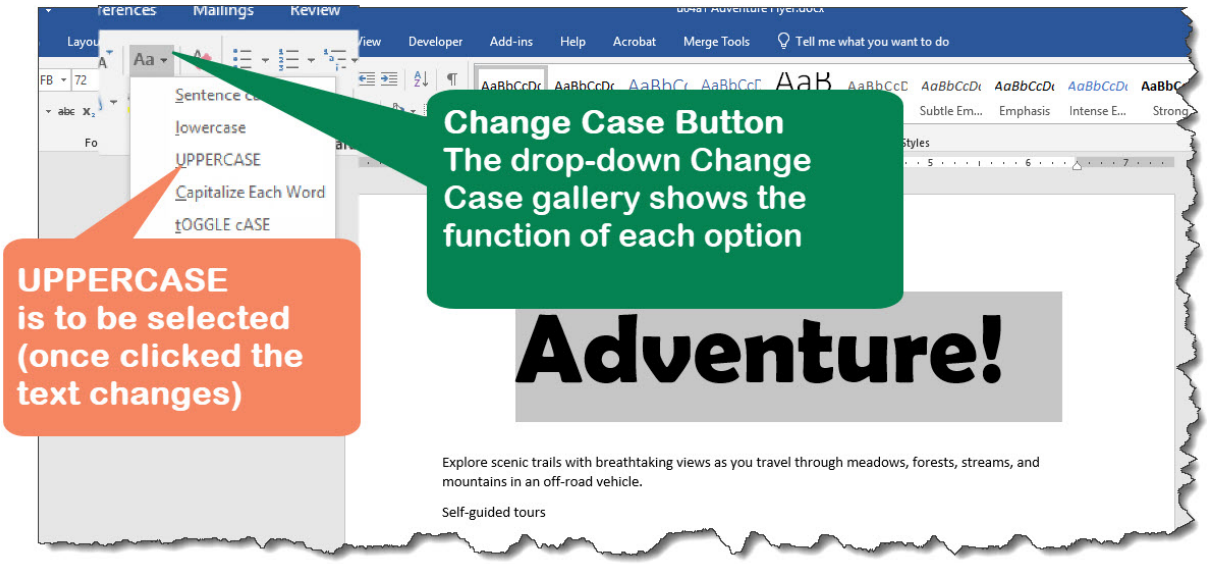
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CHANGE THE CASE OF SELECTED TEXT

The headline currently shows the first letting each word capitalized, which sometimes is referred to as initial cap. The following steps change the headline to uppercase. **Why?** *To draw more attention to the headline, you would like the entire line of text to be capitalized, or in uppercase letters.*

Step 1. With the text selected, tap or click the Change Case button (HOME tab| Font group) to display the Change Case gallery.

Step 2. Tap or click **UPPERCASE** in the Change Case gallery to change the case of the selected text.



APPLY TEXT EFFECTS TO SELECTED TEXT

Word provides many text effects to add interest and variety to text. The following steps apply a text effect to the headline. **Why?** *You would like the text in the headline to be even more noticeable.*

Step 3. With the text selected, tap or ***Click*** the '***Text Effects and Topography'*** button (HOME tab | Font group) to display the Text Effects and topography gallery.

Step 4. If you are using a mouse, point to ***Fill-White, Outline: Blue, Accent color 1; Glow: Accent color 1*** (fourth text effect in second row) to display a live preview of the selected text in the selected text effect.

Experiment – If you are using a mouse, point to various text effects in the Text Effects and Typography gallery and watch the text effects of the selected text change in the document window. Return to the desired effect listed in step 38.

Step 5. Click '***Fill-White, Outline: Blue, Accent color 1; Glow: Accent color 1'*** to change the text effect of the selected text

Step 6. Click anywhere in the document window to remove the selection from the selected text.

SAVE YOUR UPDATES

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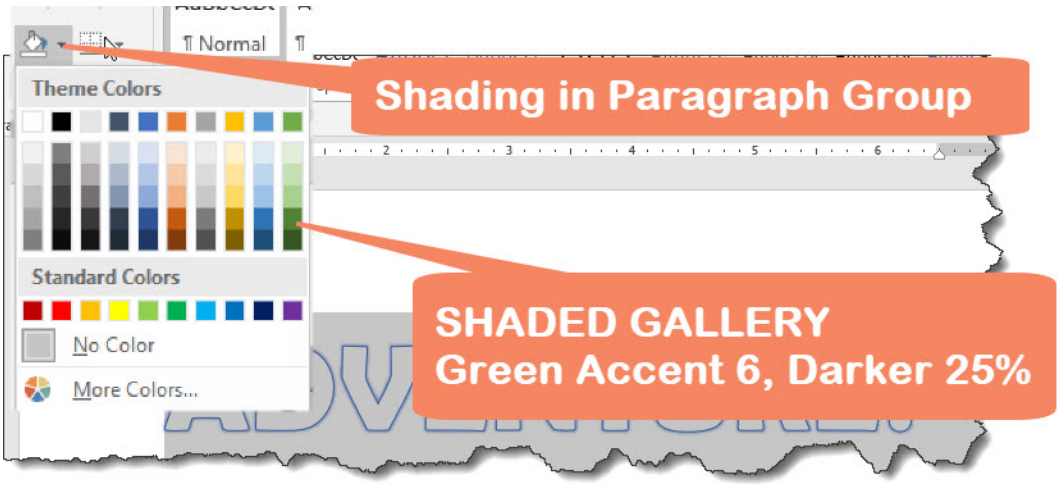
SHADE A PARAGRAPH

When you **shade** text, Word colors the rectangular area behind any text or graphics. If the text to shade is a paragraph, Word shades the area from the left margin to the right margin of the current paragraph. To shade a paragraph, place the insertion point in the paragraph. To shade any other text, you must first select the text to be shaded.

This flyer uses green as the shading color for the headline. **Why?** *To make the headline of the flyer more eye-catching, you shade it.* The following steps shade a paragraph.

Step 1. ***Click somewhere in the paragraph*** to be shaded (in this case the headline, **ADVENTURE**!) to position the insertion point in the paragraph to be formatted.



Step 2. Click the Shading arrow (**HOME tab | Paragraph group**) to display the Shading gallery.
Step 3. Click '**Green Accent 6, Darker 25%**' (rightmost color in fifth row) to shad the current paragraph.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SELECT MULTIPLE LINES

The next formatting step for the flyer is to increase the font size of the characters between the headline and the signature line. **Why?** *You want this text to be easier to read from a distance.*

To change the font size of the characters in multiple lines you first must select all the lines to be formatted. The following steps select multiple lines.

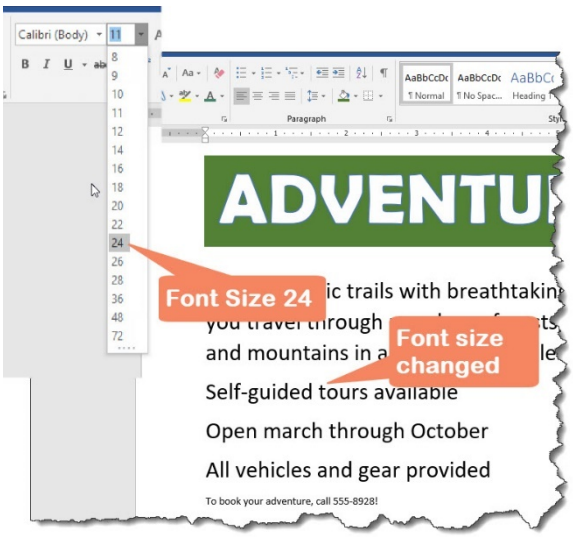
Step 1. Scroll, if necessary, so that all text below the headline is displayed on the screen. ***Click*** your insertion point ***in front*** of the sentence that starts with the word '***Explore*** ….'

Step 2. Hold your shift key down and hit your down arrow until you have completely highlighted all the lines before the signature block.

Step 3. Release your shift key and arrow button. Leave your text highlighted and follow the steps to format these lines.

CHANGE THE FONT SIZE OF SELECTED TEXT

The characters between the headline and the signature line in the flyer currently are 11 point. To make them easier to read from a distance, this flyer users a 24-pont font size for characters.



Step 4. With the text selected, tap or click the Font Size arrow (HOME tab | Font group) to display the Font size gallery

Step 5. Tap or click 24 in the Font Size gallery to increase the font size of the selected text.

Step 6. Tap or click anywhere in the document window to remove the selection from the text.

Step 7. If necessary, scroll so that you can see all the resized text on the screen.

SAVE YOUR UPDATES

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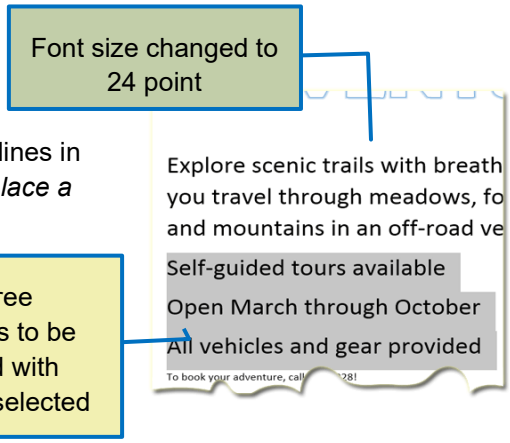
BULLET A LIST OF PARAGRAPHS

A bulleted list is a series of paragraphs, each beginning with a bullet character. The next step is to format the three paragraphs about the tours that are above the signature line in the flyer as a bulleted list.

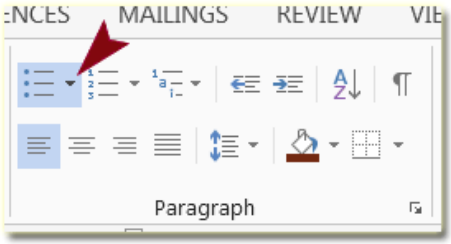


To format a list of paragraphs with bullets, you first must select all the lines in the paragraphs. **Why?** *If you do not select all paragraphs, Word will place a bullet only in the paragraph containing the insertion point.*

Step 1. Click your insertion point in front of the word 'Self-guided'.

Step 2. Hold down your shift key and tap your down arrow until you have selected all three lines of text to be formatted with bullets

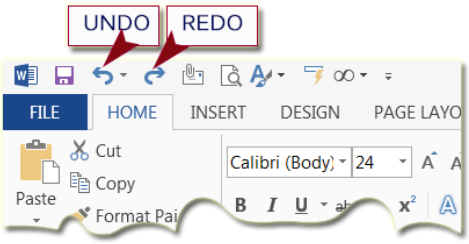
Step 3. Tap or click the Bullets button (HOME tab | Paragraph group) to place a bullet character at the beginning of each selected paragraph.



UNDO AND REDO ACTION

Word provides a means of canceling your recent command (s) or action (s). For example if you format text incorrectly, you can undo the format and try it again. When you point to the Undo button, Word displays the action you can undo as part of a Screen Tip.

If, after you undo an action, you decide you did not want to perform the undo, you can redo the undone action. Word does not allow you to undo or redo some actions, such as saving or printing a document. The following steps undo the bullet format just applied and then redo the bullet format. **Why?** *These steps illustrate the undo and redo actions.*



Step 4. Tap or click the Undo button on the Quick Access Toolbar to reverse your most recent action (in this case, remove the bullets from the paragraphs).

Step 5. Tap or click the Redo button on the Quick Access Toolbar to reverse your most recent undo (in this case, place a bullet character on the paragraphs again)

SAVE YOUR UPDATES

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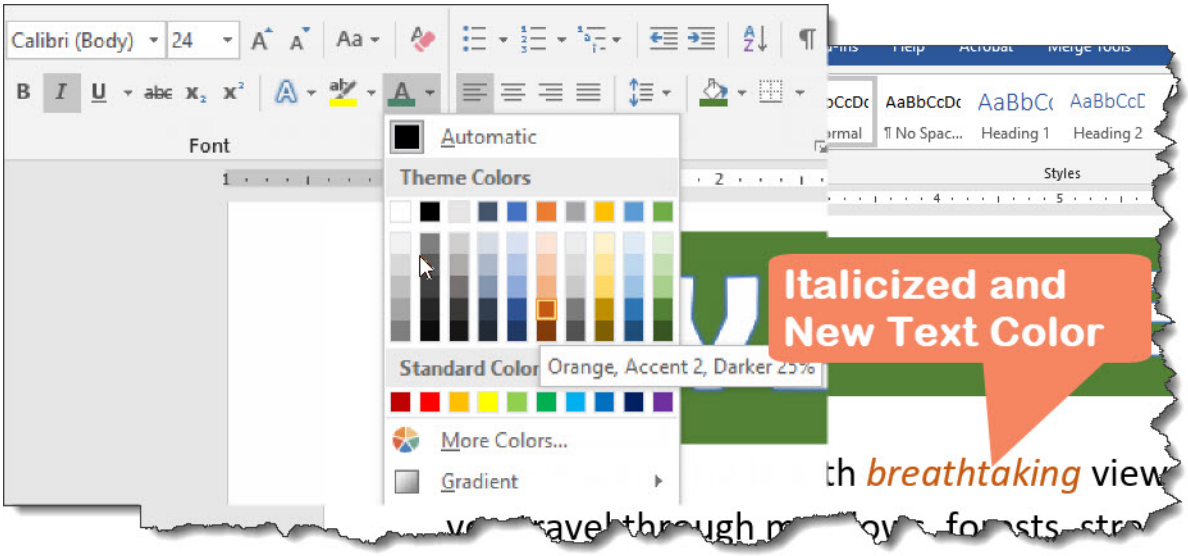
ITALICIZE TEXT

The next step is to italicize the word, breathtaking, in the flyer to further emphasize it. As with a single paragraph, if you want to format a single word, you do not need to select it.

Step 1. Tap or ***Click*** somewhere in the ***word to be italicized*** (***breathtaking***, in this case) to position the insertion point in the word to be formatted

Step 2. Tap or ***Click*** the ***Italic*** button (HOME tab | Font group) to italicize the word containing the insertion point.

Step 3. Tap or ***Click*** '***Orange, Accent 2, Darker 25%*** (sixth color in fifth row) to change the color of the text.



Step 4. ***Select the last sentence*** in the flyer.

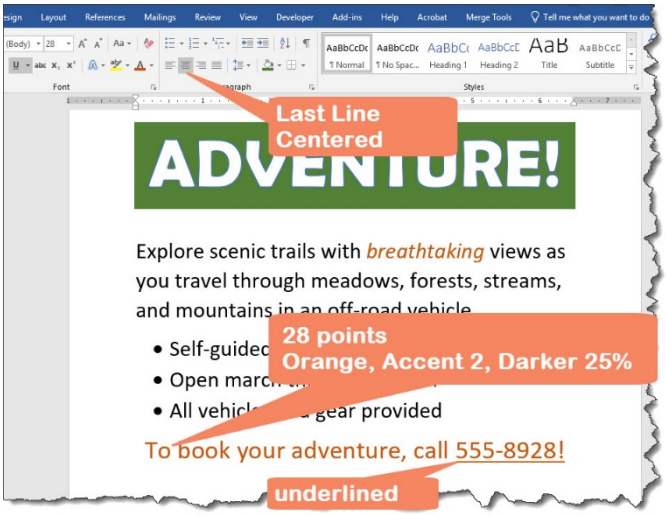
Step 5. Tap or ***Click*** the ***font size*** arrow to display the Font Size Gallery. Choose ***28*** for the for the new font size for the last sentence

Step 6. With the sentences selected, change the ***font color to Orange, Accent 2, Darker 25%***

Step 7. ***Click Center*** to center the last line on vertically on the page.

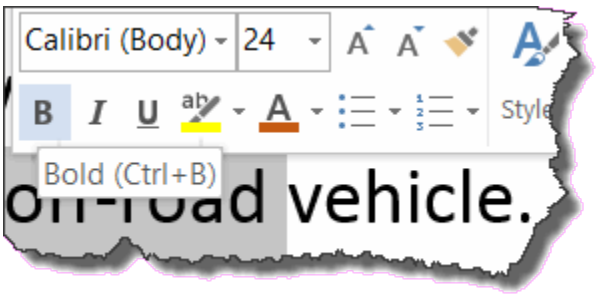
Step 8. ***Select the telephone number*** in the last line of text.

Step 9. With the text selected, tap or ***Click*** the ***Underline*** button (HOME tab| Font group) to underline the selected text.



BOLD TEXT

Bold characters appear somewhat thicker and darker than those that are not bold.

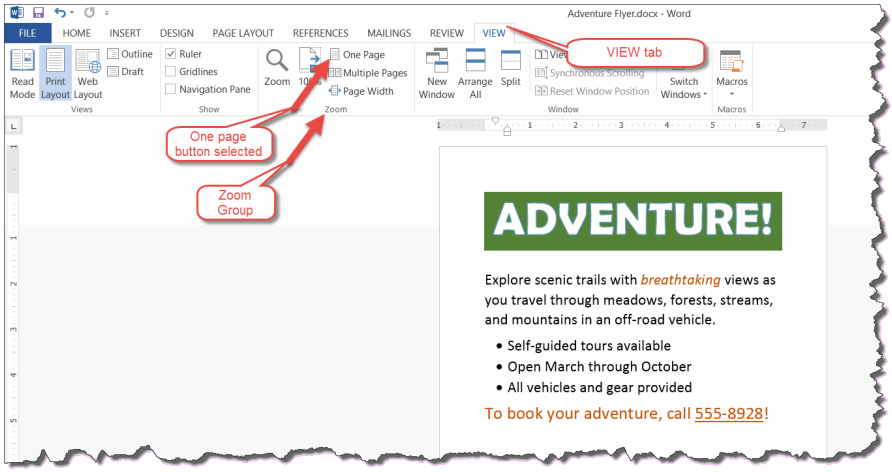


Step 10. ***Select*** the text to be formatted (the text, ***off road***, in this case)

Step 11. With the text selected, tap or ***click*** the ***Bold*** button (HOME tab| Font group) to bold the selected text

Step 12. Tap or ***click anywhere in*** the document window to remove the selection from the screen.

TO ZOOM ONE PAGE



Step 13. Tap or ***click VIEW*** on the ribbon to display the VIEW tab

Step 14. Tap or ***click the One Page*** button (VIEW tab| Zoom group) to display the entire page in the document window as large as possible.

SAVE YOUR UPDATES

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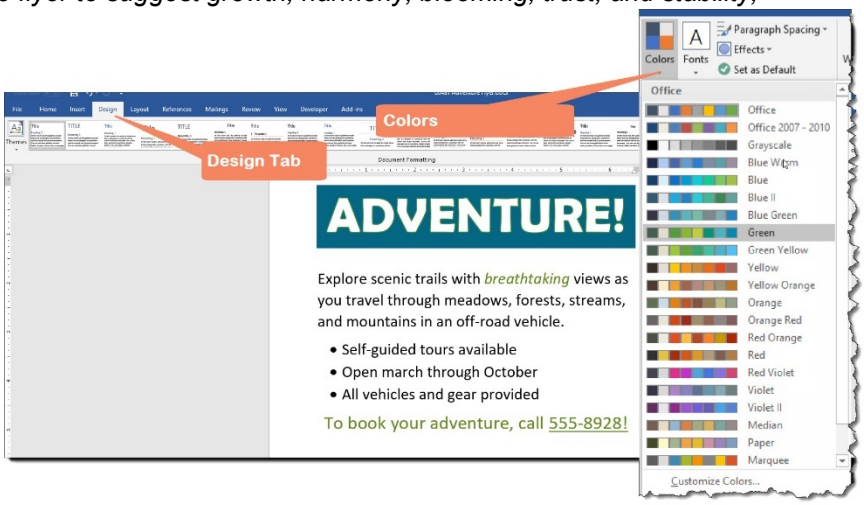
CHANGE THEME COLORS

A color scheme in Word is a document theme that identifies 12 complementary colors of text, background, accents, and links in a document. With more than 20 predefined color schemes, Word provides a simple way to coordinate colors in a document.

The default color scheme is called Office. In the flyer, you will change the color scheme from Office to Green. ***Why?*** *You want the colors in the flyer to suggest growth, harmony, blooming, trust, and stability, which are conveyed by shades of greens and blues. In Word, the green color scheme uses these colors.*



Step 1. Tap or ***Click DESIGN*** on the ribbon to display the DESIGN tab.

Step 2. Tap or ***Click*** the ***Theme Colors*** button (DESIGN tab | Document Formatting group) to display the Theme Colors Gallery

Step 3. ***Point*** to the ***Green*** in the Theme Colors gallery to display a live preview of the selected theme color.

Experiment – Point your mouse to various color schemes in the Theme Colors gallery and watch the colors change in the document.

Step 4. ***Click*** the ***Green*** in the Colors gallery to change the document theme colors.

SAVE YOUR UPDATES

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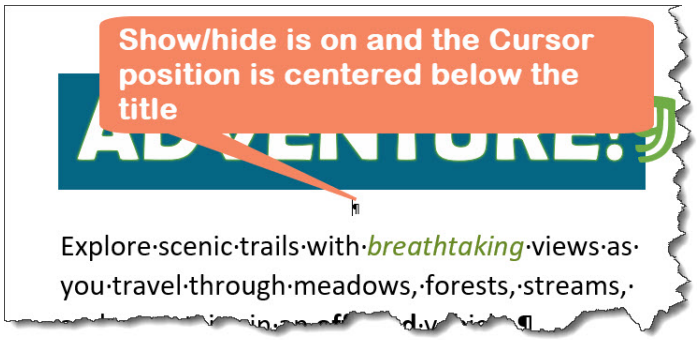
INSERT AND FORMAT A PICTURE

The next step is to insert a digital picture into the flyer then reduce its size.



Step 1. Position the insertion point at the location where you want to insert the picture (in this case, on the centered blank paragraph below the headline).

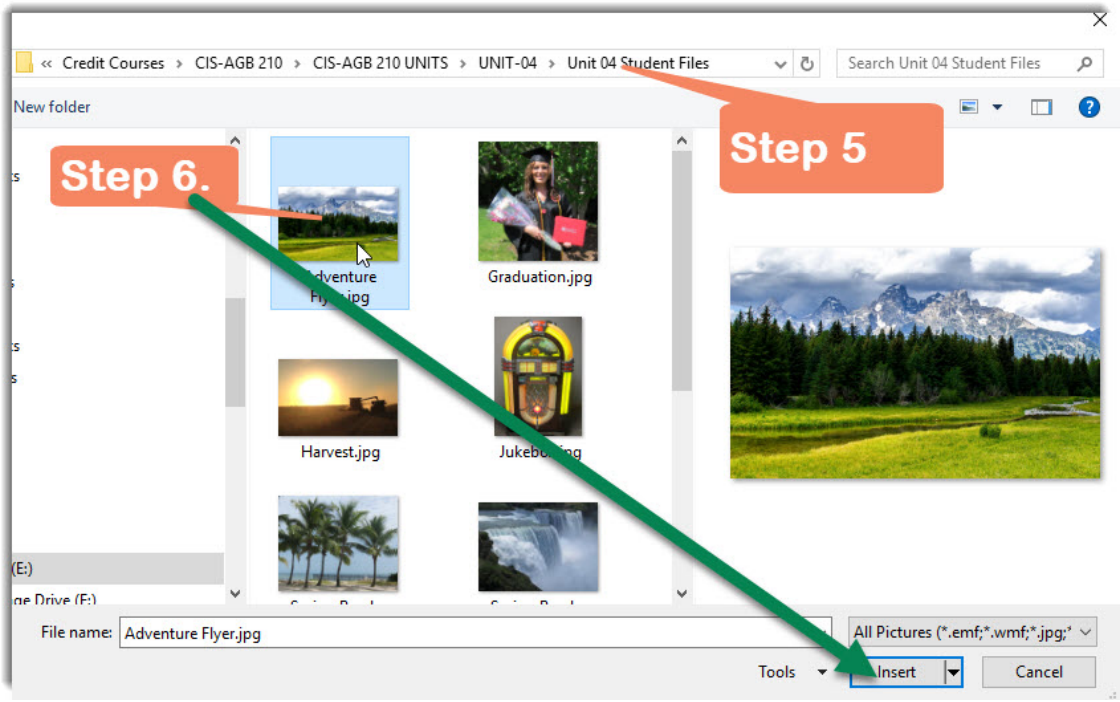
Step 2. Click INSERT on the ribbon to display the INSERT tab

Step 3. *Click* the From File button (INSERT tab | illustrations group).

Step 4. ***Click*** Pictures. Navigate to you documents folder.

Step 5. In your ***UNIT 04*** folder, you will find a folder called "***UNIT 04 Student Files***" this folder contains the image you need to complete this part of the activity.

Step 6. After you have opened the folder, ***Insert*** the picture called ***Adventure Flyer***.

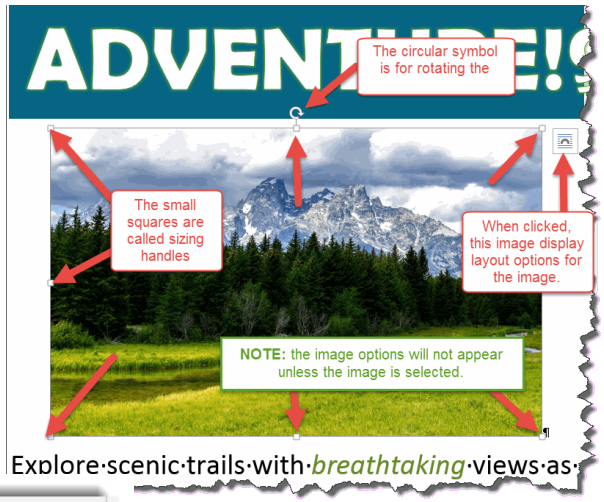


SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

RESIZE THE GRAPHIC

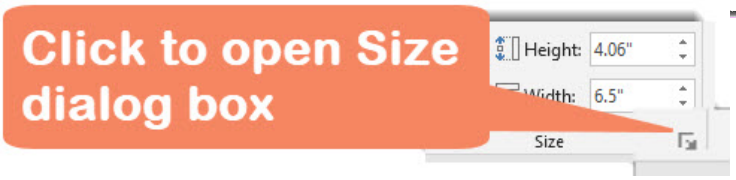
Resizing includes both increasing and reducing the size of a graphic. The next step is to resize the picture so that it is the desired size for the flyer.



Step 1. Be sure the graphic is still selected. **Click** on the ***Picture***

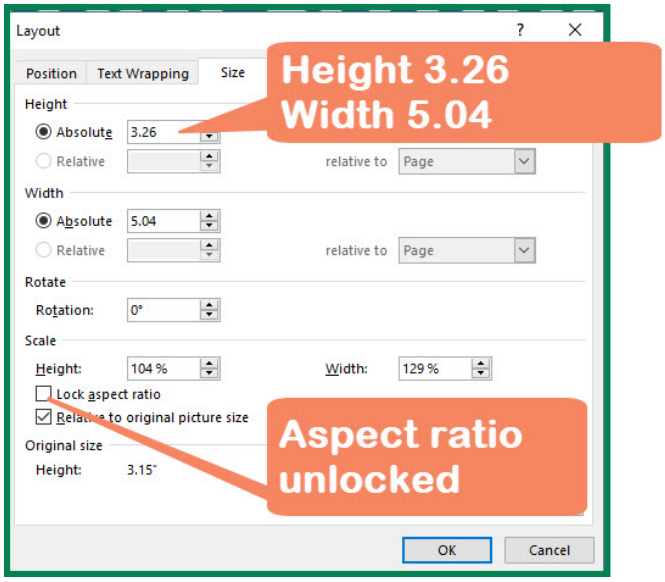
Step 2. You will note when the picture is selected, the PICTURE TOOLS| FORMAT tab appears. ***Click*** on ***PICTURE TOOLS| FORMAT***

Step 3. ***Click right-hand corner of the size group*** to display the size dialog box



Step 4. ***Deselect the option to Lock Aspect Ratio.*** This is a toggle (The term *toggle* implies that there are only two possible settings and that you are switching from the current setting to the other setting.). Refer to the illustration. The Lock Aspect Ratio should not be checked.

Step 5. ***Change the size to 3.26" x 5.04"***



What is Aspect Ratio? The aspect ratio of an image is the ratio of the width of the image to its height, expressed as two numbers separated by a colon. That is, for an x:y aspect ratio, no matter how big or small the image is, if the width is divided into x units of equal length and the height is measured using this same length unit, the height will be measured to be y units. For example, consider a group of images, all with an aspect ratio of 16:9. One image is 16 inches wide and 9 inches high. Another image is 16 centimeters wide and 9 centimeters high. A third is 8 yards wide and 4.5 yards high.

SAVE YOUR UPDATES

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APPLY PICTURE STYLE

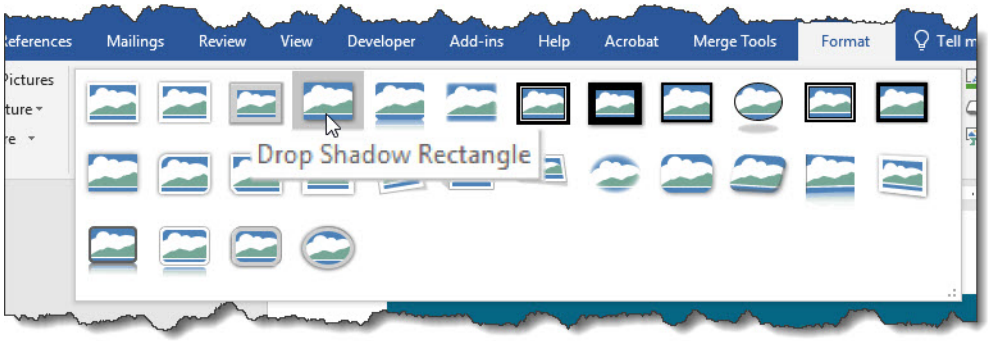
A style is a named group of formatting characteristics Word provides more than 25 picture styles.

Step 1. With the picture selected, tap or ***Click PICTURE TOOLS FORMAT*** on the ribbon to display the PICTURE TOOLS FORMAT tab| Picture Styles group.

Step 2. ***Point to 'Drop Shadow Rectangle' in the Picture Styles gallery*** to display a live preview of the style applied to the picture in the document.

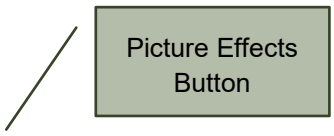
Experiment – Point to various picture styles in the Picture Styles gallery and watch the style of the picture change in the document window.

Step 3. ***Click*** the '***Drop Shadow Rectangle'*** in the Picture Styles gallery (fourth style in first row) to apply the style to the selected picture.



APPLY PICTURE EFFECTS

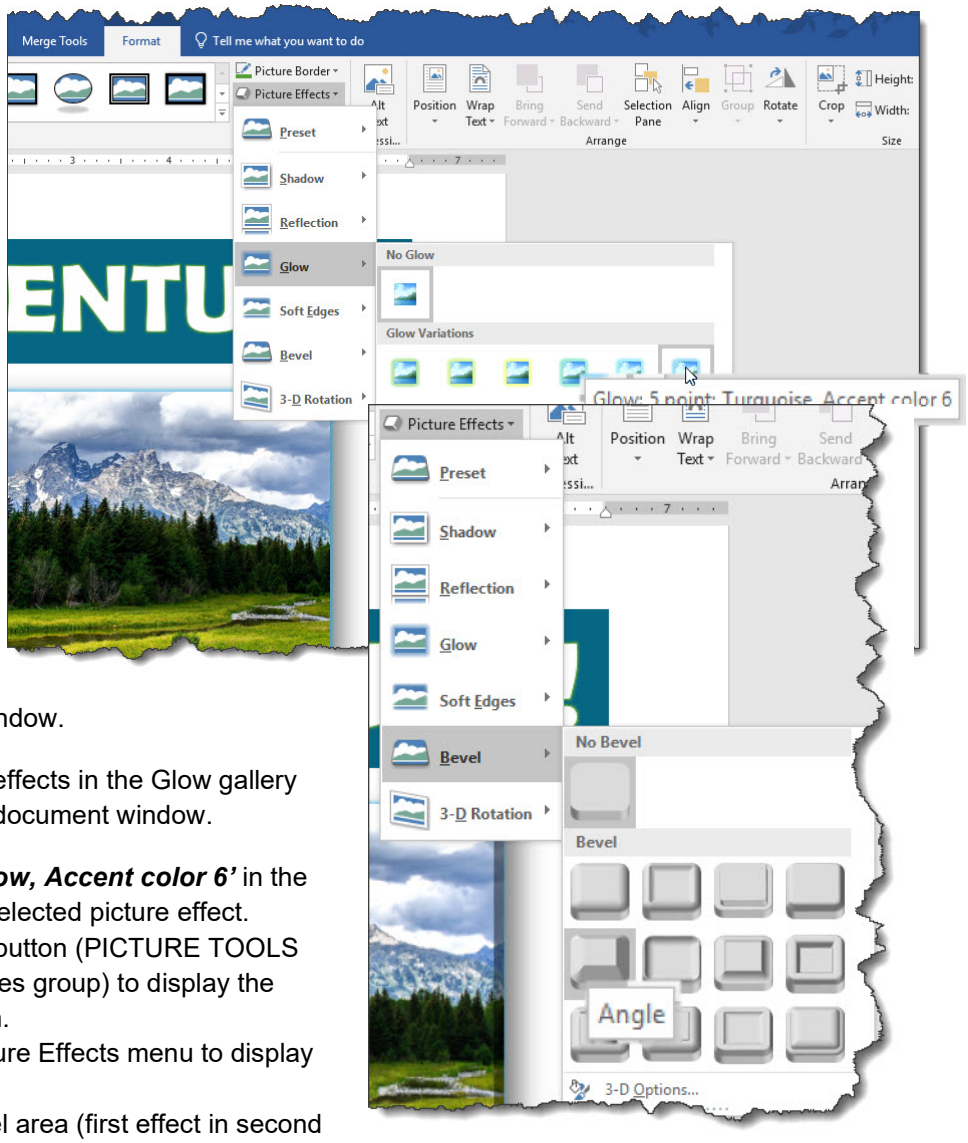
Word provides a variety of picture effects, such as shadows, reflections, glow, soft edges, bevel and 3-D rotation. The difference between the effects and styles is that each effect has several options, providing you with more control over the exact look of the image.



Step 4. With the picture still selected, tap or ***Click*** the ***Picture Effects*** button (PICTURE TOOLS FORMAT tab| Picture Styles group) to display the Picture Effects menu.

Step 5. Tap or ***Point*** to ***Glow*** on the Picture Effects menu to display the Glow gallery.

Step 6. If you are using a mouse, ***Point*** to '***Turquoise, 5pt glow, Accent color 6***' in the Glow variations area (rightmost glow in the first row) to display a live preview of the selected glow effect applied to the picture in the document window.



Experiment – Point to various glow effects in the Glow gallery and watch the picture change in the document window.

Step 7. ***Click 'Turquoise, 5 pt. glow, Accent color 6'*** in the Glow gallery to apply the selected picture effect.

Step 8. ***Click*** the ***Picture Effects*** button (PICTURE TOOLS FORMAT tab | Picture Styles group) to display the Picture Effects menu again.

Step 9. ***Point*** to ***Bevel*** on the Picture Effects menu to display the Bevel gallery

Step 10. ***Point*** to ***Angle*** in the Bevel area (first effect in second row) to display a live preview of the selected bevel effect applied to the picture in the document window.

Experiment – Point to various bevel effects in the Bevel gallery and watch the picture change in the document window.

Step 11. ***Click Angle*** in the ***Bevel gallery*** to apply the selected picture effect.

SAVE YOUR UPDATES

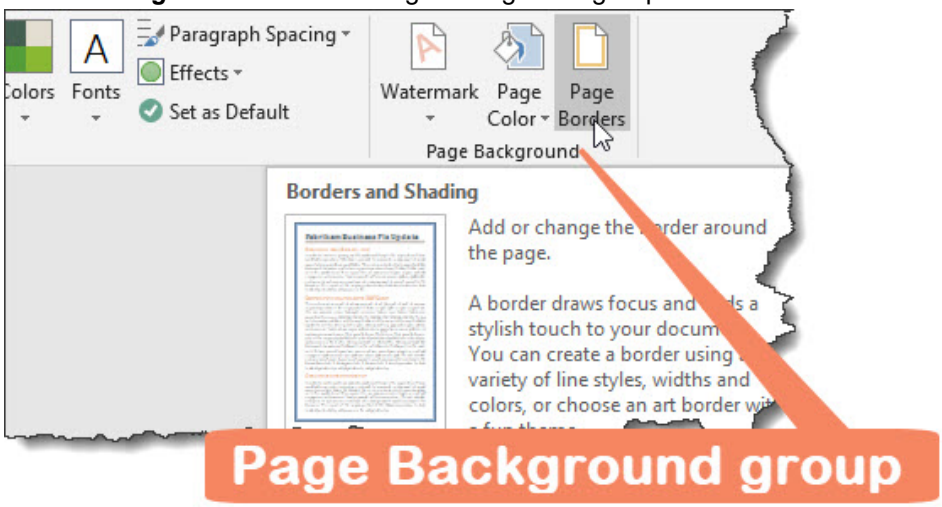
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD A PAGE BORDER

In Word you can add a border around the perimeter of an entire page. We have chosen a light green border to complement the flyer. These are the steps to add the page border.

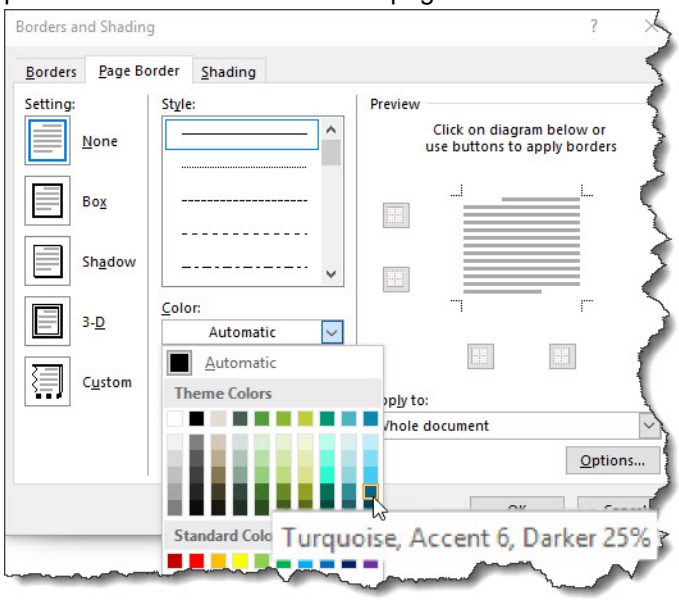
Step 1. ***Click DESIGN*** to display the DESIGN ribbon.

Step 2. ***Click*** the ***Page Borders*** in the Page Background group



Step 3. ***Choose*** the ***drop-down menu*** for the ***Color***

Step 4. ***Click*** '***Turquoise, Accent 6, Darker 25%***' (fifth color in the turquoise column) in the Color palette to select the color for the page border.



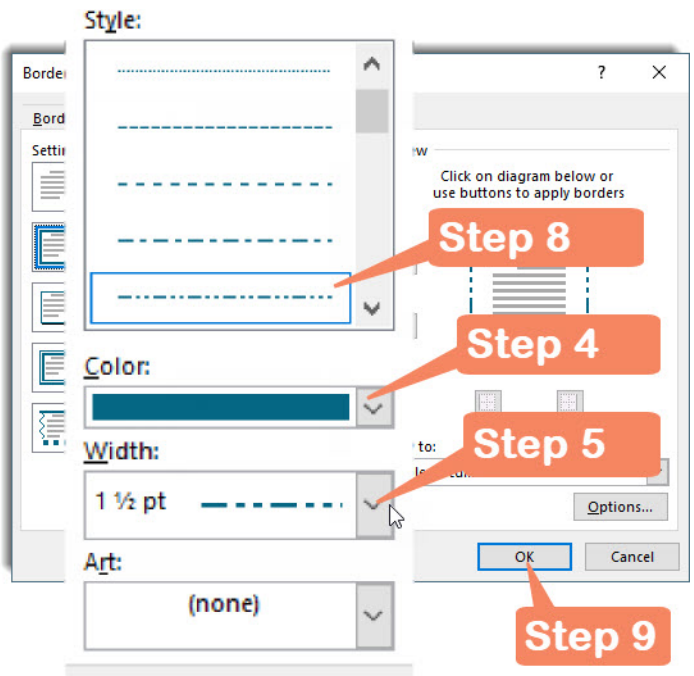
Step 5. ***Click*** the ***Width*** arrow to display the Width list

Step 6. ***Click 1 ½ pt.*** to select the thickness of the page border.

Step 7. ***Scroll through*** the ***Style*** option to choose the desired line style

Step 8. ***Click the broken dashed line***

Step 9. ***Click*** the ***OK*** button to add the border to the page.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u04a1 Adventure Flyer

ON YOUR OWN ACTIVITY

For this activity, you will be creating a flyer to promote the Gulliver's Travel Agency. You may need to reference the lessons presented in the tutorial portion of Unit 04. All the same principles used in the unit are applied to this activity.

Step 1. ***Open*** a ***New Word document***

Step 2. Use the verification steps to ***Verify*** the ***document settings*** are correct

Step 3. ***Save as*** your file as *u04a2 Spring Break Flyer*

Step 4. ***Change*** the ***Theme*** to ***ION***

Step 5. ***Type*** the following HEADLINE: *Spring Break*

Step 6. ***Hit ENTER***

Step 7. ***TYPE*** the SECOND HEADLINE: *Party Packages*

Step 8. ***Hit ENTER, ENTER***

Step 9. ***TYPE*** the COMPANY NAME: *Gulliver's Travel*

Step 10. ***Hit ENTER***

Step 11. ***TYPE*** the COMPANY ADDRESS: *758 Grant Street in Mulberry*

Step 12. ***Hit ENTER***

Step 13. ***TYPE*** *the* LINE 1*:* *Packages include airfare, rental car, accommodations, and dining*

Step 14. ***Hit ENTER***

Step 15. ***TYPE*** the LINE 2: *Discounted attraction tickets*

Step 16. ***Hit ENTER***

Step 17. ***TYPE*** the LINE 3: *Destinations around the country*

Step 18. ***Hit ENTER***

Step 19. ***TYPE*** the LINE 4: *Fund-raising tools for you to use on Facebook, Twitter or via email*

Step 20. ***Hit ENTER***

Step 21. ***TYPE*** the SIGNATURE LINE: ***Call us at 715-588-7500 or stop by today!***

Step 22. ***CLICK HOME*** to view the Home ribbon

Step 23. ***TRIPLE-CLICK*** the ***HEADLINE*** to select the entire paragraph

- ***a.*** ***CENTER the TEXT***
- ***b.*** Change the ***FONT*** to ***BROADWAY***
- ***c.*** Font ***SIZE*** to ***48***
- ***d.*** ***Fill: Blue-Gray, Accent color 5; Outline: White, Background color 1; hard Shadow: Blue-Gray, Accent color 5***

Step 24. ***TRIPPLE-CLICK*** the ***SECOND HEADLINE*** to select the entire paragraph

- ***a.*** ***CENTER*** the ***TEXT***
- ***b.*** Change the ***FONT*** to ***ARIAL ROUNDED MT BOLD***
- ***c.*** Font ***SIZE*** to ***28***
- ***d.*** In the Paragraph group, ***SHADING***: ***PURPLE, ACCENT 6, LIGHTER 40%***
- ***e.*** Set the ***FONT COLOR: WHITE, BACKGROUND 1***

Step 25. ***Select COMPANY NAME***

Step 26. ***CLICK Line Spacing*** in the Paragraph Group

Step 27. ***CLICK Remove Space After***

Step 28. ***CENTER*** the ***COMPANY NAME*** and ***COMPANY ADDRESS***

Step 29. ***HIGHLIGHT*** the text containing ***COMPANY NAME, ADDRESS AND LINES 1-4***

Step 30. ***CHANGE THE FONT*** of the highlighted text to ***Arial Rounded MT Bold.***

Step 31. ***FONT SIZES:***

- ***a.*** COMPANY NAME: ***28 points***
- ***b.*** COMPANY ADDRESS: ***24 points***
- ***c.*** LINES 1-4, & SIGNATURE: ***22 points***

Step 32. ***Select LINES 1-4***

Step 33. In the paragraph group, ***CLICK*** the ***BULLETS*** option. You should have 4 bulleted lines of text.

Step 34. Change the ***TEXT COLOR*** for ***COMPANY NAME*** and ***ADDRESS*** to ***BLUE-GREY, ACCENT 5, DARKER 25%***

Step 35. ***UNDERLINE*** the ***COMPANY NAME***

Step 36. In ***LINE 1*** of the bulleted text, ***ITALICIZE*** the word ***AND***

Step 37. In ***LINE 2*** of the bulleted text, ***BOLD*** the word ***DISCOUNTED.*** Change the color of the word to ***PURPLE, ACCENT 6, DARKER 25%***

Step 38. ***TRIPLE-CLICK*** the ***SIGNATURE LINE*** to select the entire paragraph

- ***a.*** Use the shading option in the Paragraph group to ***SHADE*** the ***SIGNATURE LINE: PURPLE, ACCENT 6, LIGHTER 40%***
- ***b.*** ***CENTER the SIGNATURE LINE***
- ***c.*** Set the ***FONT COLOR: WHITE, BACKGROUND 1***

Step 39. ***ZOOM*** to view the entire page of the document

Step 40. On the blank line after the second heading***, INSERT PICTURES (***Both images are in the UNIT 04 Student Files.)***:***

- ***a.*** ***SPRING BREAK-FLORIDA***
- ***b.*** ***SPRING-BREAK NEW YORK***

Step 41. ***CHANGE FLORIDA IMAGE:***

a.	SIZE:	***2.4" X 3"***
b.	FRAME:	***SIMPLE FRAME, WHITE***
c.	PICTURE EFFECTS:	***3-D ROTATION***
d.	PERSPECTIVE:	***RIGHT***
e.	WRAP:	***TIGHT***

Step 42. ***CHANGE NEW YORK IMAGE:***

a.	SIZE:	***2.4" X 3"***
b.	FRAME:	***SIMPLE FRAME, WHITE***
c.	ROTATION:	***3-D ROTATION***
d.	PERSPECTIVE:	***LEFT***
e.	WRAP:	***TIGHT***

Step 43. ***PLACE THE IMAGES*** on the same line under the second headline

Step 44. In the line spacing option, the ***SPACING BEFORE*** the ***SIGNATURE LINE*** should be ***12 pts.***

Step 45. ***PAGE BORDER:***

a.	STYLE:	***THICK AND THIN LINE***
b.	COLOR:	***PURPLE, ACCENT 6***
c.	WIDTH:	***6 pts.***

Step 46. **Save your work and submit the file to the u04a2 assignment area.**

UNIT 05 CREATE A BUSINESS LETTER WITH LETTERHEAD AND TABLE

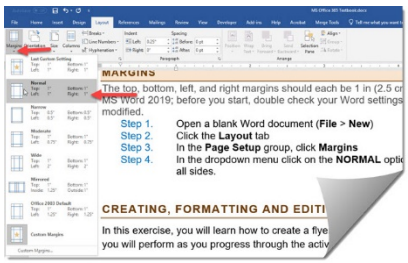
In this unit, your will learn how to create a block style letter and then modify it to modified block style. The following roadmap identifies general activities you will perform as ou progress through the unit:

- ✓ ***CREATE AND FORMAT*** a ***LETTERHEAD WITH GRAPHICS***
- ✓ ***SPECIFY*** the ***LETTER FORMATS*** according to Business letter guidelines
- ✓ ***INSERT*** a ***TABLE*** in the letter
- ✓ ***FORMAT*** the ***TABLE*** in the letter
- ✓ ***INSERT*** a ***BULLETTED LIST*** in the letter
- ✓ ***ADDRESS*** an ***ENVELOPE*** for the Letter

VERIFY THE DOCUMENT SETTINGS

Before you start, double check your Word settings to make sure they have not been modified.

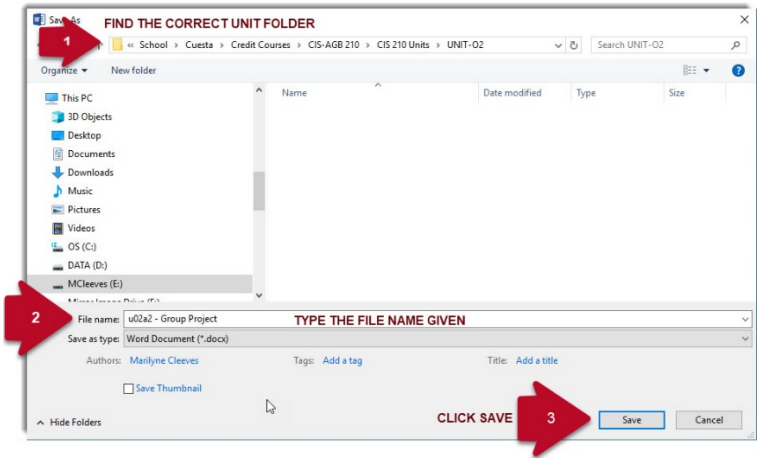
Step 1. Open a blank Word document (**File** > **New**)
Step 2. Click the **Layout** tab
Step 3. In the **Page Setup** group, click **Margins**
Step 4. In the dropdown menu click on the **NORMAL** option. This will set your margins at 1" on all sides.



SAVE THE FILE

Step 5. Now that the margins are set, you should save your file. An easy saving method is to use your **CTRL** key with the letter **S**. In a new document, if you hold down **CTRL** and hit the letter **S**, you will receive a Save As dialog box.

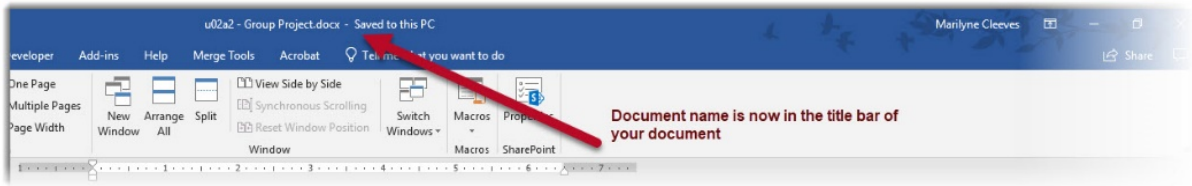
Step 6. Click on the ***Browse*** option and navigate to your folders for this class. In the illustration my folder is in School\Cuesta\Credit Courses\CIS-AGB 210\CIS 210 UNITS\ **UNIT-05**



Step 7. In the section marked **File name**, type your file name as:

u05a1 Letterhead

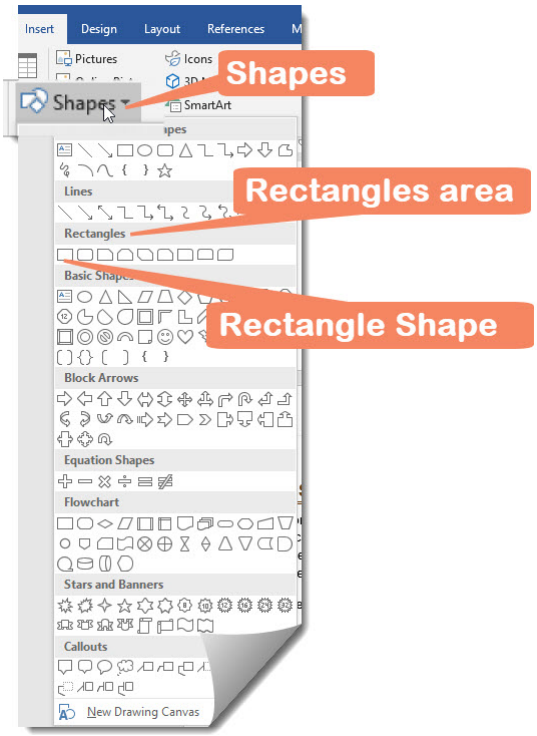
Step 8. ***Click Save***. You will see the new file name appear in the title bar of your document.



INSERT A SHAPE

Word has a variety of predefined shapes, which are a type of drawing object, that you can insert in documents. A **drawing object** is a graphic that you can create using Word. Examples of shape drawing objects include rectangles**,** circles, triangles, arrows, flowcharting symbols, stars, banners, and callouts (Freund, et al., 2017).

Use the following steps to insert a rectangle shape in the letterhead:



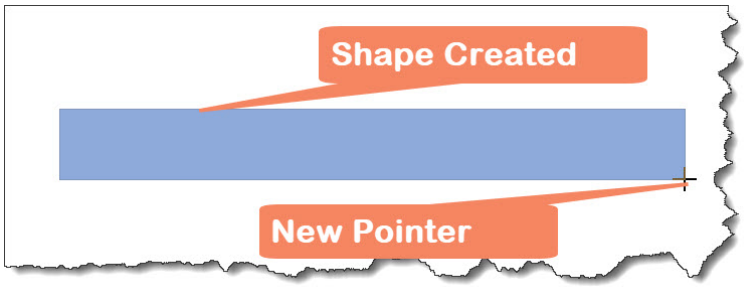
Step 1. ***CLICK INSERT*** to display the Insert ribbon band.

Step 2. In the Illustrations group, ***CLICK*** the drop-down arrow head next to ***SHAPES***

Step 3. ***CLICK*** *the* ***RECTANGLE SHAPE****.* The shape gallery will then disappear. Your pointer changes to a plus.

Step 4. Use the ***NEW POINTER*** *to* ***DRAG THE MOUSE*** to the ***RIGHT*** and ***DOWNWARD***

Step 5. ***RELEASE THE MOUSE.*** Your shape should now show on your document.

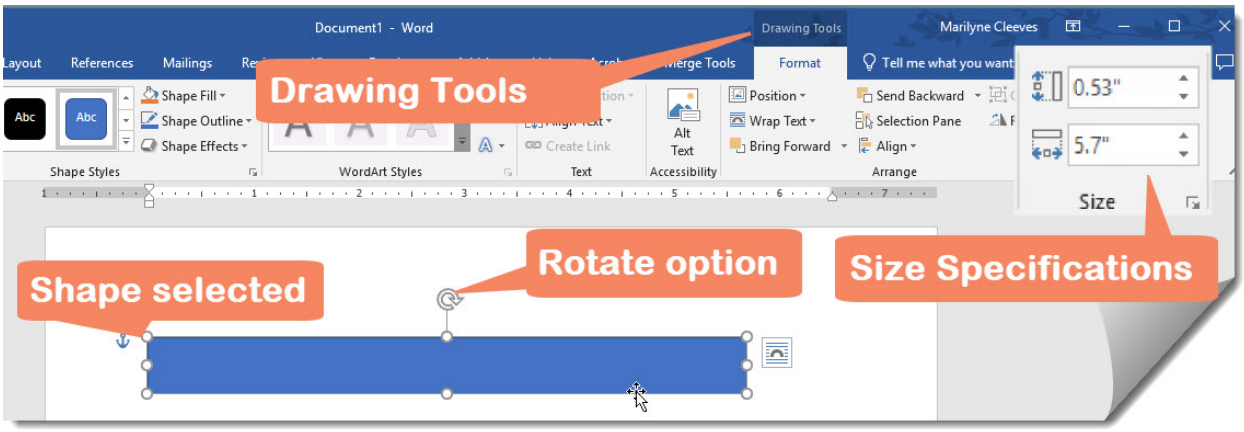


ADJUST THE SHAPE SIZE

Step 6. ***SELECT*** the ***SHAPE*** you have created. You will see sizing handles around the shape when it is selected.

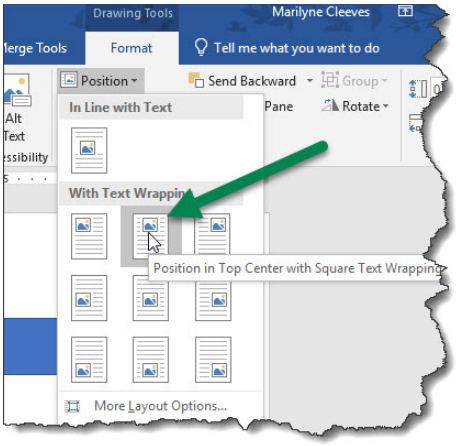
Step 7. With the shape selected, ***CLICK*** the ***DRAWING TOOLS*** to display the ***FORMAT*** options.

Step 8. In the Size group, change the ***HEIGHT .53"*** and the ***WIDTH 5.7"***



Step 9. After the shape size has been set, ***RELEASE*** the ***MOUSE***

CHANGE THE POSITION OF THE OBJECT



Step 10. With the shape still selected, change the position of the shape. ***CLICK POSITION*** in the Arrange group.

Step 11. In the With Text Wrapping option, change the position to center. ***CLICK TEXT WRAP CENTER***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CHANGE A SHAPE

APPLY SHAPE STYLE

Quick Styles let you apply a style to your shape with one click. You'll find the styles in the Quick Style gallery. When you rest your pointer over a Quick Style thumbnail, you can see how the style affects your shape.

Step 1. ***SELECT*** the ***SHAPE***

Step 2. In the Drawing tools Shape Styles group, ***CLICK*** the ***MORE*** option in the gallery.

Step 3. In the Theme Styles Gallery, choose ***Moderate Effect – Grey 50%, Accent 3***

ADD TEXT TO A SHAPE

Step 4. ***RIGHT-CLICK*** the ***SHAPE*** to display a mini toolbar and/or shortcut menu

Step 5. ***CLICK ADD TEXT***

Step 6. Type ***Village of Apple Park***

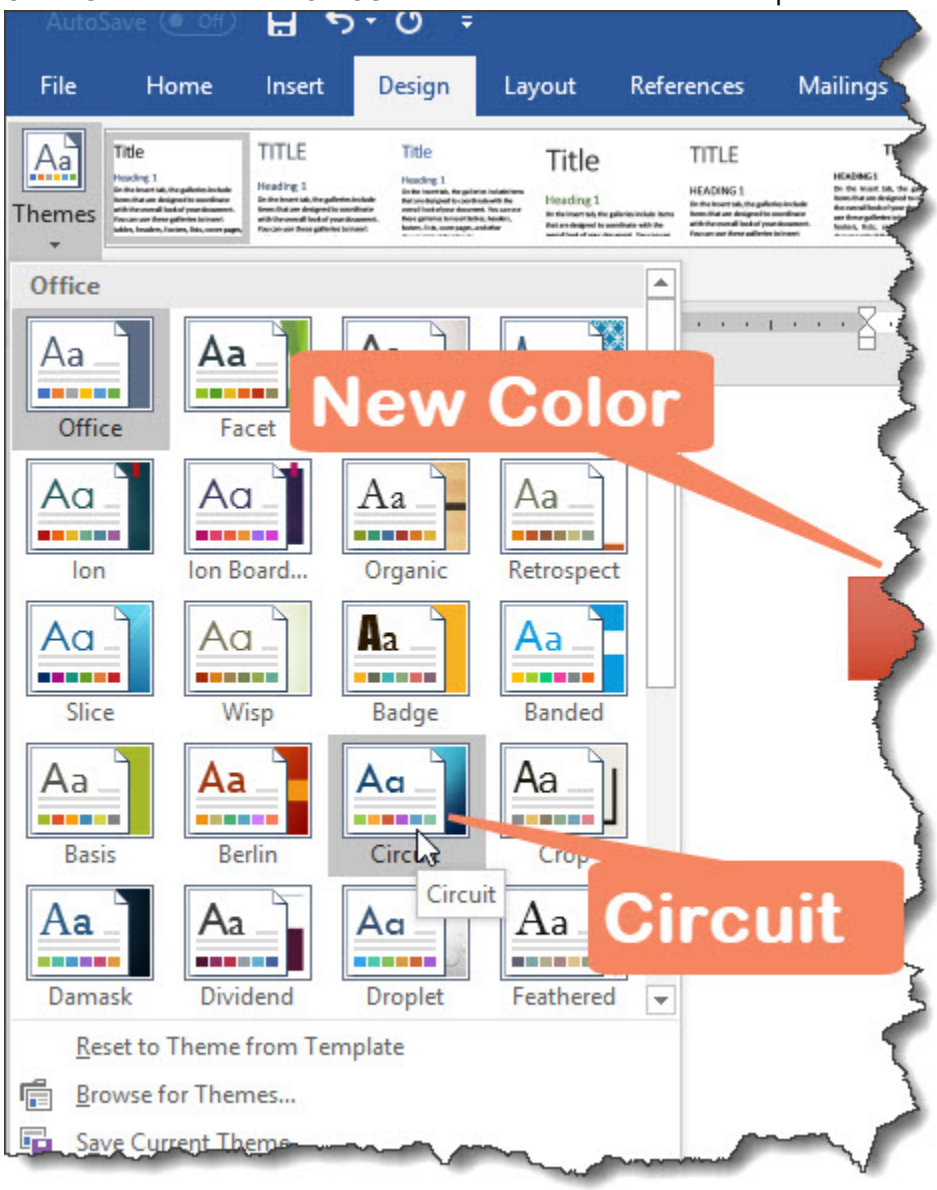
Step 7. Increase the ***FONT*** size to ***26.***

Step 8. Emphasize the font- ***CLICK BOLD***

CHANGE THE THEME

Step 9. ***CLICK*** on ***DESIGN*** to display the Design ribbon.

Step 10. ***CHANGE*** the ***THEME*** to ***CIRCUIT.*** Note that the color for the shape is now an apple red.



SAVE YOUR UPDATES

Village of Apple Park

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

INSERT A PICTURE

The image you will be using for this letterhead is an apple that has been provided for you in your UNIT 05 Student Files. Please follow these instructions to insert the picture into your document:

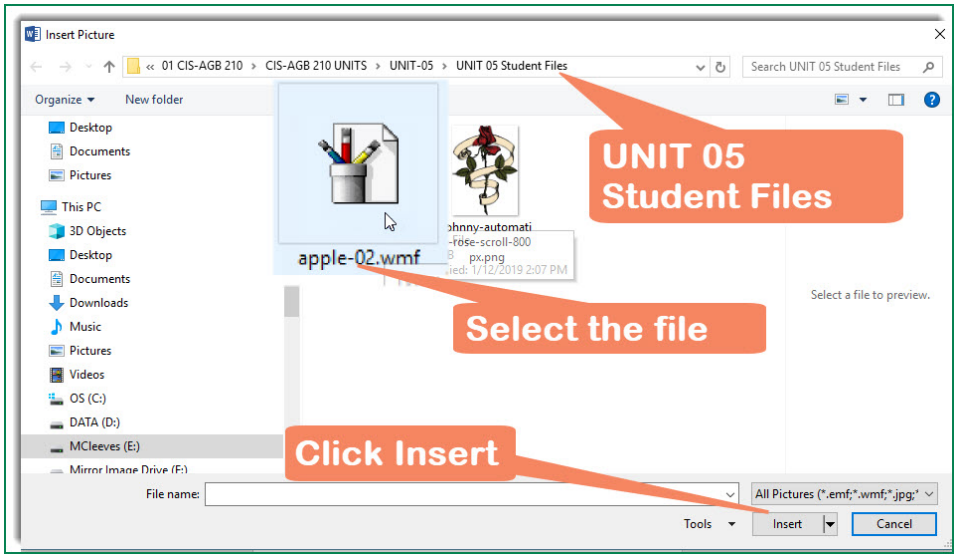
Step 1. ***CLICK*** the ***INSERT*** tab to display the Insert ribbon

Step 2. In the Illustrations group, ***CLICK PICTURES***

Step 3. ***BROWSE*** your computer until you see the ***UNIT 05 Student Files***

Step 4. ***CLICK apple-02.wmf.*** This file is the type of file that is easy to alter. It is important you use the file from the UNIT 05 Student files for this activity.

Step 5. ***CLICK INSERT***



CHANGE THE COLOR OF A GRAPHIC

We will be eventually resizing the apple graphic but before we do so, we are going to change some of the background properties by following these instructions:

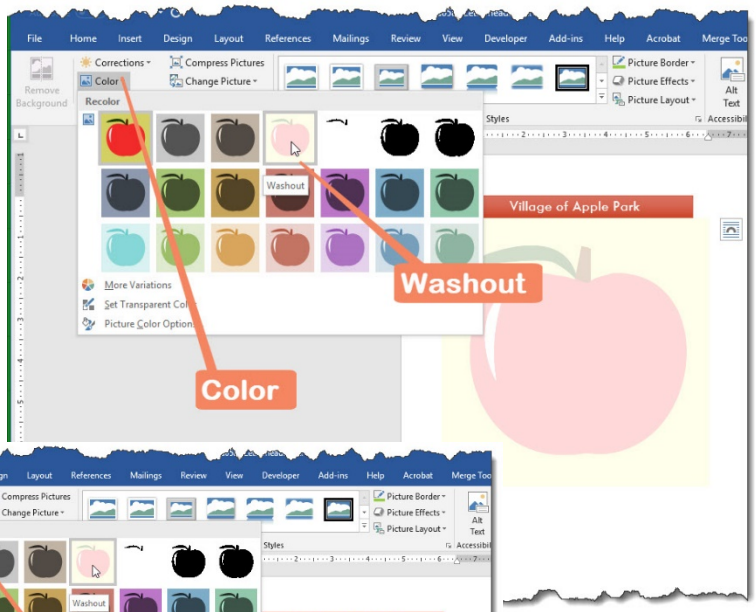
Step 6. Select the apple graphic that was just inserted into the text. ***CLICK*** the ***PICTURE TOOLS*** option that appears when your graphic is selected.

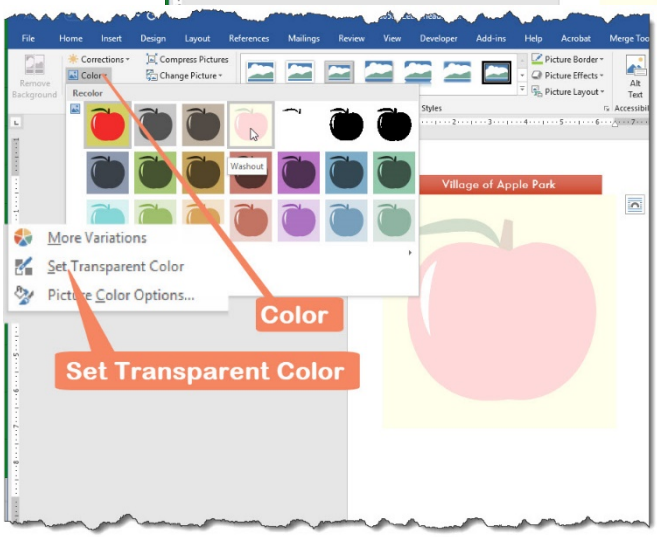
Step 7. From the Picture Tools Format menu, ***CLICK COLOR*** from the Adjust group.

Step 8. ***CLICK WASHOUT*** to change the color of the picture

Step 9. With the graphic still selected, ***CLICK*** the ***COLOR*** option again.

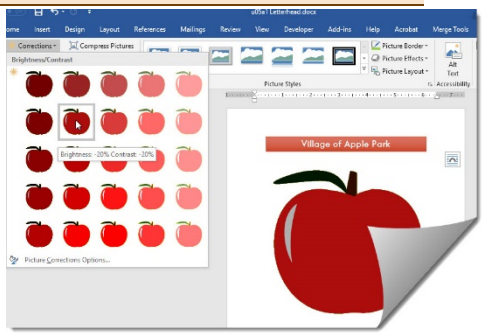
Step 10. On the bottom left corner of the color option, you will see an option called Set Transparent Color. ***CLICK*** on ***SET TRANSPARENT COLOR***





Step 11. After you choose the transparent color option, you will notice your mouse turns into a pencil with a triangle in the bottom. Use the new pointer to ***CLICK*** on the ***BACKGROUND.*** The background around the apple is now transparent.

ADJUST THE BRIGHTNESS, CONTRAST AND SIZE OF A GRAPHIC



Step 12. With the graphic still selected, ***CLICK CORRECTIONS*** on the Picture Tools Format menu.

Step 13. ***CLICK BRIGHTNESS: -20% CONTRAST: -20%***

Step 14. If needed select the graphic again. In the ***SIZE*** group of the Picture Tools Format option enter the ***HEIGHT .53" WIDTH .53"***

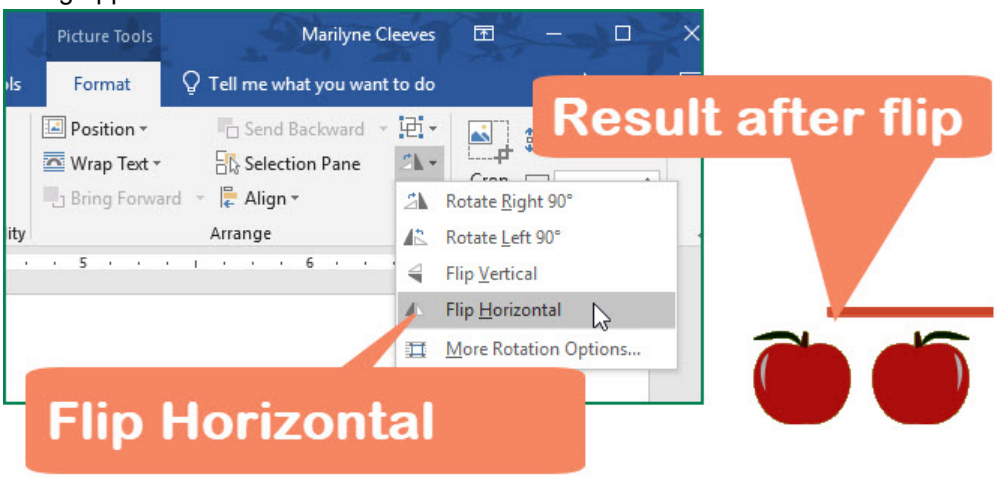
Step 15. ***RIGHT-CLICK*** the apple graphic after it has been sized and ***CLICK COPY***

Step 16. ***RIGHT-CLICK PASTE*** the copy of the apple with the background removed and the color changed.

Step 17. ***CLICK*** the new copy of the ***APPLE*** to select it.

Step 18. In the picture tools menu, navigate to the Arrange group. ***CLICK*** the ***DROP-DOWN MENU*** under ***ROTATE OBJECTS***

Step 19. ***CLICK FLIP HORIZONTAL.*** You should now have two apples without any background, facing opposite directions.



CHANGE THE BORDER COLOR ON A GRAPHIC

Step 20. With the apple graphic selected, ***CLICK the PICTURE TOOLS: FORMAT tab***

Step 21. In the picture styles group, ***CLICK PICTURE BORDER*** to display the drop-down menu

Step 22. ***CLICK*** on ***LIME, ACCENT 1, DARKER 25%***

Step 23. The apply now has a lime green border around the picture. ***RIGHT-CLICK*** on the APPLE WITH THE BORDER and select your ***FORMAT PAINTER***

Step 24. ***CLICK*** on the ***APPLE WITHOUT THE BORDER*** with your ***FORMAT PAINTER.*** You should now have two apples with a border.

Step 25. Change the ***WRAP*** *on each* ***APPLE*** to ***TIGHT***

Step 26. ***PLACE*** each apple on the ***ENDS*** of the ***SHAPE*** you created. You can do this by clicking on the graphic and placing it on the end of the shape.

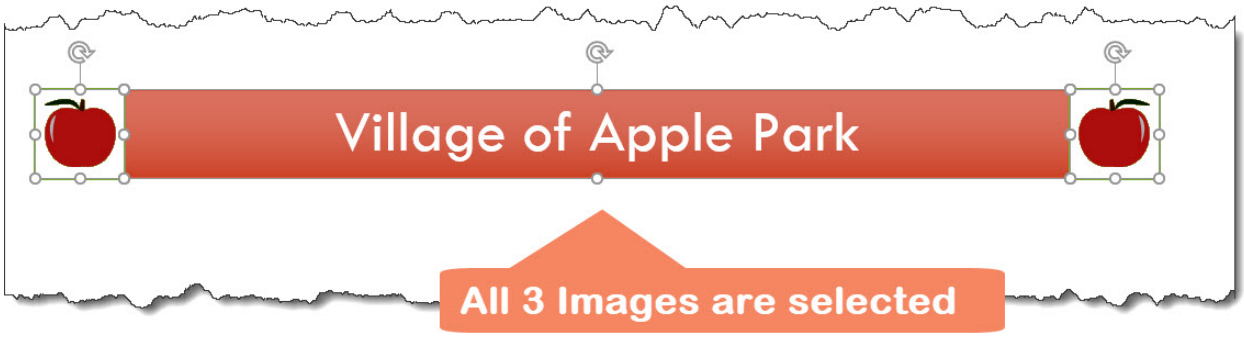
Step 27. ***CLICK*** on the ***SHAPE***. You can easily align the shape with the apples with your arrow keys. Try nudging it into place.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

COPY AND PASTE GROUPED IMAGES

Step 1. *Once the apples are placed in alignment with the shape,* select each of the 3 images. ***HOLD DOWN*** your ***SHIFT KEY*** and ***CLICK ON EACH IMAGE.*** The images should have selection marks around every graphic.



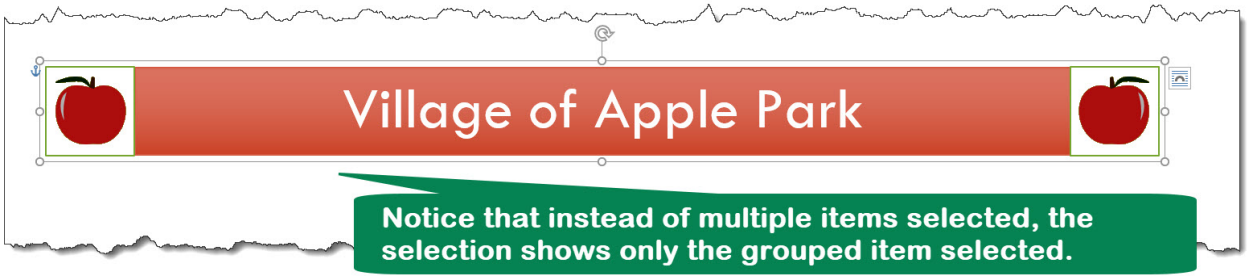
Step 2. ***CLICK PICTURE TOOLS***

Step 3. In the arrange group, ***CLICK GROUP***. Grouping lets you rotate, flip, move, or resize all shapes or objects at the same time as though they were a single shape or object. You can also change the attributes of all the shapes at one time. You can ungroup a group of shapes at any time and then regroup them later.

CUT AND PASTE THE GROUP

Step 4. ***CLICK*** on the ***HOME*** tab to reveal the home ribbon

Step 5. ***CLICK*** the ***GROUPED IMAGE***. The selection should look like the following illustration:



Step 6. In the clipboard group, ***CLICK CUT*** (represented with a pair of scissors). You have not lost your work. This removes the grouped graphic from the page and places it in the clipboard.

PLACE THE GRAPHIC IN THE HEADER

Step 7. ***CLICK*** on the ***INSERT*** tab to reveal the insert ribbon

Step 8. ***CLICK*** on the ***HEADER*** option in the Header & Footer group

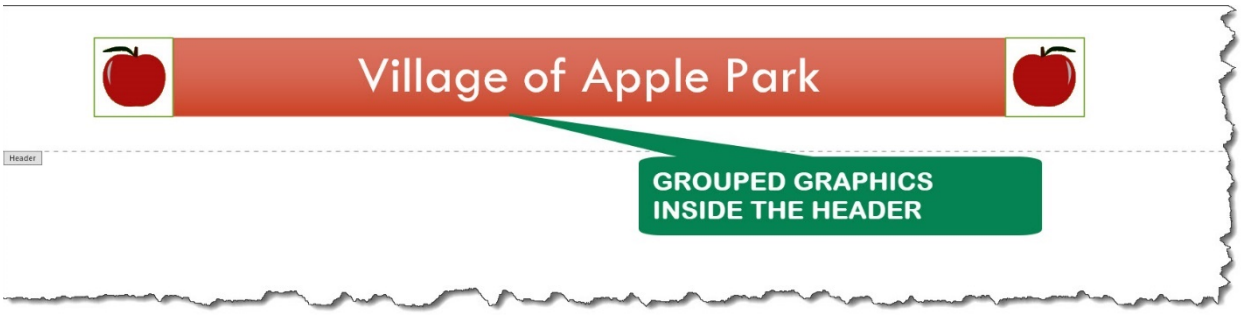
Step 9. ***CLICK EDIT HEADER***

Step 10. ***RIGHT-CLICK*** your ***MOUSE*** inside the header

Step 11. ***CLICK PASTE***. Select the first paste option (use destination theme)

Step 12. ***CLICK*** on the ***GROUPED GRAPHIC*** to select it again.

Step 13. You should ***MOVE*** the ***GRAPHIC*** to the desired location. Keep in mind most printers will allow at least .25 inch from the top of the paper. Once the graphic is selected, you can move it using your arrow keys or your mouse. The following image illustrates an example moved inside the header before the header is closed:



TYPE THE ADDRESS

Step 1. ***CLICK*** the ***GROUPED GRAPHIC***

Step 2. In the ***PICTURE TOOLS*** menu, ***CLICK WRAP TEXT***

Step 3. ***CLICK*** the ***TOP AND BOTTOM*** option.

Step 4. ***CLICK CENTER*** to center the text

Step 5. Your cursor should appear below the graphic. If it does not, you should hit enter. From the ***HOME*** tab change the settings to the following:

a. ***FONT SIZE 12***.

b. Align the text ***CENTER***

Step 6. Type ***15 Center Street, Horizon, MT 35568***

Step 7. Enter a ***SPACE*** after the zip code

INSERT A SYMBOL

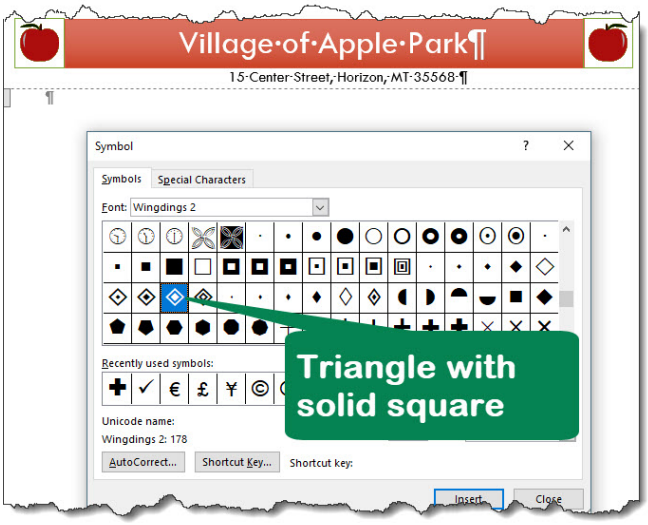
Step 8. ***CLICK*** the ***INSERT*** tab to open the Insert ribbon

Step 9. In the Symbols group ***CLICK SYMBOL***

Step 10. ***CLICK MORE SYMBOLS . . .***

a. FONT: Wingdings 2

b. ***CLICK TRAIANGE WITH A SQUARE*** (refer to the graphic illustration)



c. ***CLICK INSERT*** to insert the symbol in the address. ***CLOSE*** the menu.

Step 11. ***HIT SPACE***

Step 12. Type ***Phone: (802) 555-7896***

Step 13. ***HIT SPACE***

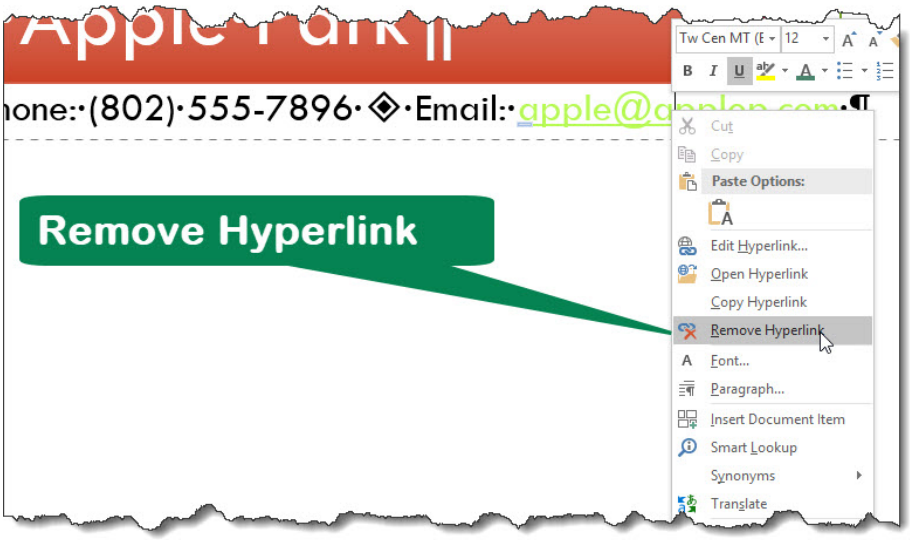
Step 14. ***INSERT ANOTHER SYMBOL*** (same as the first symbol). Since it was the last symbol you used, it will be first on the list.

Step 15. Type ***Email: apple@applep.com***

REMOVE HYPERLINK

Step 16. When you type the email address, it will automatically become a hyperlink. ***RIGHT-CLICK*** the ***EMAIL ADDRESS***.

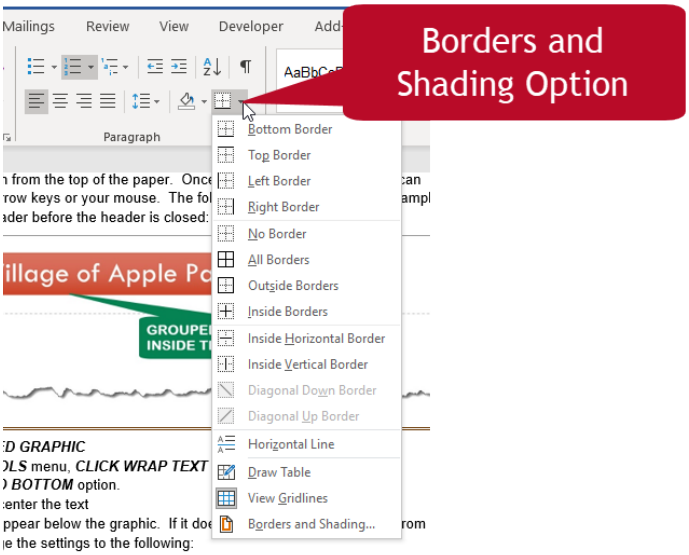
Step 17. ***CLICK REMOVE HYPERLINK***



ADD PARAGRAPH UNDERLINE

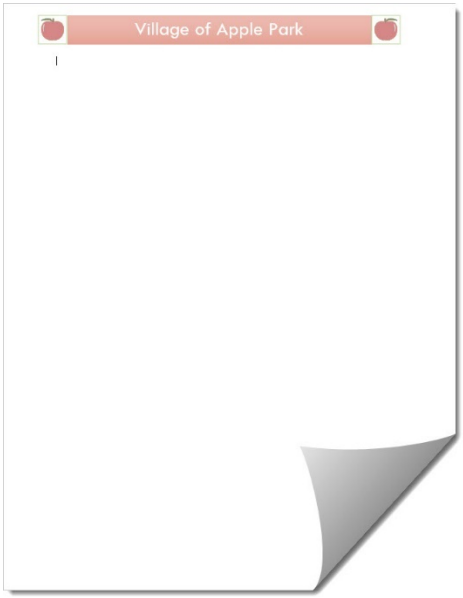
Step 1. ***CLICK*** in the paragraph to be underlined (the address line).

Step 2. Click the Borders and Shading Option ***(HOME tab | Paragraph group)*** to display the gallery



Step 3. ***SELECT*** the ***BOTTOM BORDER*** option. Address should now have an underline that extends the full length of the paragraph.

Step 4. Using the Header & Footer tools menu, ***CLOSE*** the ***HEADER.*** The letterhead will appear faded because it is in the header; however, it does not print faded. You can test it with a print preview. A copy of the finished letterhead as it appears in Word is below:



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u05a1 Letterhead

BUSINESS LETTERS (BLOCK AND MODIFIED BLOCK STYLES)

Block Format

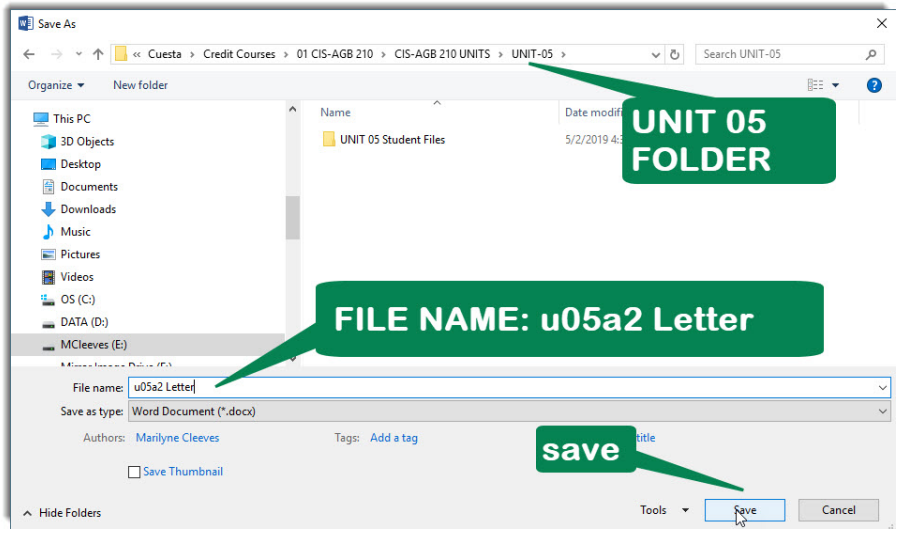
Block format features all elements of the letter aligned to the left margin of the page. It has a neat and simple appearance. Paragraphs are separated by a double line space.

Modified Block Format

Modified block differs from block style in that the date, sign off, and signature lines begin at the center point of the page line. Depending on the length of the letter, paragraphs may be separated by a single- or double-line space.

The following instructions are for a Block Style Letter:

Step 1. ***OPEN u05a1 Letterhead***. If you saved it properly it is in your UNIT 05 folder.
Step 2. ***CLICK FILE SAVE AS***
Step 3. ***Because the file was saved in the UNIT 05 folder, the save as location will also be UNIT O5***
Step 4. ***Type u05a2 Letter as the filename***
Step 5. ***CLICK SAVE***



The letterhead usually takes up to 1-1.25 inch from the top edge of the paper. The first line of the letter should be the date. The dateline for a large letter starts 1.5 inches from the top of the page. A short (1-page letter) often takes less space. To eliminate a large white space after the signature line, you can go

down the page as much as 3 inches from the top to start the dateline. For this exercise, we will start our letter at the 2-inch mark. Follow these steps:

Step 6. ***RIGHT-CLICK*** the ***STATUS BAR*** at the bottom of the page

Step 7. In the Customize Status Bar menu, ***CLICK VERTICAL PAGE POSITION*** to select the option. You should see the position of your cursor displayed on the status bar.

Step 8. ***HIT ENTER UNTIL*** the STATUS BAR indicates ***AT 2" (2.1" is acceptable as well)***

Step 9. ***CLICK INSERT*** to display the Insert ribbon

Step 10. In the text group, ***CLICK DATE AND TIME***. You will see a list of date formats.

Step 11. ***SELECT OPTION 3*** (Month Day, Year). Your date will be automatically entered in the document.

Step 12. ***HIT ENTER ENTER*** on your keyboard after the date

Step 13. Type ***Ms. Tamara Lee***

Step 14. ***HIT ENTER***

Step 15. Type ***Tam's Artistic Designs***

Step 16. ***HIT ENTER***

Step 17. Type ***1587 Willow Road***

Step 18. ***HIT ENTER***

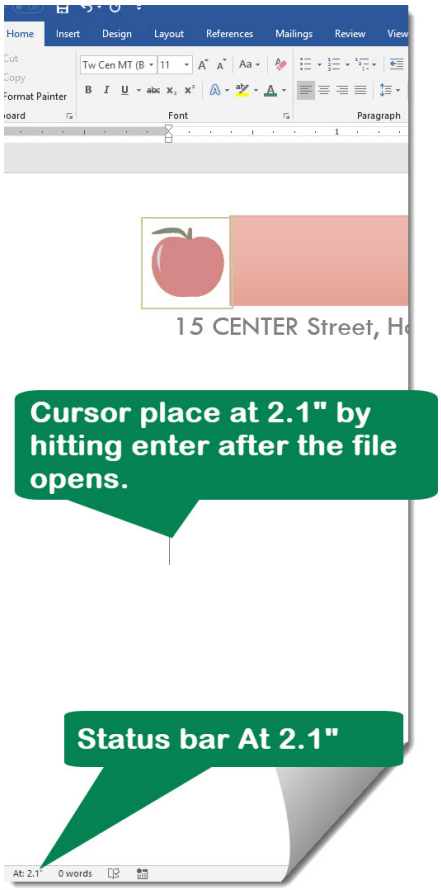
Step 19. Type ***Juniper, MT 33522***

Step 20. ***HIT ENTER***

Step 21. Type ***Dear Ms. Lee:***

Step 22. ***HIT ENTER***

Step 23. Type **The park district board has approved the vendor application for your business, Tam's Artistic Designs. Your check for $150 for a 10 x 20 booth has been deposited, and we are excited**



that you will be participating in our Fall Festival. The table below outlines the timetable for vendors:

Step 24. ***HIT ENTER***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

INSERT AND CREATE A TABLE

Step 1. ***CLICK INSERT*** to display the insert ribbon

Step 2. ***CLICK TABLE***

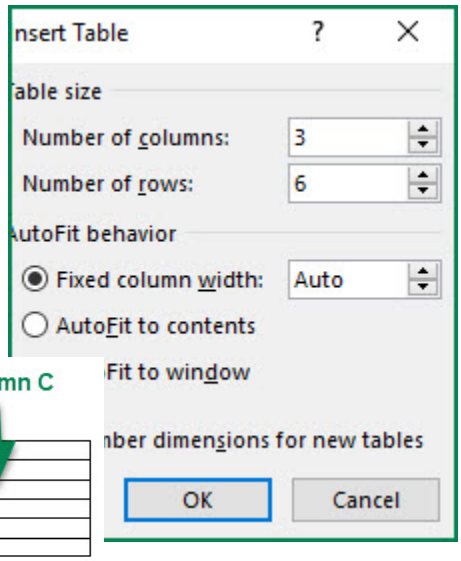
Step 3. ***CLICK INSERT TABLE***

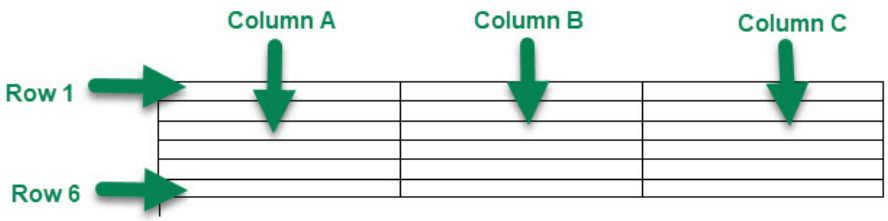
a. NUMBER OF COLUMNS: ***3***

b. NUMBER OF ROWS: ***6***

Step 4. ***CLICK OK***

Step 5. The columns of the table are represented by letters and the rows by numbers. This illustration helps to visualize the references:





a. Column A, Row 1 (***CELL A1***): ***Vendor Time Table.*** After you enter the information in each cell, hit your tab key to advance to the next cell.

b. Column A, Row 2 (***CELL A2***): ***Activity***

c. Column B, Row 2 (***CELL B2***): ***Event Dates***

d. Column C, Row 2 (***CELL C2***): ***Times***

e. CELL A3: ***Booth Setup***

f. CELL B3: ***Friday, October 27***

g. CELL C3: ***5:00 to 9:00 p.m.***

h. CELL A4: ***Booth Sales***

i. CELL B4: ***Saturday, October 28***

j. CELL C4: ***9:00 a.m. to 6:00 p.m.***

k. CELL A5: ***Booth Sales***

l. CELL B5: ***Sunday, October 29***

m. CELL C5: ***9:00 a.m. to 3:00 p.m.***

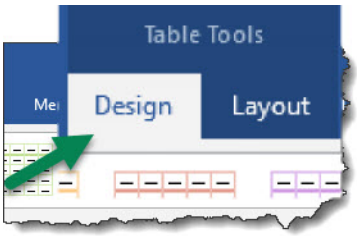
n. CELL A6: ***Booth Takedown***

o. CELL B6: ***Sunday, October 29***

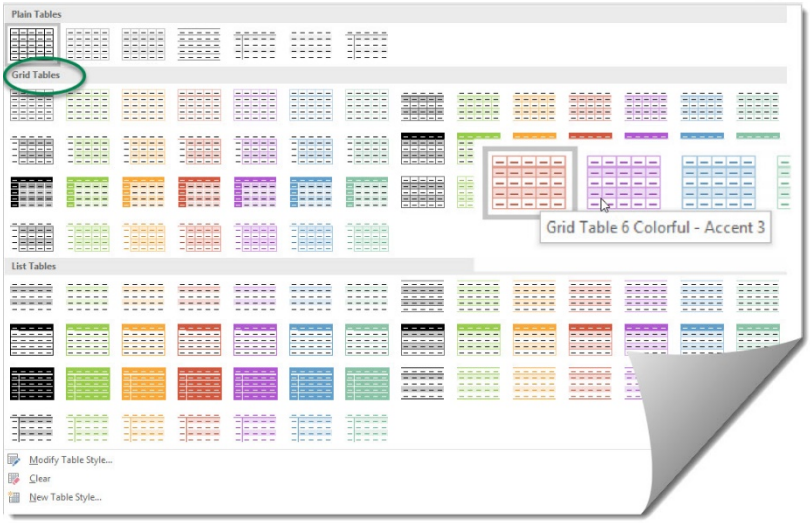
p. CELL C6: ***3:00 to 7:00 p.m.***

Vendor Time Table		
Activity	Event Dates	Times
Booth Setup	Friday, October 27	5:00 to 9:00 p.m.
Booth Sales	Saturday, October 28	9:00 a.m. to 6:00 p.m.
Booth Sales	Sunday, October 29	9:00 am to 3:00 p.m.
Booth Takedown	Sunday, October 29	3:00 to 7:00 p.m.

Step 6. Select anywhere inside the table to activate the Table Tools options. In the ***Table Tools*** menu, ***CLICK DESIGN***

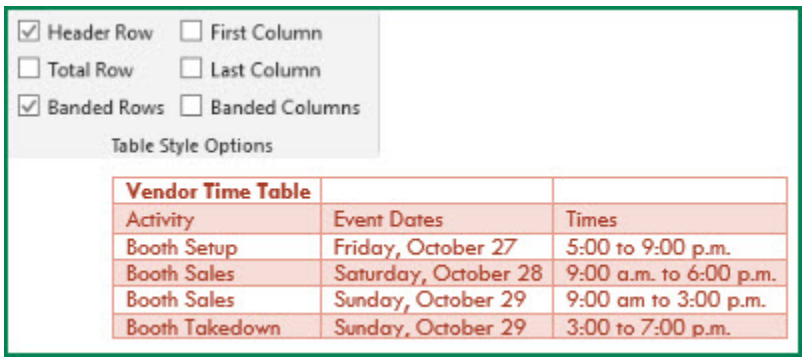


Step 7. In the Table Styles group select the More option to display the many table styles available. In the Grid Tables group choose ***Grid Table 6 Colorful-Accent 3***



Step 8. In the ***Table Style Options***, ***SELECT HEADER ROW*** and ***BANDED ROWS***. Your table will look like the following illustration:

Step 9. With the insertion point in the table, ***CLICK LAYOUT*** in the ***Table Tools*** menu.



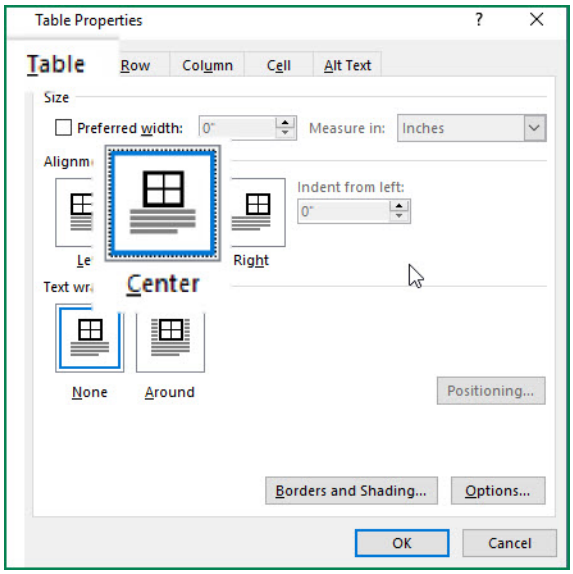
Vendor Time Table		
Activity	Event Dates	Times
Booth Setup	Friday, October 27	5:00 to 9:00 p.m.
Booth Sales	Saturday, October 28	9:00 a.m. to 6:00 p.m.
Booth Sales	Sunday, October 29	9:00 am to 3:00 p.m.
Booth Takedown	Sunday, October 29	3:00 to 7:00 p.m.

Step 10. In the Cell Size group, ***CLICK*** the ***AUTOFIT*** option

Step 11. In the drop-down menu ***CLICK*** the ***AUTOFIT CONTENTS*** option. Word will automatically adjust the cell size to fit the contents of the cell.

Step 12. In the Table group, ***CLICK*** the ***PROPERTIES*** option.

Step 13. ***CLICK*** the ***TABLE*** tab in the ***PROPERTIES*** menu



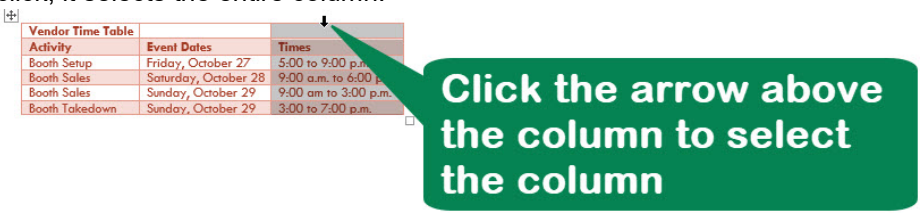
Step 14. ***CLICK*** the ***CENTER*** option to center the table in the letter.

Step 15. ***CLICK OK***

Step 16. ***SELECT ROW 2*** by highlighting all the contents of the cells *A2, B2, and C2*

Step 17. ***CLICK BOLD***

Step 18. ***SELECT COLUMN C*** by clicking above the column. You will get an arrow. When you click, it selects the entire column.



Step 19. ***RIGHT-CLICK*** your mouse to display the short-cut menu

Step 20. ***CLICK CENTER*** to center the text in column C

Step 21. ***SELECT ROW 1*** by highlighting all the contents of the cells *A1, B1,* and *C1*

Step 22. ***RIGHT-CLICK*** your mouse to display the shortcut menu

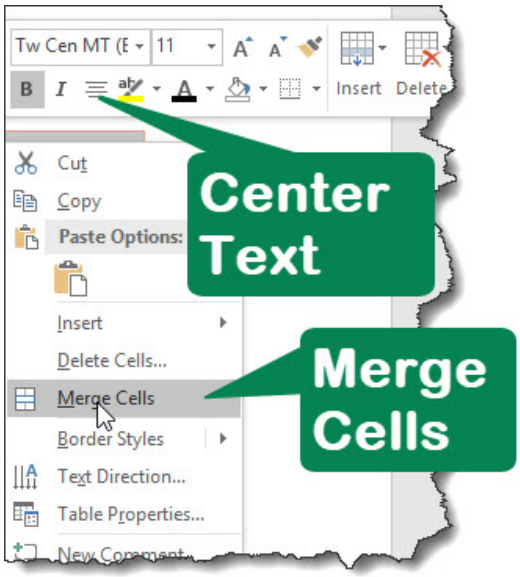
Step 23. ***CLICK MERGE CELLS***

Step 24. Hold down your ***CTRL*** key and ***TAP*** your ***END.*** Your cursor should now be in the blank space below the table.

Step 25. ***HIT ENTER***

Step 26. Type ***Please note the following vendor guidelines:***

Step 27. ***CLICK ENTER***



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD BULLETED LIST

Step 1. ***HIT ENTER*** *after the colon in the sentence describing the list.*

Step 2. ***CLICK HOME*** to display the home ribbon. If you show/hide option is still showing, you may prefer to turn it off by clicking it again.

Step 3. ***CLICK BULLETS***

Step 4. Type ***Vendors must bring their own tables and chairs.***

Step 5. HIT ENTER

Step 6. Type ***Vendors must supply their own electrical cords.***

Step 7. HIT ENTER

Step 8. Type ***Vendors shall comply with fire, safety, and health regulations.***

Step 9. HIT ENTER

Step 10. CLICK the BULLET option again to turn bullets off.

Step 11. Type ***We also request that all vendors donate one item from their booth to our fundraising efforts. We look forward to your business, Tam's Artistic Designs, taking part in our event. Please contact me if you need additional information.***

Step 12. CLICK ENTER

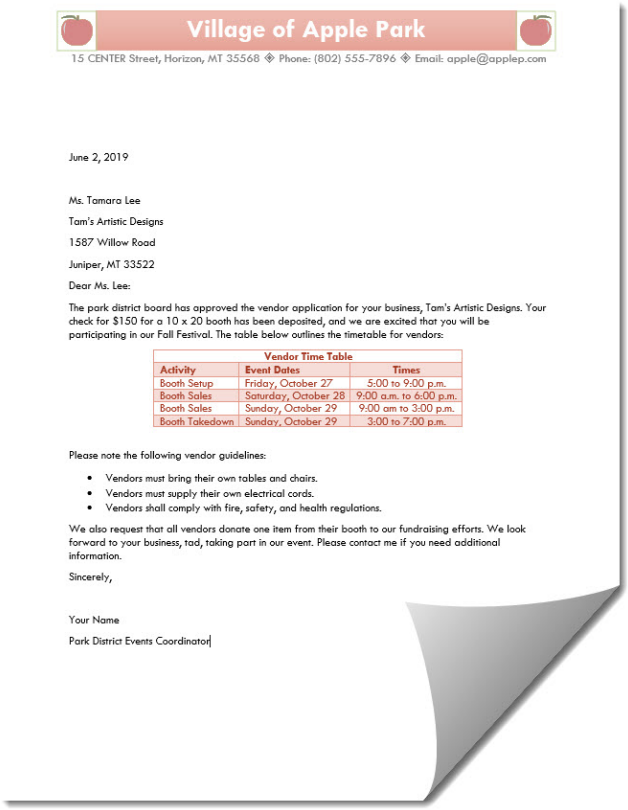
Step 13. Type ***Sincerely,***

Step 14. CLICK ENTER ENTER

Step 15. Type ***Your Name***

Step 16. HIT ENTER

Step 17. Type ***Park District Events Coordinator***



Village of Apple Park

15 CENTER Street, Horizon, MT 35568 ◈ Phone: (802) 555-7896 ◈ Email: apple@applep.com

June 2, 2019

Ms. Tamara Lee

Tam's Artistic Designs

1587 Willow Road

Juniper, MT 33522

Dear Ms. Lee:

The park district board has approved the vendor application for your business, Tam's Artistic Designs. Your check for $150 for a 10 x 20 booth has been deposited, and we are excited that you will be participating in our Fall Festival. The table below outlines the timetable for vendors:

Vendor Time Table		
Activity	Event Dates	Times
Booth Setup	Friday, October 27	5:00 to 9:00 p.m.
Booth Sales	Saturday, October 28	9:00 a.m. to 6:00 p.m.
Booth Sales	Sunday, October 29	9:00 am to 3:00 p.m.
Booth Takedown	Sunday, October 29	3:00 to 7:00 p.m.

Please note the following vendor guidelines:

- Vendors must bring their own tables and chairs.
- Vendors must supply their own electrical cords.
- Vendors shall comply with fire, safety, and health regulations.

We also request that all vendors donate one item from their booth to our fundraising efforts. We look forward to your business, tad, taking part in our event. Please contact me if you need additional information.

Sincerely,

Your Name

Park District Events Coordinator

SAVE YOUR UPDATES

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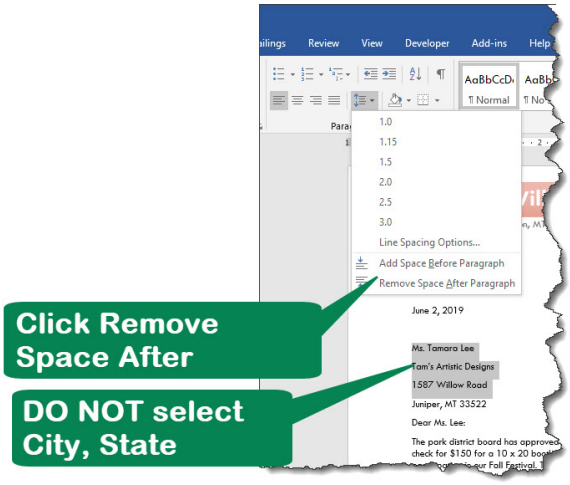
ADJUST THE SPACING

Step 1. INISIDE ADDRESS: Select the first 3 lines of the inside address. DO NOT select the City, State line. ***CLICK LINE AND PARAGRAPH SPACING*** in the paragraph group of the Home ribbon.

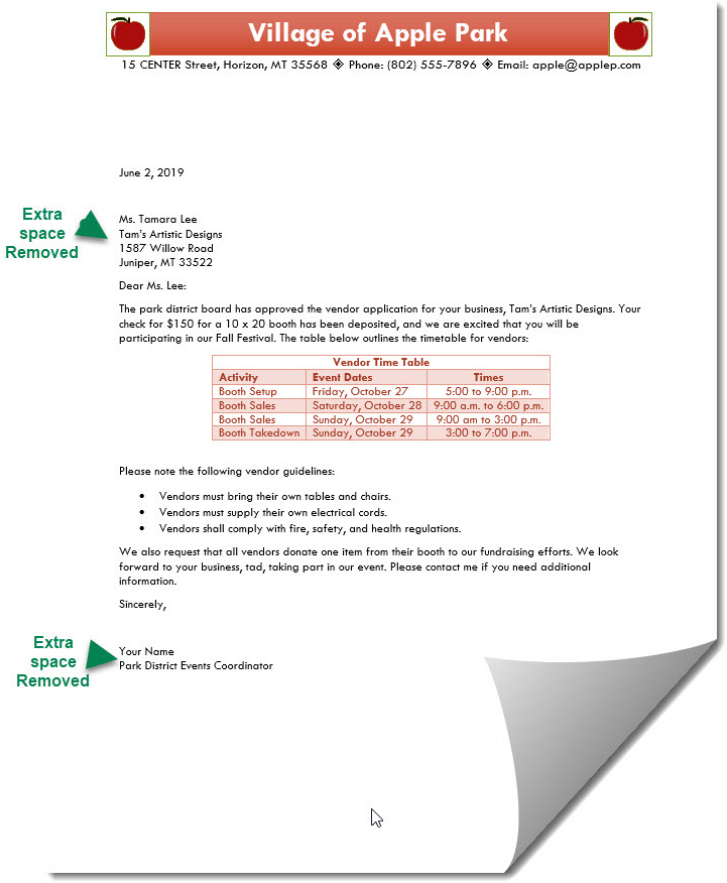
Step 2. ***CLICK REMOVE SPACE AFTER***



Step 3. ***CLICK ANYWHERE IN YOUR SIGNATURE LINE***

Step 4. ***CLICK LINE AND PARAGRAPH SPACING***

Step 5. ***CLICK REMOVE SPACE AFTER***



SAVE YOUR UPDATES

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ATTACH AN ENVELOPE

Microsoft Office applications are designed with many unique and user-friendly features. These features not only allow users to do get things done but do a lot of things simultaneously. For example, you can create a professional envelope using the Microsoft Word application.

For this exercise, we sill be attaching the envelope to the letter. This is a nice feature but there are a few items you should keep in mind.

- ✓ ***SIZE OF ENVELOPE*** – Envelopes come in a variety of sizes. It is important to know the size of envelope you are using.
- ✓ ***PRINTER LIMITS*** – Some printers may not accommodate printing envelopes. Others may stop printing until the envelope is inserted.
- ✓ ***ATTACHED TO DOCUMENT*** – If you have a printer that accommodates envelopes, you should know that your printer will prompt you for the envelope and then the letter. It may take a few test runs to print properly.

Follow these steps to attach your envelope to the document

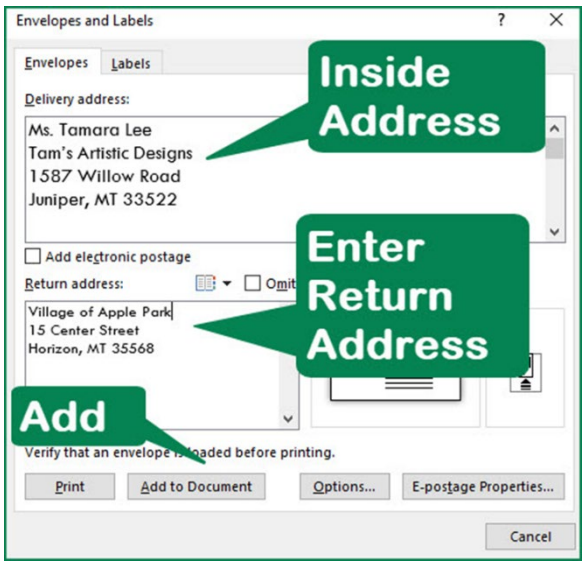
Step 1. With your u05a2 letter open, ***highlight the inside address*** (including the zip code)

Step 2. ***CLICK MAILINGS*** to reveal the Mailings tool bar

Step 3. ***CLICK ENVELOPES*** in the Create Group

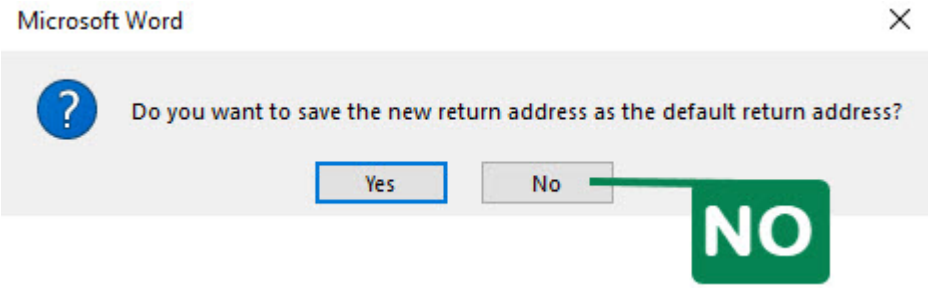
Step 4. The delivery address has been entered because you highlighted the inside address before you opened the option. You may note that the return address is blank. Please type the name and address of the company in this area:

Village of Apple Park
15 Center Street
Horizon, MT 35568



Step 5. ***CLICK ADD TO DOCUMENT***

Step 6. The next screen will ask if you want to save the return address to the default return address. ***CLICK NO***

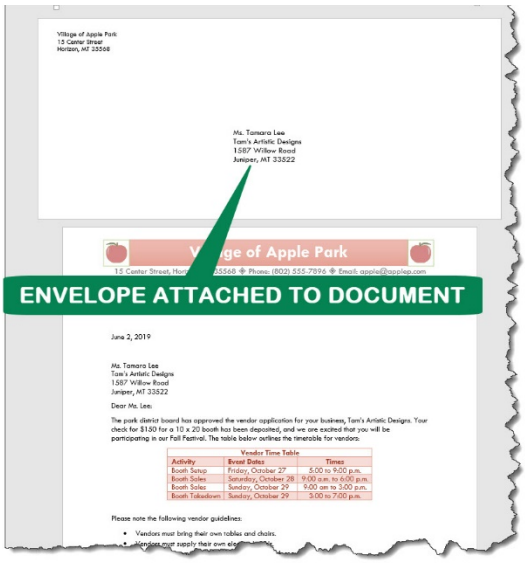


SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u05a2 Letter



ON YOUR OWN ACTIVITY

Step 1. ***Open*** a ***New Word document***

Step 2. Use the verification steps to ***Verify*** the ***document settings*** are correct

Step 3. MARGINS: ***Moderate***

a. TOP/BOTTOM: ***1"***

b. LEFT/RIGHT: ***.75"***

Step 4. Change the ***THEME*** to ***Berlin***

Step 5. ***Save as*** your file as ***u05a3 Rosewood Letter***

CREATE THE LETTERHEAD

Step 6. Insert a Horizontal Scroll Shape with these specifications:

a. HEIGHT: ***0.74"***

b. WIDTH: ***6.32"***

c. POSITION: ***Top center with square text wrapping***

d. TEXT WRAPPING: ***Top and Bottom***

e. STYLE: ***Subtle Effect – Rose Accent 6***

Step 7. Add the following text to the shape: ***Rosewood Memorial Hospital***

a. FONT: ***Script MT Bold***

b. SIZE: ***28 points***

c. COLOR: ***Aqua, Accent 4, Darker 50%***

d. ALIGNMENT: ***Centered***

Step 8. From the UNIT 05 Student files, ***INSERT johnny-automatic-rose-scroll-800px***

a. COLOR TONE: ***4700 K***

b. TEXT WRAPPING: ***In Front of Text***

c. HEIGHT: ***0.45"***

d. WIDTH: ***0.33"***

Step 9. ***COPY ROSE SCROLL GRAPHIC***

Step 10. ***PASTE INTO DOCUMENT***

Step 11. ***MOVE*** the ***SCROLLS*** as shown in the illustration

Step 12. ***GROUP*** the ***IMAGES***
Step 13. ***CUT*** the ***GROUP***
Step 14. ***OPEN*** the ***HEADER***
Step 15. ***PASTE*** the ***GROUP INTO THE HEADER***
Step 16. ***WRAP TEXT TOP AND BOTTOM***
Step 17. Type the company address information.

- ***a.*** FONT: ***11 points***
- ***b.*** COLOR: ***Aqua, Accent 4 Darker 50%***
- ***c.*** POSITION: ***CENTER***
- ***d.*** Between each bit of information (address, phone, email), insert an ***open diamond symbol ◊.***
- ***e.*** ADDRESS: ***9600 Brighton Parkway, Apollo, WY 29642***
- ***f.*** PHONE: ***Phone: (212) 555-9600***
- ***g.*** EMAIL: **Email: info@rosewood.net**

Step 18. ***Remove Hyperlink*** created after entering the email address
Step 19. Apply a ***PARAGRAPH LINE UNDER THE ADDRESS INFORMATION***

- ***a.*** COLOR: ***Aqua, Accent 4 Darker 50%***
- ***b.*** STYLE: ***Solid***
- ***c.*** WIDTH: ***½ point***

Step 20. Preview in the ***PRINT PREVIEW***. Because the item in the header appears faded, you need to perform a print preview to view the correct color specifications.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

CREATE THE LETTER

The letter should appear with the following information in block style:

Rosewood Memorial Hospital

9600 Brighton Parkway, Apollo, WY 29642 ◊ Phone: (212) 555-9600 ◊ Email: info@rosewood.net

October 16, 2019

Ms. Natalia Zajak
88 Sycamore Street
Apollo, WY 29642

Dear Ms. Zajak:

Thank you for your interest in our community education classes. We look forward to seeing you! The table below confirms the classes in which you are registered during November:

November Class Registration Confirmation			
Class	Date	Time	Location
Diabetes Risk Assessment	November 6	5:00 to 6:00 p.m.	Suite 101
First Aid and CPR	November 11	9:00 a.m. to 3:00 p.m.	Suite 220
Healthy Cooking	November 14	4:00 to 5:00 p.m.	Suite 203
Basics of Meditation	November 17	11:00 a.m. to 12:20 p.m.	Suite 124

Please note the following:

- Arrive 10 minutes early for all classes.
- No outside food or drink allowed in the classrooms.
- Kindly give 48-hour cancellation notice.

If you have any questions, please contact me via email at jgreen@roosewood.net or phone at 212-555-9612.

Sincerely,

Jerome Green
Community Education Class Coordinator

TABLE SPECIFICATIONS

Step 1. STYLE: ***Grid Table 5 Dark-Accent 4***

Step 2. OPTIONS: ***Header Row and Banded Rows***

Step 3. ROW 2: ***Bold***

Step 4. COLUMN C: ***Center***

LAST SENTENCE SPECIFICATIONS

Step 1. ***REMOVE HYPERLINK*** for the email address

Step 2. ***USE NONBREAKING HYPHENS*** in the phone number. This will keep the phone number from splitting.

A nonbreaking hyphen is not really a hyphen; rather, it is a command not to hyphenate. When placed in front of a word or a group of characters acting as a word, such as a phone number, web address or email address, that word will not be hyphenated. This is helpful not only in text, but also in headlines that you don't want to break onto two lines.

NONBREAKING HYPHEN COMMAND MICROSOFT® WORD

- Command (Mac) or control (PC) + Shift + hyphen, or
- From main menu, go to Insert > Symbol > Special Characters > Nonbreaking Hyphen.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u05a3 Rosewood Letter

GROUP - GROUND RULES

RATIONALE: College is a preparing ground for the “corporate world” and in the corporate world there will be many times where you will need to work within a group/team to accomplish a task. This project consists of creating a “fictitious” or “actual” company. An assignment for each application within Office (Word, Excel, and Access) will be given to demonstrate proficiency within the application. PowerPoint will be used for the presentation.

GETTING STARTED: Introduce yourself to your team members, and acquire **contact information** such as email addresses, cell phone number and/or land line numbers. Next - discuss a “fictitious” or “actual” company which will provide a service, product or idea, and **establish a company name**. Some previous companies have been: pizza delivery service, a beverage company, surf shop, house cleaning service, DVD services, coffee shops and childcare centers. These are just a few ideas, but I look forward to your new creative ideas. Make sure your choice is appropriate and meets the guidelines for student conduct [i.e. nothing drug, sex related . . .]

TEAM GROUND RULES

A vital contract when forming a group/team and defining roles and responsibilities, assigning work, setting schedules and monitoring progress.

Ground rules describe things like - how you should behave, communicate, prepare for and run meetings, make decisions, solve problems, and resolve conflicts. Good ground rules are clear, consistent, agreed to, reinforced (not enforced or policed), and followed.

As soon as you can, discuss and define the most obvious ground rules. Don't expect to cover every conceivable issue. Just post your initial ideas on a chart that's visible during all meetings. As you run into new situations, add new ground rules, revise existing ones, and drop those that don't fit anymore. Use the questions on the next page as a starting point to establish your team ground rules.

GROUND RULES WORKSHEET

Use the following questions to explore how your team wants to operate. You can distribute these questions for individual consideration and then discuss your answers with the team.

How will we . . .

1. Assign roles and responsibilities?
2. Work together?
3. Establish plans and processes?
4. Assign work/tasks and set schedules/timelines?
5. Monitor and follow-up on work assignments?
6. Keep each other fully informed? [Do you need a facilitator?]
7. Give Feedback?
8. Recognize accomplishments?
9. Organize and conduct meetings?
10. Ensure that everyone participates fully?
11. Make decisions?
12. Resolve differences and solve problems?
13. Make the best use of limited resources?
14. Ensure that we achieve desired results?

Your team should use the u04d4 discussion area to compose answers for the fourteen questions listed. When you are submitting a group project, only one member of the group should be assigned to do the submission. The submission is for the entire group. Make sure your group has agreed upon who will submit the project. The ***ground rules are worth 25 points*** toward your grade. This is a copy of the grading criteria used for u05a4 Ground Rules:

- **QUESTIONS OUTLINED (10 PTS)-** Each of the 14 questions has been addressed and clearly displayed in the summary presented.
- **REPORT FORMAT (10 PTS) -** The format for the team ground rules has been done in a professional format with each of the 14 processes clearly visible. The group logo is at the top of the ground rules report.
- **File NAME (1 PT) -** Your group has followed the guidelines and saved the report at u05a4 Team Guidelines.
- **TITLE PAGE (4 PTS) -** Your team has created an attractive title page with the names of all team members that participated in this project. ***DO NOT LIST INACTIVE MEMBERS!*** The colors for the title page work well with the team logo chosen.

When your group is working with this section of the project, make sure that you don't try to take the entire load on yourself. The idea is to delegate the work and to check each section for each person to respond to. One approach would be to assign different responsibilities. If your group has 5 members, here are some ideas:

- **All Members** - Decide what the name of the company will be and what the theme is that is going to be presented.
- **All Members** - Present letterhead with logo and vote on the outcome.
- **Member 1 & 2** - Answer questions 2-4
- **Member 3** - Answers questions 5-8
- **Member 4** - Answers questions 9-12
- **Member 5** - Answers questions 1, 13-14 and creates the final submission

If one or two members are not active, their answers to the questions can be absorbed by one of the members that is active. Make sure your group agrees on a title page that is appropriate for your chosen company and that all of the participating members names are on that page.

Remember everyone is more productive when they are working cohesively with a team.

SUBMIT ASSIGNMENT

The assignment should be submitted by a designated group member. ***One submission is made for the entire group.*** The correct filename for this assignment is ***u05a4 Ground Rules.***

GROUP - LETTER AND FLYER

Company Letterhead (5 points)

Design a company letterhead, which includes a company logo/graphic, your company name and your company's address. You may want to incorporate colored text or graphic features in this document. (see Word Chapter 3 for creating a letterhead)

Letter of Introduction (10 points)

Prepare a block style letter of introduction about your company, using the letterhead which you have designed (review UNIT 05 lessons for letter structure). Goal – one page.

- **Paragraph 1** – Introduction
- **Paragraph 2** – Ethics considerations for your business
- **Paragraph 3** – How will your group incorporate Social Media into your project?
- **Paragraph 4** – Summary

Marketing Flyer (10 points)

The flyer contains the three major elements discussed in UNIT 04 (headline, body, signature). The use of space is clearly defined, and the graphics relate clearly to the headline and body of the flyer. A separate title page has been attached that includes the names of the group members that participated in the project.

u05d5 Discussion (10 points)

Your team should use the u05d5 discussion area to contribute to the creation of the letter and flyer for this portion. The discussion grade is a separate grade from the assignment grade. I am monitoring your participation and contribution to the group.

SUBMIT ASSIGNMENT

The assignment should be submitted by a designated group member. ***One submission is made for the entire group.*** Your group will be submitting more than one file. If you have never uploaded multiple files to Canvas, make sure you have reviewed the introduction on how to do so: (INTRO 6 - Uploading Multiple Files to Canvas) .

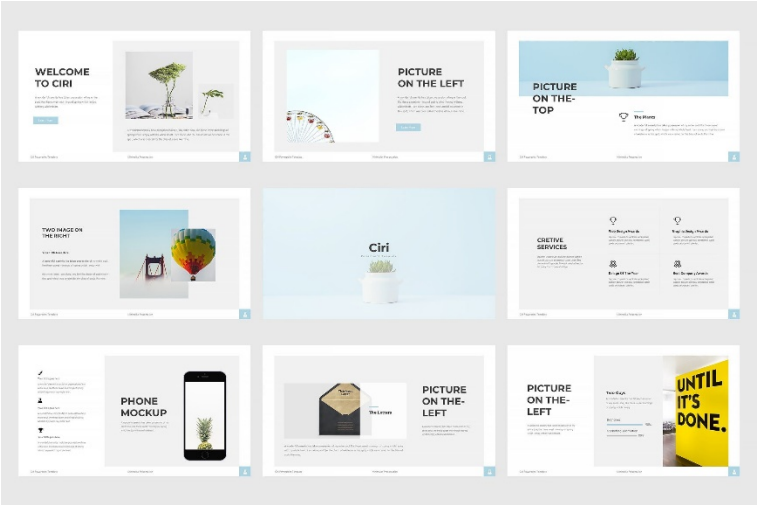
This is what should be submitted:

1. ***Company Promotional Letter***
2. ***Marketing Flyer with Title Page***

NOTE: The instructions on how to attach a title page to a document are outline in UNIT 02 page 30

UNIT 06 MS POWERPOINT

Visual documents are commonly used in business settings. A study done by the Wharton School of Business showed that the use of visuals reduced meeting times by 28 percent. Another study found that audiences believe presenters who use visuals are more professional and credible than presenters who merely speak. And still other research indicates that meetings and presentations reinforced with visuals help participants reach decisions and consensus in less time. A presentation program such as Microsoft PowerPoint, Apple Keynote, OpenOffice.org Impress or Prezi, is often used to generate the presentation content. Modern internet-based presentation software, such as the presentation application in Google Docs and Slide Rocket also allow presentations to be developed collaboratively by geographically separate collaborators.



The following are formatting guidelines specific to using PowerPoint or similar presentation software:

- Do not write out the entire presentation on your PowerPoint; instead, create bullet points and headings no longer than three to five words that give the main points
- Include no more than five to seven lines per slide; better to split information onto two slides than it is to cram too much information onto one
- Be consistent with your “theme” (do not use a different theme for each slide)
- Do not overuse flashy transitions; they are meant to enhance your presentation, not take over
- Be careful with your color scheme; again, this is meant to enhance your presentation
- Make sure that the text is big enough for the audience to read
- Do not use complicated or unreadable font
- Use a font color that stands out against the background

PowerPoint allows you to apply built-in templates, to apply your own custom templates, and to search from a variety of templates available on Office.com. Office.com provides a wide selection of popular PowerPoint templates, including presentations and design slides.

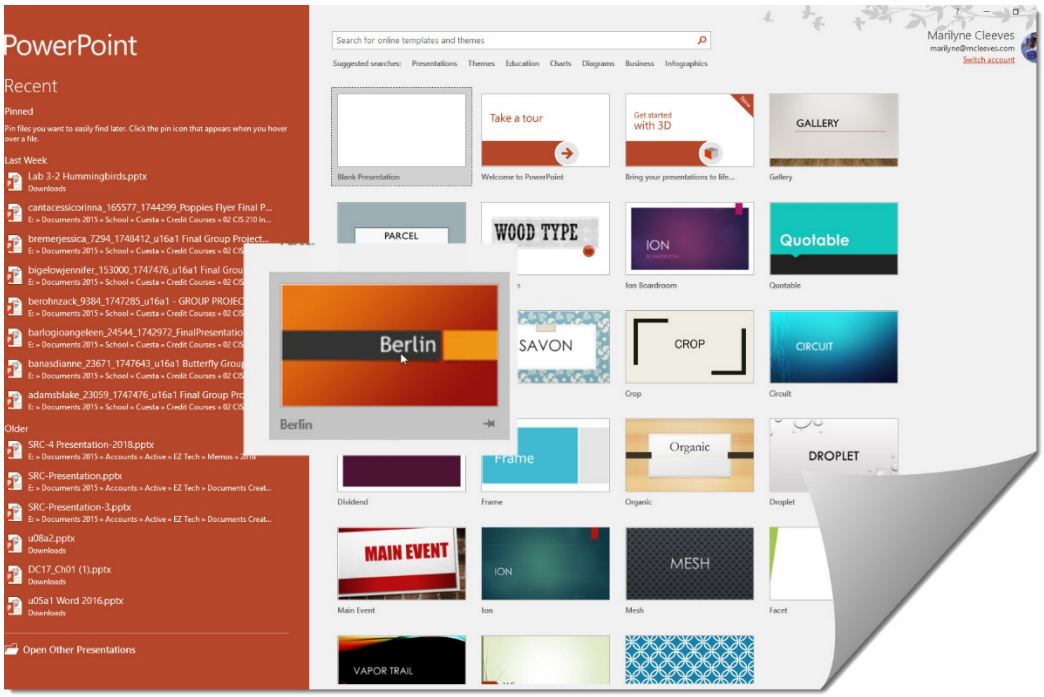
PRESENTATION WITH BULLETED LIST AND PICTURES

In this unit, you will learn how to perform basic tasks using PowerPoint. The objective is to produce a presentation, titled u06a1 Tall Oaks, to promote three programs at a nature center. The show has a variety of pictures and visual elements to add interest and give facts about the events. Some of the text has formatting and color enhancements. Transitions are used to help one side flow gracefully into the next during the show.

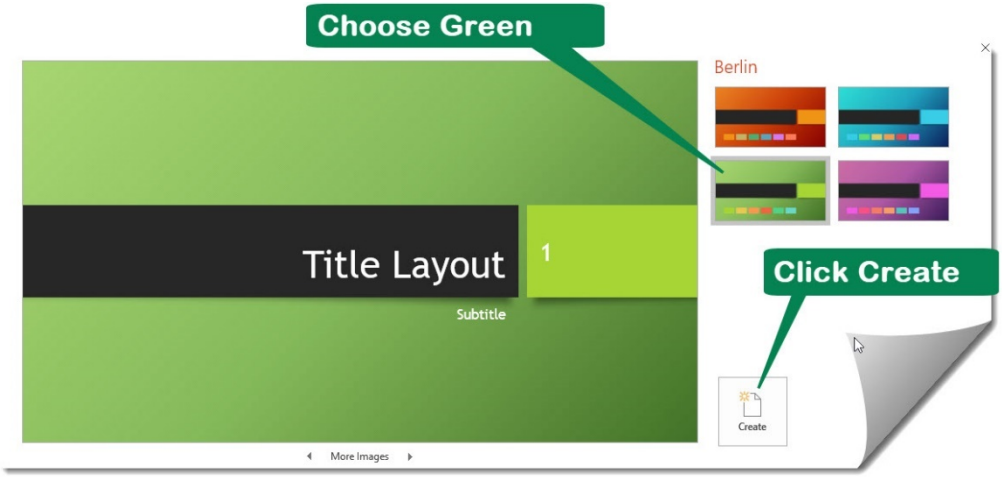
CHOOSE A DOCUMENT THEME AND VARIANT

Step 1. ***CLICK*** on the shortcut to open ***POWERPOINT***. The first screen will show you a series fo presentation themes already on your computer.

Step 2. ***CLICK*** the ***BERLIN*** theme to display the theme preview



Step 3. Notice you have four theme variants. ***CLICK*** the ***GREEN VARIANT.*** Your middle image will change to the Green color layout.

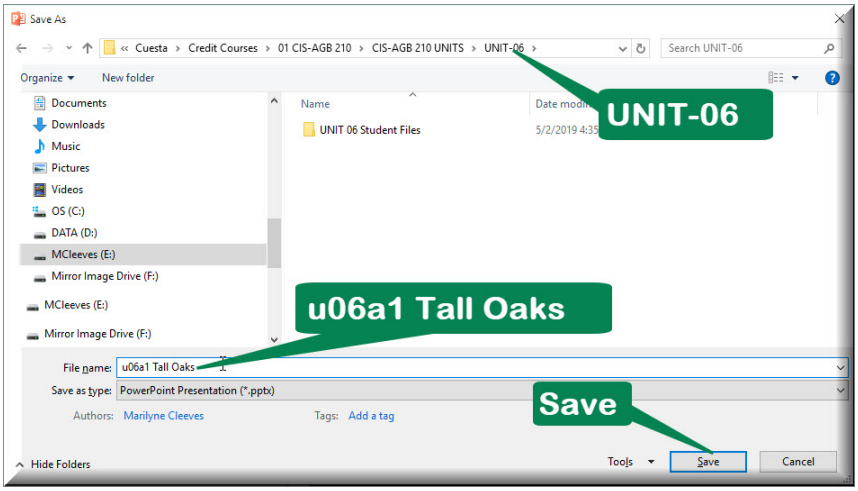


Step 4. ***CLICK CREATE*** to open the Berlin template in the green variant.

Step 5. ***CLICK F12*** to display the Save As dialog box

Step 6. ***NAVIGATE*** to the ***UNIT-06*** folder.

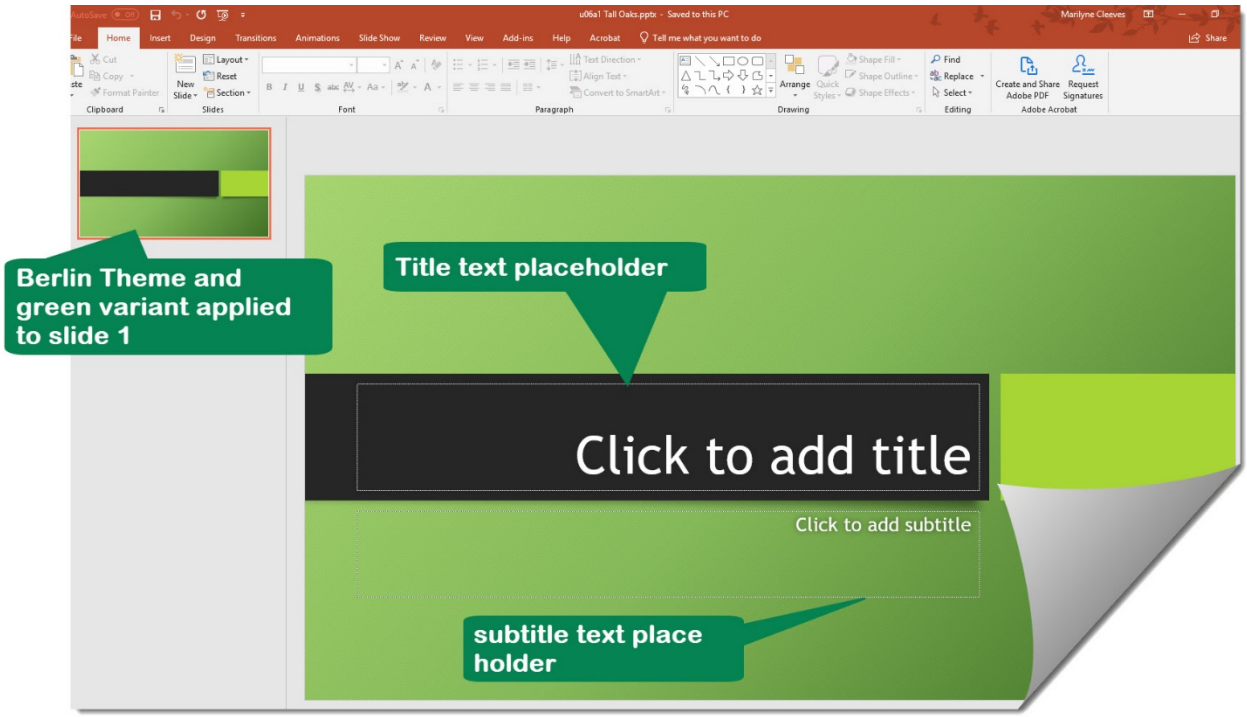
Step 7. ***SAVE*** the presentation as ***u06a1 Tall Oaks***



Step 8. ***CLICK SAVE***

CREATE A TITLE SLIDE

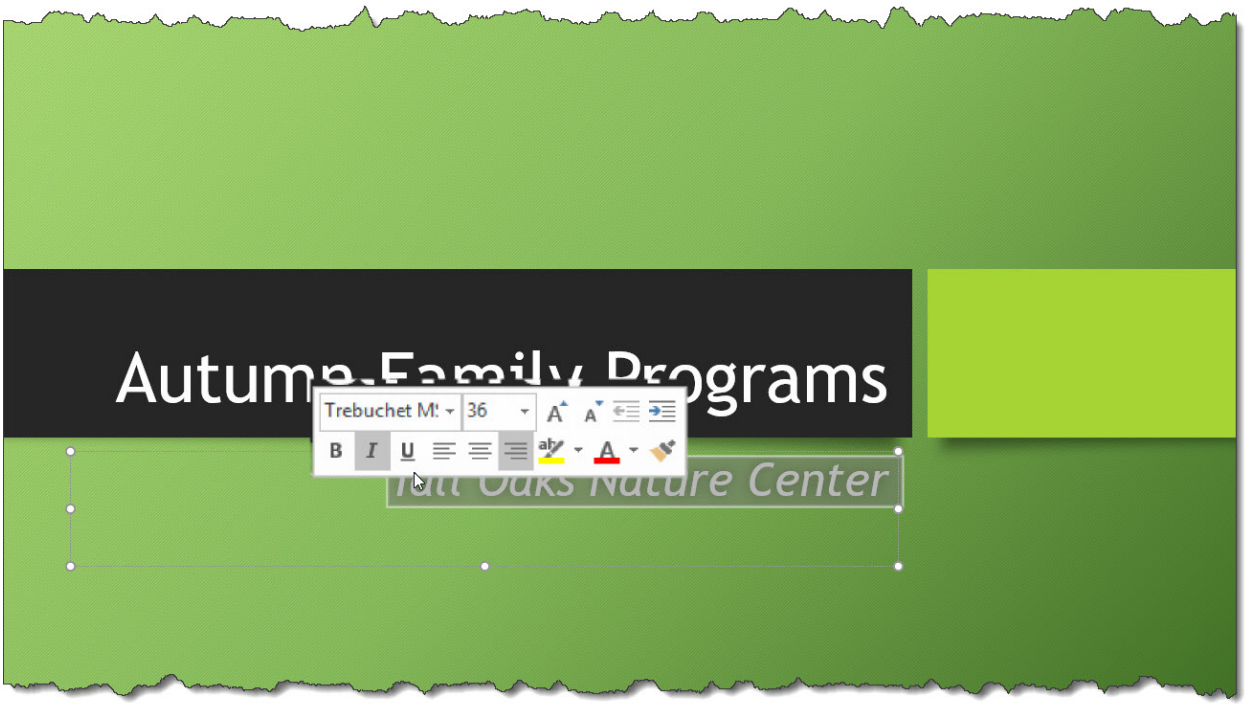
The default Title Slide has placeholders (boxes with dotted or hatch-marked borders. Most layouts have a title text placeholder and at least one content placeholder. Depending on the slide layout selected, title and subtitle placeholders are displayed for the slide title and subtitle.



Step 1. ***CLICK*** the label to add a title ***INSIDE*** the ***TITLE PLACEHOLDER***
Step 2. Type ***Autumn Family Programs***
Step 3. ***DO NOT PRESS ENTER***
Step 4. ***CLICK*** to add the ***SUBTITLE***
Step 5. Type ***Tall Oaks Nature Center***
Step 6. ***DO NOT PRESS ENTER***

Step 7. ***TRIPLE-CLICK*** the paragraph for ***Tall Oaks Nature Center***

Step 8. The short-cut formatting menu should appear. If it doesn't, ***RIGHT-CLICK*** the ***SELECTED TEXT***



Step 9. Change the ***FONT SIZE*** to **36**

Step 10. ***CLICK*** the ***ITALIC*** option to italicize the text.

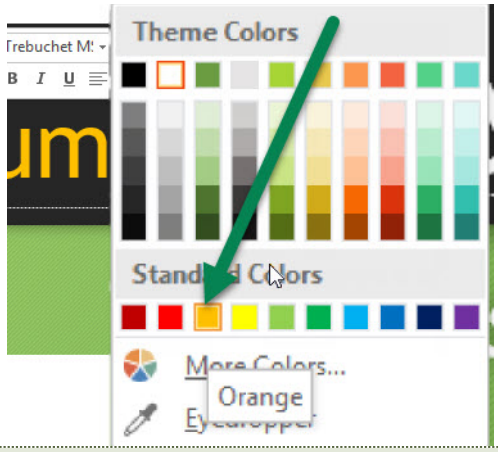
CHANGE THE TITLE

PowerPoint designers use many techniques to emphasize words and characters on a slide. In this activity, you will accentuate the word *Autumn* in the *Title Slide* just created.

Step 11. Select the word Autumn by following these directions: ***DOUBLE-CLICK*** the word ***AUTUMN*** in the title.

Step 12. ***CLICK*** the ***FONT COLOR*** option on the mini tool bar

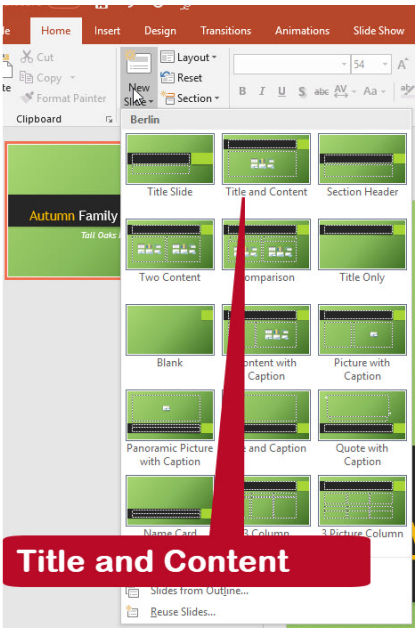
Step 13. ***CLICK ORANGE*** on the standard-colors palette



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD A NEW SLIDE WITH A BULLETED LIST



Step 1. ***CLICK*** on the ***HOME*** tab to review the home ribbon

Step 2. In the Slides group, ***CLICK NEW SLIDE***. PowerPoint will reveal multiple slide options.

Step 3. ***CLICK*** the ***TITLE AND CONTENT*** option.

Step 4. In the placeholder for the title, type ***Morning Bird Walks***

Step 5. Navigate down to the area marked for a bulleted list and type your first bulleted item: ***Enjoy a hike on natural surface trails***

Step 6. ***HIT ENTER*** to advance to the next bullet item.

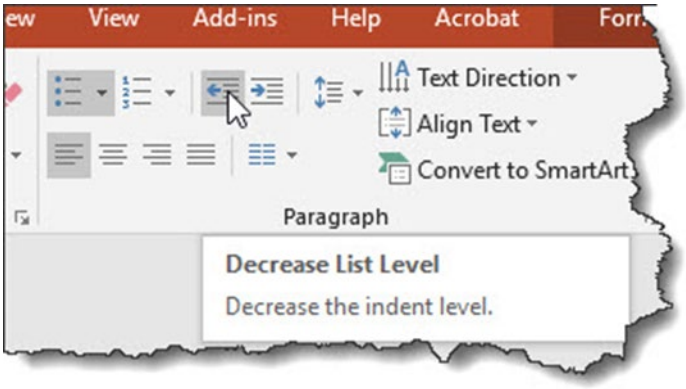
Step 7. ***HIT TAB*** to make the new item a sub-item of the first bullet

Step 8. Type ***Approximately 1.5 miles***

Step 9. ***HIT ENTER***

Step 10. If not in view, ***CLICK*** on the ***HOME*** tab to review the home ribbon

Step 11. In the *Paragraph Group,* ***CLICK DECREASE.*** This will make the bullet align with the first bullet typed.



Step 12. Type ***9 a.m. every Saturday***

Step 13. ***HIT ENTER*** to advance to the next bullet

Step 14. ***HIT TAB*** to make the new item a sub-item of the second bullet.

Step 15. Type ***Bring binoculars and a field guide***

Step 16. ***HIT ENTER*** to advance to the next bullet

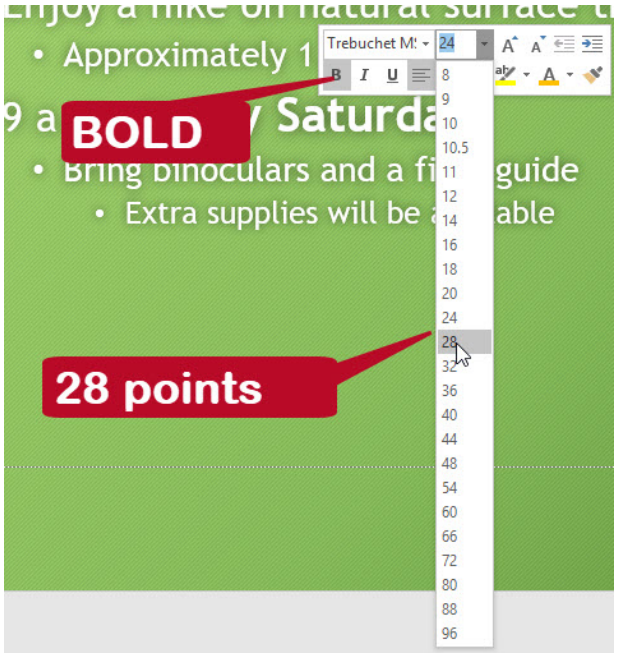
Step 17. ***HIT TAB*** to make the new item a sub-item of the binoculars statement

Step 18. Type ***Extra supplies will be available***

EMPHASIZE IMPORTANT POINTS

Emphasis is used to enhance areas of the slide that are important to the reader. In this case, we are emphasizing the fact the bird walks are every Saturday. Follow these directions to implement emphasis:

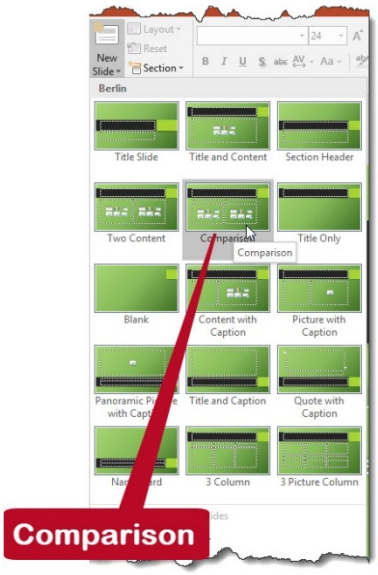
Step 19. ***HIGHLIGHT*** the words ***every Saturday***
Step 20. ***CLICK BOLD***
Step 21. ***INCREASE*** the ***FONT SIZE*** to ***28***



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD A COMPARISON SLIDE



Step 1. ***CLICK*** on the ***HOME*** tab to review the home ribbon

Step 2. In the Slides group, ***CLICK NEW SLIDE***. PowerPoint will reveal multiple slide options.

Step 3. ***CLICK*** the ***COMPARISON*** option.

Step 4. Type the ***TITLE:*** ***Afternoon Insect Identification***

Step 5. Heading for List 1 Type: ***Grasshoppers***

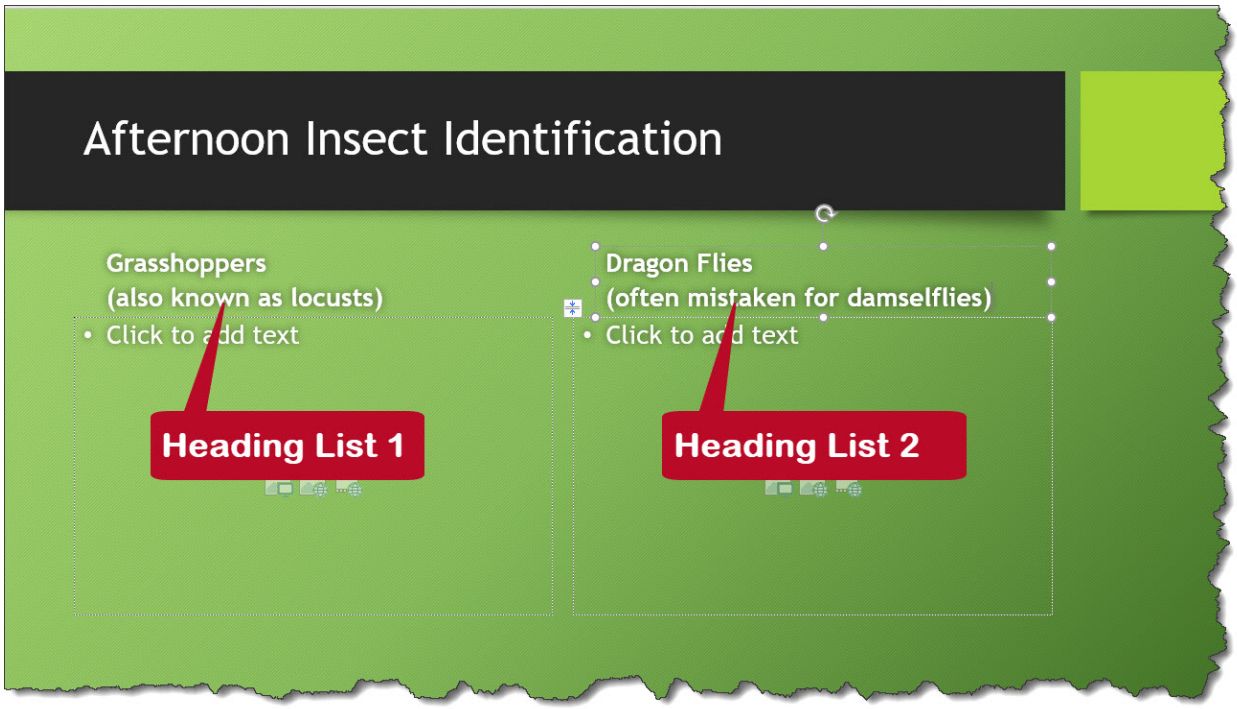
Step 6. ***HIT ENTER***

Step 7. Type ***(also known as locusts)***. DO NOT hit enter

Step 8. Click in the heading option for List 2 Type: ***Dragonflies***

Step 9. ***HIT ENTER***

Step 10. Type ***(often mistaken for damselflies)***. DO NOT hit enter.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

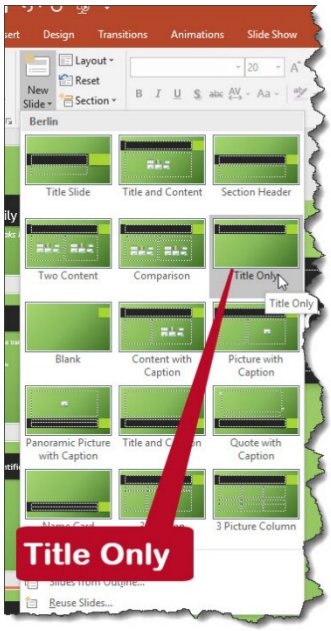
ADD A TITLE ONLY SLIDE

Step 1. ***CLICK*** on the ***HOME*** tab to review the home ribbon

Step 2. In the Slides group, ***CLICK NEW SLIDE***. PowerPoint will reveal multiple slide options.

Step 3. ***CLICK*** the ***TITLE ONLY*** option.

Step 4. Type the title: ***Twilight Firefly Hikes***. DO NOT hit enter.

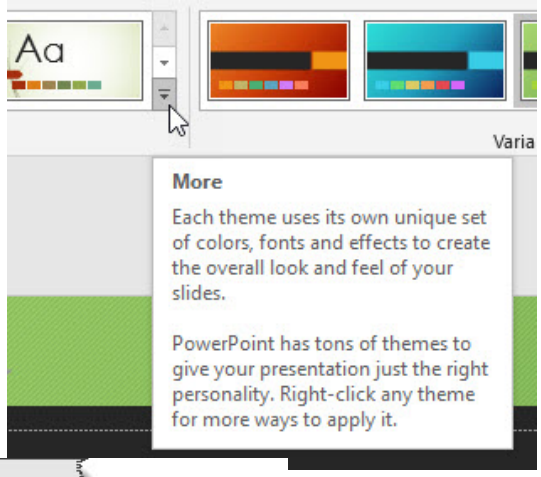


SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CHANGE THE THEME AND VARIANT

A theme provides consistency in design and color throughout the entire presentation by setting the color scheme, font set, and layout of a presentation. Change the theme of the existing presentation by following these steps:



Step 1. ***CLICK*** on the ***DESIGN*** tab to review the design ribbon

Step 2. ***CLICK*** the ***MORE*** button on the bottom right of the themes group

Step 3. ***CLICK*** the ***MAIN EVENT*** theme

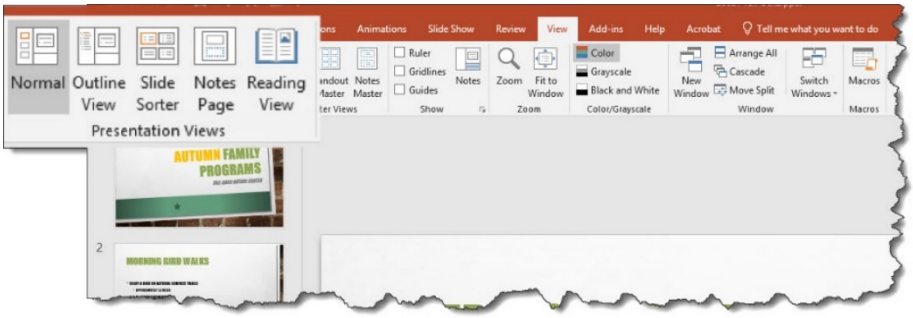
Step 4. In the Variants group, ***CLICK*** the ***GREEN VARIANT***

MOVE TO ANOTHER SLIDE IN NORMAL VIEW

PowerPoint has several presentation views. For this activity, you should be in Normal presentation view.

Step 5. ***CLICK*** on the ***VIEW*** tab to review the view ribbon

Step 6. In the presentation views group, ***CLICK NORMAL***



Step 7. In the normal view ***CLICK*** on the ***FIRST TITLE SLIDE*** on the top left panel

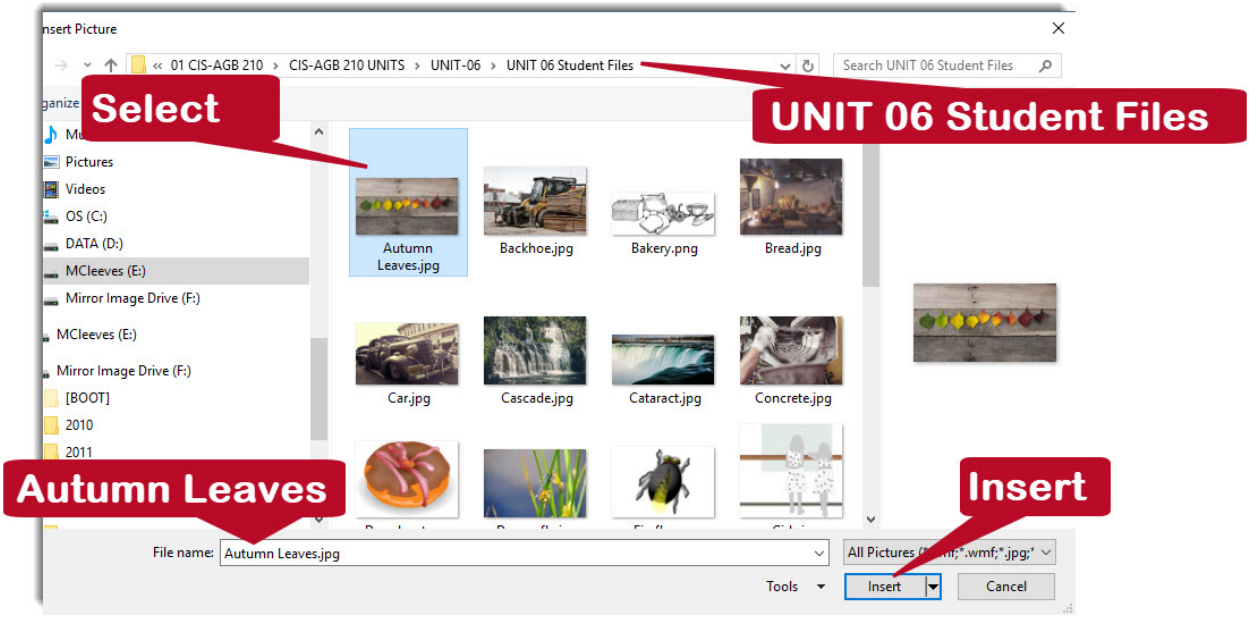
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

INSERT PICTURES

The files you need for the remainder of this activity are in your ***UNIT-06 Student Files.***

Step 1. ***CLICK*** on ***SLIDE 1*** to bring it into view.
Step 2. ***CLICK*** on the ***INSERT*** tab to display the Insert ribbon
Step 3. ***CLICK*** on ***PICTURES*** located in the images group
Step 4. ***SCROLL*** through the folders on your computer until you find the ***CIS-AGB 210 UNITS***
Step 5. ***OPEN*** the folder. ***NAVIGATE*** to the ***UNIT-06*** folder
Step 6. ***OPEN*** the folder
Step 7. ***OPEN*** on the ***UNIT-06 Student Files***
Step 8. ***CLICK*** on the ***Autumn Leaves.jpg***. This will activate the insert icon.
Step 9. ***CLICK INSERT***

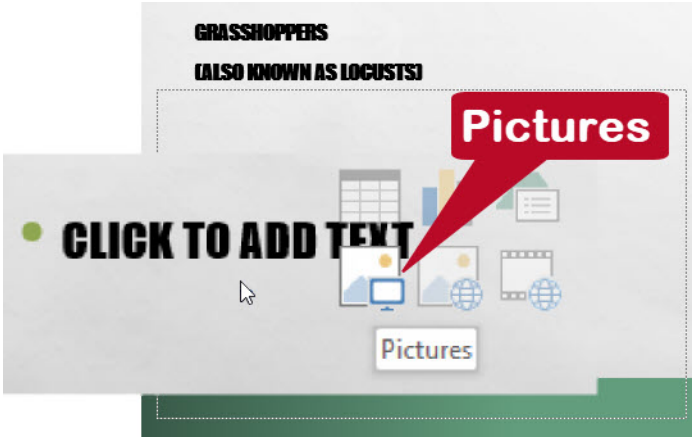


Step 10. ***CLICK*** on ***SLIDE 2*** to bring it into view.
Step 11. ***CLICK*** on the ***INSERT*** tab to display the Insert ribbon
Step 12. ***CLICK*** on ***PICTURES*** located in the images group. Because you have already opened the folder, your view shows the UNIT 06 Student files folder.
Step 13. ***SCROLL*** through the images until you find the image called ***Owl.jpg***
Step 14. ***CLICK*** on the ***Owl.jpg*** image
Step 15. ***CLICK INSERT***

INSERT PICTURES WITH PLACEHOLDER

Step 16. ***CLICK*** on ***SLIDE 3*** to bring it into view. This slide has two content placeholders.

Step 17. ***CLICK*** on the ***PICTURES*** icon under the ***Grasshoppers*** reference



Step 18. ***SCROLL*** through the images until you find ***Grasshopper.jpg***

Step 19. ***CLICK*** on the ***Grasshopper.jpg*** image to insert into the presentation.

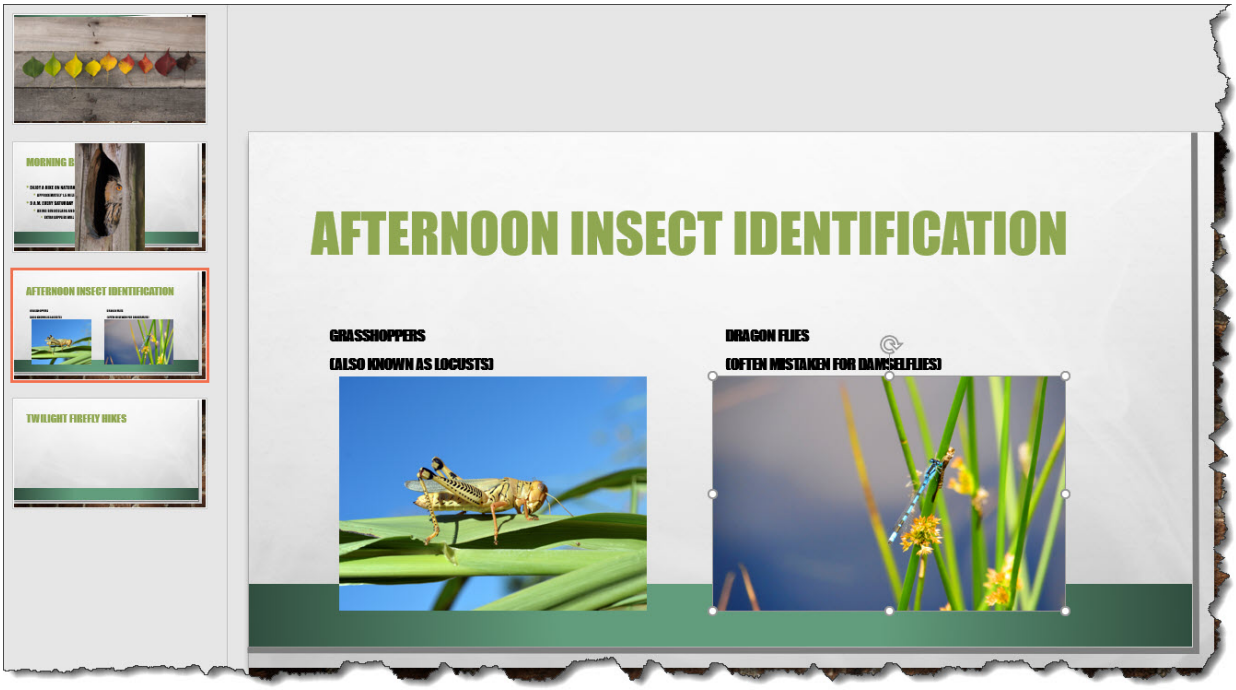
Step 20. ***CLICK INSERT***

Step 21. ***CLICK*** on the ***PICTURES*** icon under the ***Dragon Flies*** reference

Step 22. ***SCROLL*** through the images until you find ***Dragonfly.jpg***

Step 23. ***CLICK*** on the ***Dragonfly.jpg*** image to insert into the presentation.

Step 24. ***CLICK INSERT***



INSERT PICTURE WITHOUT A CONTENT PLACEHOLDER

Step 25. ***CLICK*** on ***SLIDE 4*** to bring it into view. This slide has two content placeholders.

Step 26. ***CLICK*** on the ***INSERT*** tab to display the Insert ribbon
Step 27. ***CLICK*** on ***PICTURES*** located in the images group
Step 28. ***CLICK*** on the Firefly.png image to insert into the presentation
Step 29. ***CLICK INSERT***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

RESIZE THE PICTURES

Slides 1, 2 and 4 have pictures that need adjusting. The instructions below address each of the issues for the slide in question.

SLIDE 1

On this slide, you are going to adjust the size of the picture and angle of the picture. Follow these steps:

Step 1. ***CLICK*** on the ***IMAGE***

Step 2. With the image selected, ***CLICK*** the ***PICTURE TOOLS/FORMAT*** menu

Step 3. Use the sizing handles in the bottom right corner of the image to adjust the size to approximately ***3.46" high*** x ***6.34" wide***.

Step 4. ***CLICK*** the ***ROTATION HANDLE*** to rotate the image in alignment. Align the image the same direction as the title.

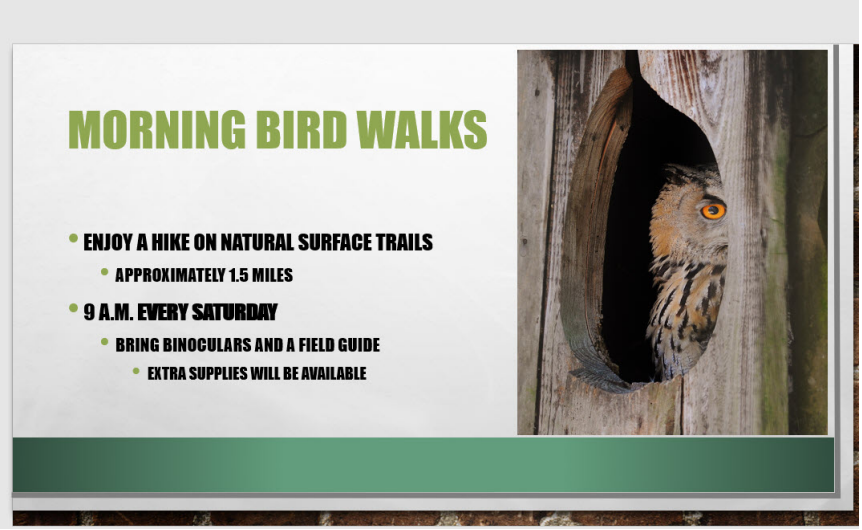
SLIDE 2

Step 5. The Owl is too large for the slide. We are going to resize the image using only the height adjustment. Place your cursor on the bottom center handle. ***CLICK*** and ***DRAG*** the ***BOTTOM HANDLE UP***.

Step 6. ***ADJUST*** the ***IMAGE*** to fit in ***ABOVE THE GREEN LINE***

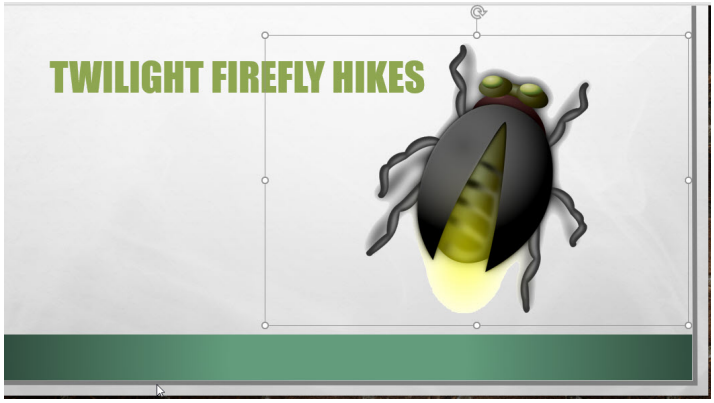
Step 7. ***CLICK*** the ***MIDDLE*** of the ***IMAGE***. You will see a four-pronged arrow (looks like a compass).

Step 8. ***DRAG*** the ***IMAGE TO THE RIGHT*** away from the text



SLIDE 4

Step 9. ***ADJUST*** the ***SIZE OF FIREFLY*** to fit on the slide. Use the following illustration as your guide:

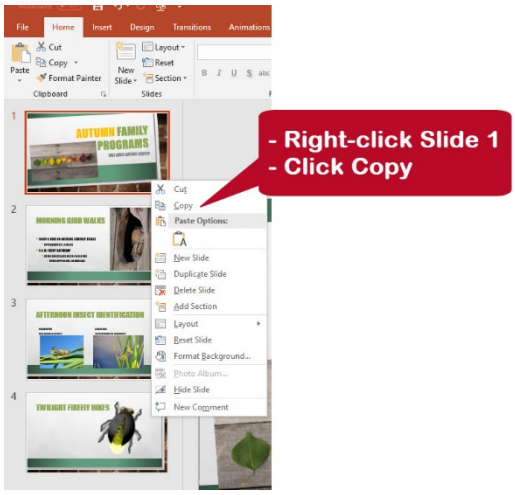


SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

COPY A SLIDE

Sometimes it is necessary to make a copy of an entire slide. The process is simple just follow these steps:



Step 1. In the left-hand panel of the normal view, ***CLICK*** on ***SLIDE 1*** to select the side.

Step 2. ***RIGHT-CLICK*** your mouse to reveal the shortcut menu

Step 3. ***CLICK COPY***

Step 4. ***CLICK BELOW SLIDE 4***. The paste options button will appear.

Step 5. ***CLICK*** the first option, ***USE DESTINATION THEME***. You should have a duplicate of slide 1 in the slide 5 position

CHANGE THE TITLE OF SLIDE 1

The format of slides 1 and 5 are now identical; however, the titles should be unique on each page. In the next steps, you will change the titles for slide 5:

Step 6. With the normal view open, ***CLICK SLIDE 5***

Step 7. In the right viewing pane, ***CLICK*** the ***TITLE***

Step 8. ***HIGHLIGHT*** the word ***AUTUMN***

Step 9. Type ***Register for***. Notice how the word Autumn is automatically replaced with the new information.

Step 10. ***CLICK*** on the word ***FAMILY***

Step 11. ***DOUBLE-CLICK*** the ***FORMAT PAINTER.*** The double-click turns the painter on until you click on it again.

Step 12. ***CLICK*** anywhere in the word ***REGISTER***

Step 13. ***CLICK*** anywhere in the word ***FOR***

Step 14. ***CLICK*** on the ***FORMAT PAINTER*** to turn if off.

Step 15. ***CLICK*** on the ***SUBTITLE*** in ***SLIDE 5***

Step 16. You are going to change the entire contents of the current subtitle. ***TRIPLE-CLICK*** the ***SUBTITLE*** to select it. If you have trouble with the triple-click, you can highlight the text by clicking and dragging your mouse over the current subtitle.

Step 17. Type ***Call 816-555-8928 Today***

SAVE YOUR UPDATES

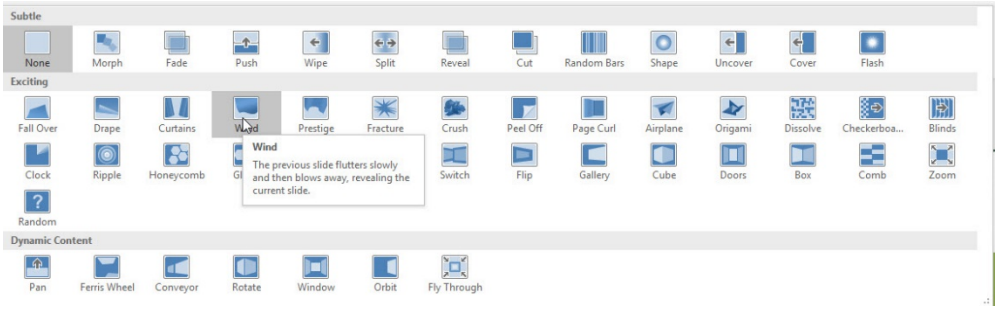
Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD A TRANSITION BETWEEN SLIDES

The slide transitions add interest to your presentation and help make it look more professional. There are many transition styles available. For this presentation, we will be using the Wind Transition.

Step 1. With your u06a1 Tall Oaks presentation open, ***CLICK*** on the ***TRANSITIONS*** tab to reveal the transitions ribbon

Step 2. ***CLICK*** on the ***MORE*** option

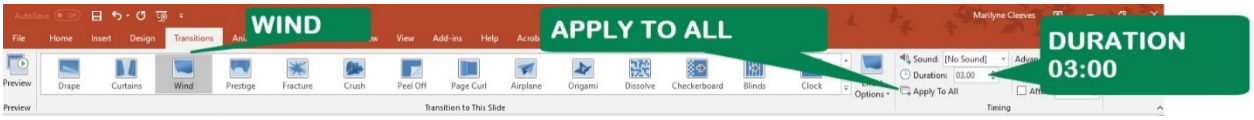


Step 3. In the Exciting section ***CLICK WIND***

Step 4. In the Timing group, choose these options:

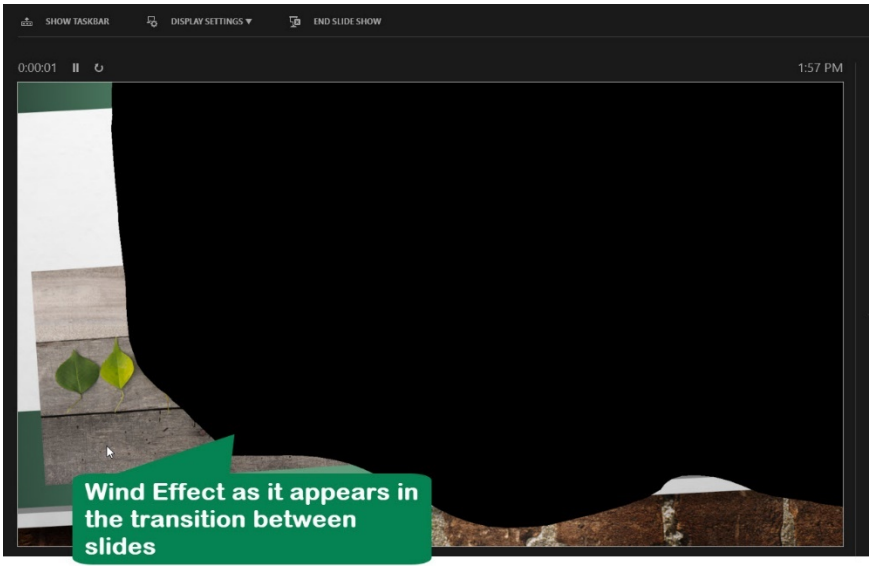
a. ***CLICK APPLY TO ALL***. This will apply the wind transition to all the slides in the presentation.

b. DURATION: ***3:00***



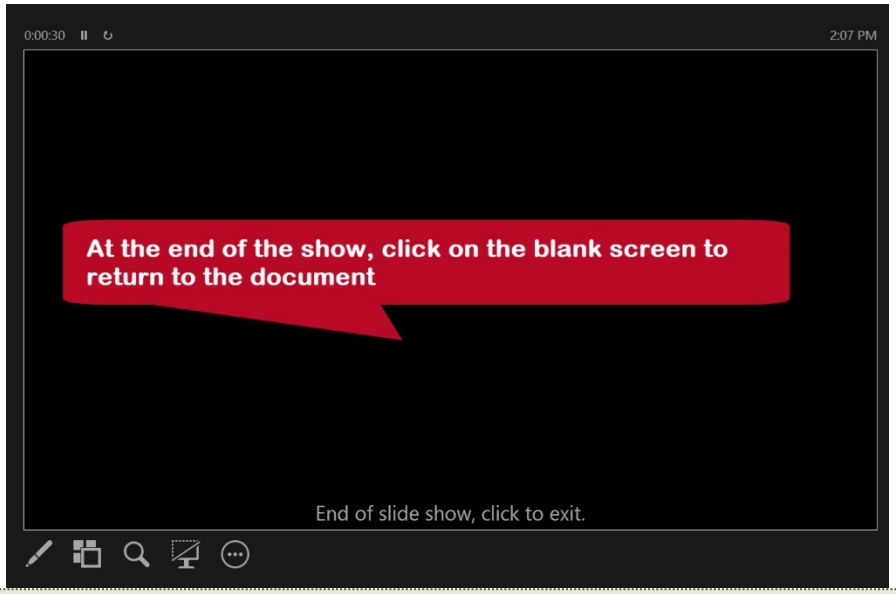
Step 5. Test your slide show ***CLICK*** on the ***SLIDE SHOW*** tab to reveal the Slide Show ribbon.

Step 6. In the Start Slide Show group, ***CLICK FROM BEGINNING***



Step 7. ***HIT ENTER***. This will advance you to the next slide. You can also click your mouse to get the same result.

Step 8. Finish previewing all the slides until you reach the end of the show. You will see a blank screen to signify the show is complete. ***CLICK*** on the ***BLANK*** screen to return to your document.



SAVE YOUR UPDATES

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SUBMIT ASSIGNMENT:

u06a1 Tall Oaks

ON YOUR OWN ACTIVITY

The images for this activity are in the ***UNIT 06 Student Files***

Step 1. ***OPEN*** a ***NEW*** document using the ***QUOTABLE THEME***

Step 2. TITLE: ***History Museum***

Step 3. SUB TITLE: ***Popular Exhibits***

Step 4. ***HIT ENTER***

Step 5. Type ***Your Name***

Step 6. ***SAVE*** your file ***AS: u06a2 History Museum***

Step 7. FONT EFFECTS AND SIZES

a. TITLE: ***ITALIC***, ***DARK BLUE*** (***Standard Colors***)

b. SUB TITLE: ***32 POINT*** (you may need to expand the size of the subtitle box to increase the font size effectively)

c. YOUR NAME: ***24 POINT***

Step 8. SLIDE 1: ***TITLE SLIDE***

a. PICTURE 1: ***Museum Icon.png***

b. PICTURE 2: ***Girls in Museum.png***

Step 9. SLIDE 2: ***COMPARISON LAYOUT***

a. TITLE: ***Tyrannosaurus (T. rex)***

b. SIDE 1: ***Found in western North America***

i. PICTURE: ***T-rex Skeleton.jpg***

c. SIDE 2: ***50-60 bone-crunching teeth***

i. PICTURE: ***T-rex 3D.jpg***

Step 10. SLIDE 3: ***SECTION HEADER LAYOUT***

a. TITLE: ***Ancient Egyptian Sarcophagus***

b. FONT COLOR: ***Dark Blue (Standard Colors)***

c. TEXT ALIGNMENT: ***RIGHT ALIGN***

d. SUB TITLE: ***Stone carved burial container contains mummified body***

e. PICTURE: ***Pharaoh.jpg***

Step 11. SLIDE 4: ***TWO CONTENT LAYOUT***

a. TITLE: ***Antiques***

b. FONT COLOR: ***Dark Blue (Standard Colors)***

c. LEFT PICTURE: ***Car.jpg***

d. RIGHT PICTURE: ***Typewriter.jpg***

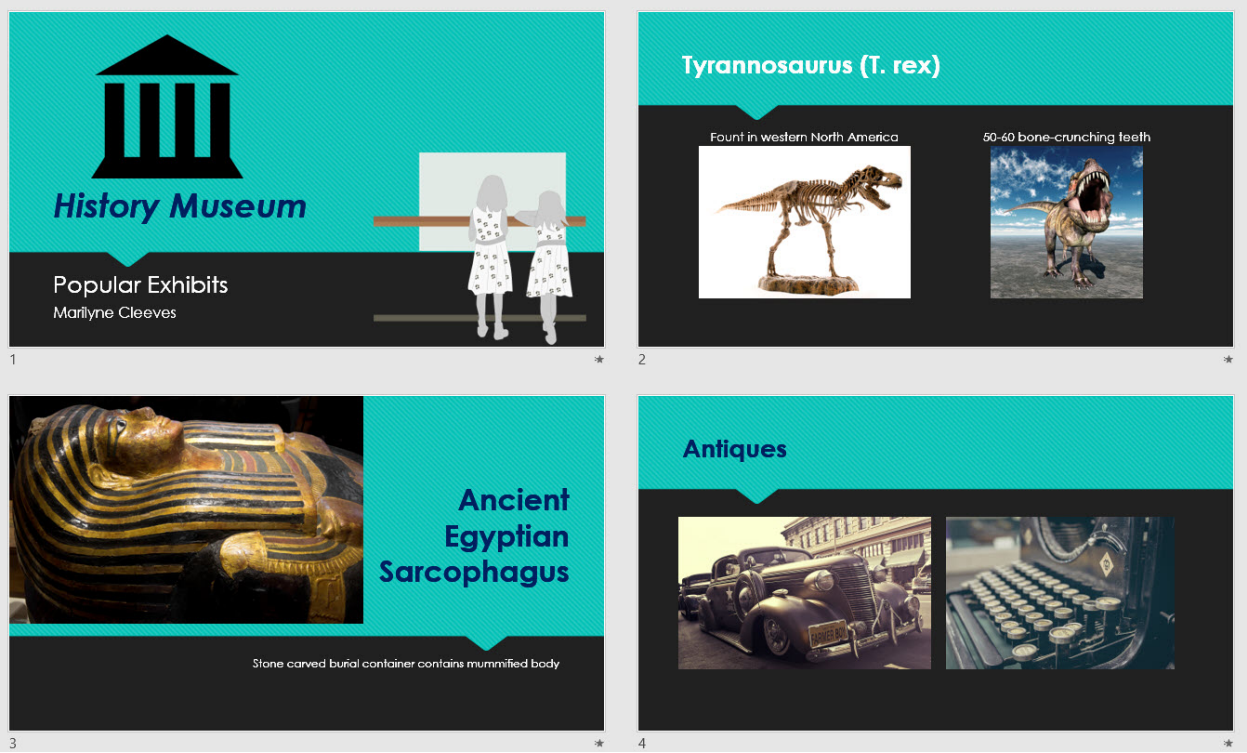
e. SIZE: Both Images should be ***3.42" HIGH by 5.67" WIDE***

f. ALIGNMENT: ***IMAGES ARE IN ALIGNMENT BY TOP EDGE***

Step 12. SLIDE TRANSITIONS: ***Gallery***

a. APPLY TO ALL

b. DURATION: ***2.25 SECONDS***



SAVE YOUR UPDATES

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SUBMIT ASSIGNMENT:

u06a2 History Museum

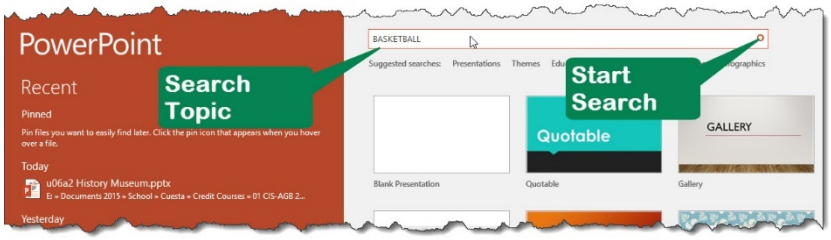
UNIT 07 DOWNLOADING THEMES AND EDITING SLIDES

Whether reading a document or viewing a PowerPoint presentation, people relate better to photographs, artwork, graphics, and a variety of typefaces. Researchers have known for decades that documents with visual elements are more effective than text only documents.

PowerPoint displays many themes that are varied and appealing. They can give you and excellent start at designing a presentation; however, you may have a specific topic and design concept. There are hundreds of pre-designed themes and templates available online. The following steps help to establish and understanding of how to find a theme that meets your needs:

Step 1. ***OPEN POWERPOINT***.

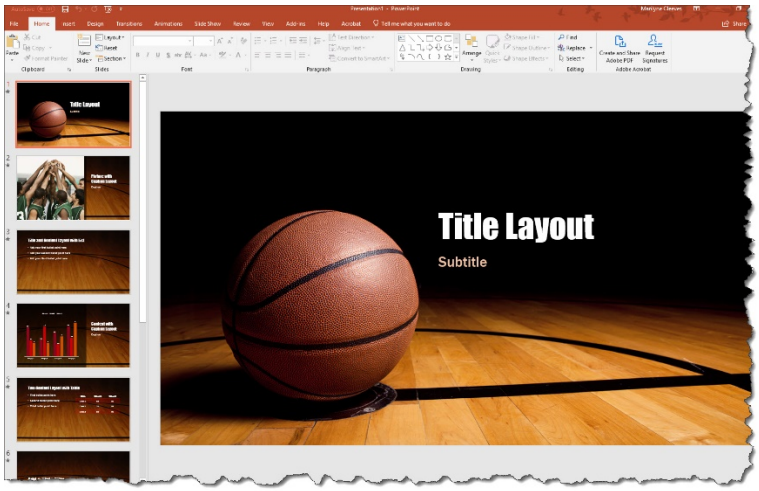
Step 2. In the ***SEARCH*** area type ***BASKETBALL***



Step 3. ***HIT ENTER***. The basketball theme will show in the result

Step 4. ***CLICK*** on the ***BASKETBALL*** presentation theme

Step 5. ***CLICK CREATE***. You will be routed to the basketball theme in the normal view.



Step 6. ***CLICK SLIDE 3***

Step 7. ***HOLD DOWN SHIFT*** key down and ***CLICK SLIDE 7***. You should have slides 3 through 7 selected.

Step 8. ***RIGHT-CLICK*** any of the four slides.

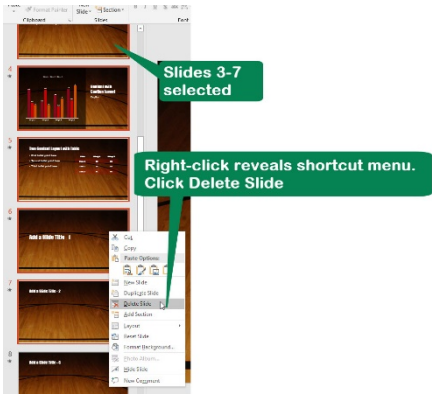
Step 9. ***CLICK DELETE SLIDE***. The four slides will be removed.

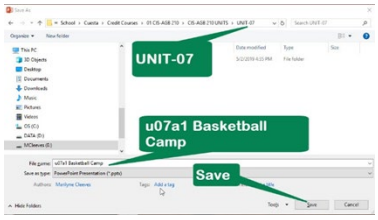
Step 10. ***HIT F12*** to open the ***SAVE AS*** menu

Step 11. ***NAVIGATE TO*** YOUR ***UNIT 07 FOLDER***

Step 12. Enter the FILE NAME: ***u07a1 Basketball Camp***

Step 13. ***CLICK SAVE***





CREATE SLIDES

In UNIT 06 you learned how the title slide introduces the audience to the presentation. The title slide also catches the readers attention. In this presentation, the title slide is using the text as an illustration that focuses on a topic (basketball). The images for this activity are in the ***UNIT 07 Student Files***

Step 1. SLIDE 1

a. TITLE: ***Basketball Camp for Kids***

b. SUBTITLE: ***Gilbert Park District***

c. INSERT PICTURE: ***Backboard.png***

Step 2. SLIDE 2

a. TITLE: ***Learn from pros and make acquaintances***

b. CAPTION: ***Classes meet weekday mornings throughout the summer***

c. CHANGE PICTURE

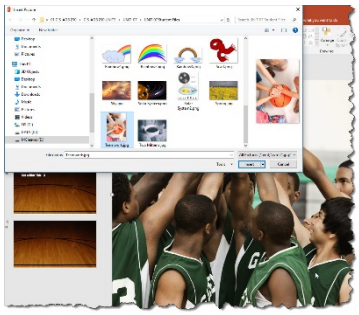
i. ***CLICK PICTURE*** to select the current picture

ii. ***RIGHT-CLICK*** to display shortcut menu

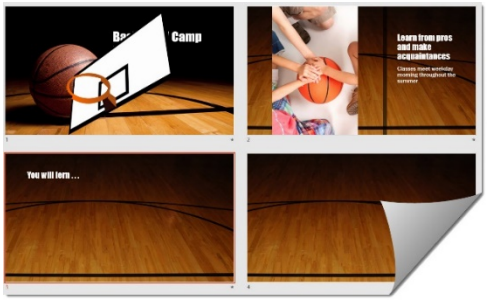
iii. ***CLICK***; ***CHANGE PICTURE***; ***FROM FILE***

iv. SELECT: ***Teamwork.jpg***

v. CLICK INSERT



Step 3. SLIDE 3



a. TEXT: ***You will lern . . .*** (Learn is intentionally spelled wrong)

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the CRTL key and taping the S key. This is a good habit and keeps you from losing your work.

REVISE PICTURES

SLIDE 1

Step 1. ***CLICK*** on the ***BACKBOARD IMAGE*** to select it.

Step 2. Use the sizing handles to adjust the size of the backboard. If you prefer to enter the size in the size group, use this setting:

a. Height 5.25"

b. Width 4.5"

Step 3. ***CLICK*** the center of the ***BACKBOARD IMAGE***. This will activate the cross hairs to move the image to the desired location. ***WATCH CAREFULLY*** as you move the image, you will see a vertical and horizontal line appear to the right and bottom of the graphic. This is a PowerPoint ***SMART GUIDE*** to illustrate the best image location for the graphic you have selected.

Step 4. ***ALIGN*** the ***IMAGE*** using the ***SMART GUIDE*** to assure you are not too close to the edge of the slide.

SLIDE 2

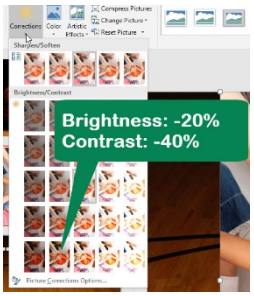
Step 5. ***SELECT*** the teamwork ***PHOTO***

Step 6. ***CLICK*** the ***PICTURE TOOLS*** button to display the Picture Tools Format tab

Step 7. ***CLICK*** the ***CORRECTIONS*** option in the Adjust group.

Step 8. Scroll down to display the last row of images. ***SELECT***

a. ***Brightness: -20% Contrast: -40%*** (second picture in last brightness/contrast row)



Step 9. With the picture selected, ***CLICK*** the ***MORE*** option in the ***PICTURE STYLES*** group

Step 10. ***CLICK*** the ***BEVEL RECTANGLE***

Step 11. With the picture selected, ***CLICK*** the ***PICTURE BORDER*** option in the PICTURE STYLES group.

Step 12. Select ***WEIGHT***. Scroll down to ***6 pt***

Step 13. ***CLICK*** on the ***6 pt*** option. There should now be a border around the picture.

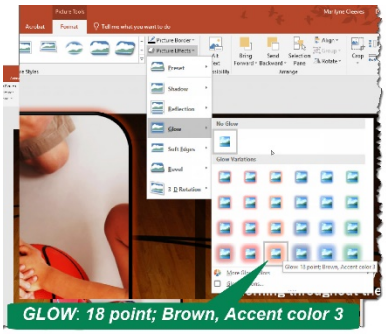
Step 14. Select the picture again to change the border color. ***CLICK PICTURE BORDER***

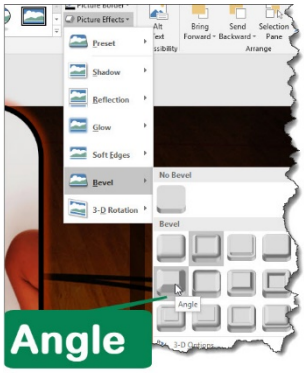
Step 15. In the theme colors ***CLICK BLACK BACKGROUND 1***

Step 16. Select the picture to change the glow effects. ***CLICK PICTURE EFFECTS***

Step 17. ***SELECT GLOW*** to reveal the glow variations available

Step 18. ***CLICK GLOW: 18 point; Brown, Accent color 3***





Step 19. Select the picture to change the bevel effects. ***CLICK PICTURE EFFECTS***

Step 20. ***SELECT BEVEL*** to reveal the bevel variations available

Step 21. ***CLICK BEVEL: Angle***

SAVE YOUR UPDATES

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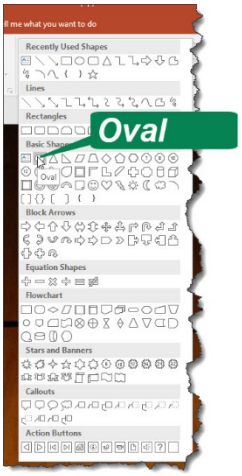
WORKING WITH SHAPES

SLIDE 3



Step 1. In the normal view, ***DISPLAY SLIDE 3***.

Step 2. ***CLICK*** the ***HOME*** tab to display the home ribbon

Step 3. In the drawing group, ***CLICK*** the ***MORE*** option next to the shapes displayed.

Step 4. In the basic shapes group, ***CLICK*** the ***OVAL*** shape.

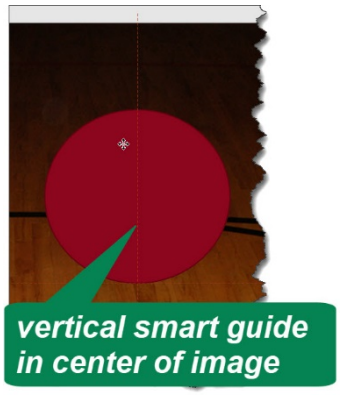
Step 5. Press and ***HOLD SHIFT*** key ***DRAG*** until the image is approximately the following dimensions (check the drawing tools for size dimensions)

a. HEIGHT 2.5”

b. WIDTH 2.67”

Step 6. ***DRAG*** the image until the ***VERTICAL SMART GUIDE*** is ***DISPLAYED***

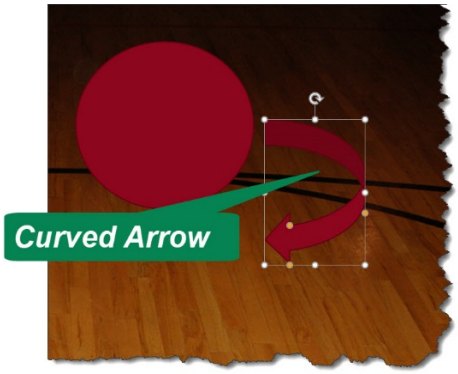
Step 7. With the oval image selected, you still have access to the drawing tools. ***CLICK*** the



MORE option on the ***INSERT SHAPES GROUP***

Step 8. In the ***BLOCK ARROWS*** group choose ***CURVED LEFT***

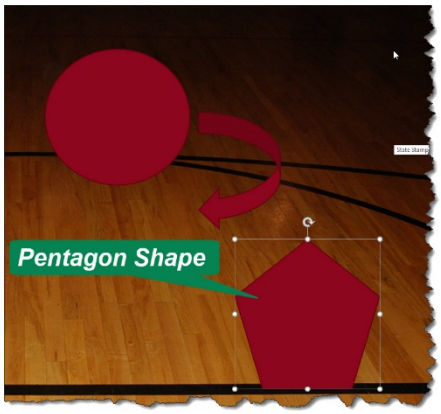
Step 9. ***CLICK*** and ***DRAG*** to insert the curved arrow into the demonstration.



Step 10. ***CLICK*** the ***INSERT SHAPES GROUP*** again

Step 11. In the ***BASIC SHAPE*** group ***CLICK PENTAGON***

Step 12. ***CLICK*** and ***DRAG*** your mouse to create a ***PENTAGON SHAPE***



SAVE YOUR UPDATES

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APPLY A SHAPE STYLE

This activity demonstrates how PowerPoint provides the means for you to apply shape styles to the arrow and pentagon that will coordinate with the oval style. A light style color in the arrow shape will help join darker colors in the oval and pentagon. Eventually you will add text to the shape but for now, we are concentrating on using the coordinating theme colors. Notice that all the styles applied are in the group marked Black, Dark 1. For this activity you will use three theme colored effects (fill, outline and subtle).

Step 1. ***CLICK*** the ***HOME*** tab to reveal the home ribbon band

OVAL SHAPE

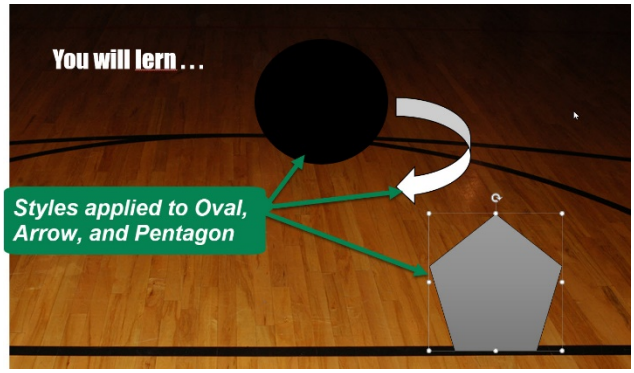
Step 2. With Slide 3 in normal view, ***CLICK*** on the ***OVAL*** shape
Step 3. In the drawing group, ***CLICK*** the ***QUICK STYLES***
Step 4. In the theme styles group, ***CLICK COLORED FILL***: ***Black, Dark 1***

ARROW SHAPE

Step 5. With Slide 3 in normal view, ***CLICK*** on the ***ARROW*** shape
Step 6. In the drawing group, ***CLICK*** the ***QUICK STYLES***
Step 7. In the theme styles group, ***CLICK COLORED OUTLINE***: ***Black, Dark 1***

PENTAGON SHAPE

Step 8. With Slide 3 in normal view, ***CLICK*** on the ***PENTAGON*** shape
Step 9. In the drawing group, ***CLICK*** the ***QUICK STYLES***
Step 10. ***CLICK SUBTLE EFFECT***: ***Black, Dark 1***



SAVE YOUR UPDATES

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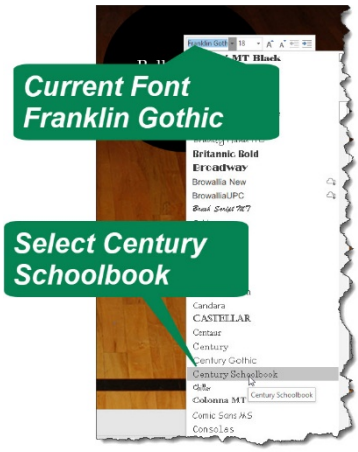
ADD TEXT AND FORMAT CONTENT

The default theme font is Franklin Gothic Medium. To draw more attention to the text in the shapes created in Slide 3, the plan is to change the font to Century Schoolbook. To change a font, you must select the text and then choose the desired font. Follow these steps to complete the text each of the shapes:

OVAL SHAPE



Step 1. ***DOUBLE-CLICK*** the ***OVAL SHAPE*** in slide 3. Your cursor should be blinking in the center of the shape. It is now ready to type the text.

Step 2. Type ***Ball handling skills***

Step 3. ***HIGHLIGHT*** the ***TEXT***

Step 4. ***RIGHT-CLICK*** to ***DISPLAY*** the ***SHORTCUT MENU***

Step 5. ***SELECT CENTURY SCHOOLBOOK*** from the list of ***FONTS***

Step 6. ***FONT***

a. SIZE = ***24 pts***

b. COLOR = ***ORANGE*** (standard colors row)

PENTAGON SHAPE

Step 7. ***DOUBLE-CLICK*** the ***PENTAGON SHAPE*** in slide 3. Your cursor should be blinking in the center of the shape. It is now ready to type the text.

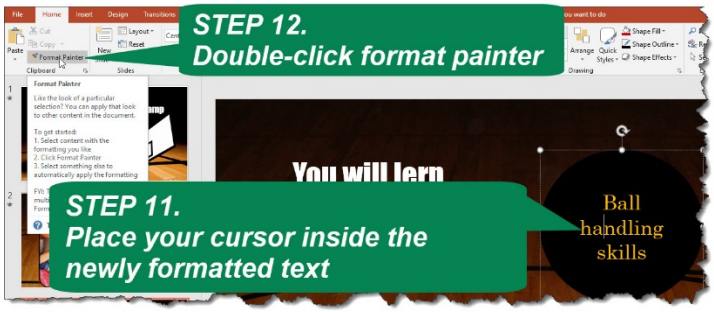
Step 8. Type ***Offensive moves***

Step 9. ***CLICK*** the ***TEXT*** in the ***OVAL SHAPE***

Step 10. ***DOUBLE-CLICK*** your ***FORMAT PAINTER.*** This will turn on the painter until you click on it again.

Step 11. Notice that your cursor turns into a paint brush. ***CLICK*** the ***TEXT*** inside the ***PENTAGON***.

Step 12. Use the ***FORMAT PAINTER*** to change all the text in the Pentagon



Step 13. ***CLICK*** the ***FORMAT PAINTER*** again to turn it off.

Step 14. With the ***PENTAGON*** selected***. CLICK COPY***

Step 15. ***CLICK AWAY*** from the ***PENTAGON*** to deselect it.

Step 16. ***CLICK PASTE***

Step 17. ***CHOOSE*** the ***USE DESTINATION THEME*** option

Step 18. There are now two pentagon shapes. ***MOVE*** the ***NEW SHAPE*** to the ***LEFT*** of the original shape. When you are moving the shape, watch for the ***SMART GUIDES.***

Step 19. The ***SMART GUIDES*** help you align the ***TWO SHAPES DIRECTLY ACROSS*** from each other.

Step 20. Change the text in the new pentagon to ***Defensive mindset***

ARROW SHAPE

Step 21. ***SELECT*** the ***ARROW SHAPE***

Step 22. ***CLICK COPY***

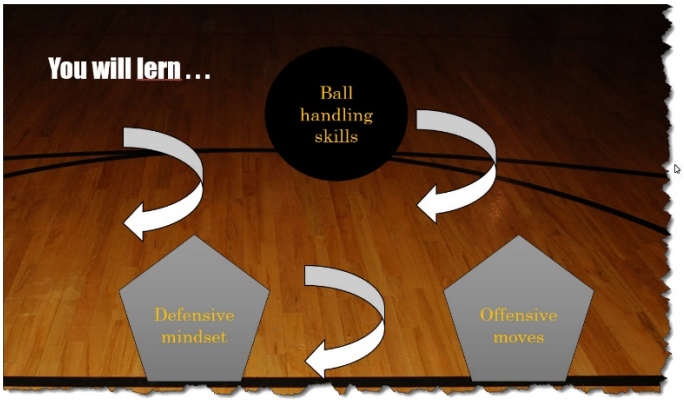
Step 23. ***CLICK PASTE***

Step 24. ***CLICK PASTE*** again. This process will produce two new arrows to work with.

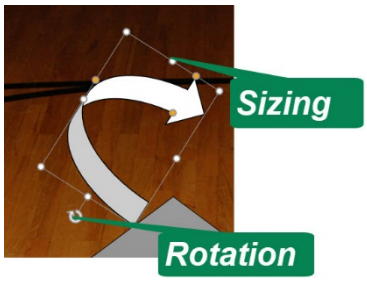
Step 25. ***CLICK*** on each of the new ***ARROWS***

Step 26. ***DRAG*** one ***BETWEEN*** the ***PENTAGON SHAPES***

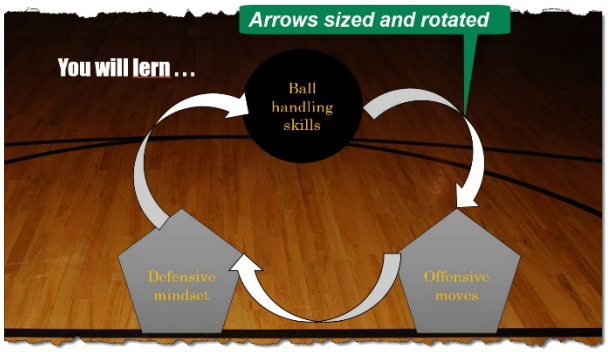
Step 27. ***DRAG*** the other ***BETWEEN*** the ***PENTAGON*** and ***OVAL***



Step 28. ***CLICK*** on each ***ARROW*** to ***ROTATE*** the ***ARROW***



After you have finished rotating and sizing the arrows, slide 3 should look like the image below:



SAVE YOUR UPDATES

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FORMATTING SLIDE BACKGROUNDS

A unique slide background can generate audience interest. Every slide can have the same background, or different backgrounds can be used. The change in backgrounds is considered a fill, which may be the content to makeup a shape, line or character. ***Solid fill*** is one color used throughout the entire slide, ***Gradient fill*** is one color shade gradually progressing to another shade. ***Picture or texture fill*** uses a specific file or an image that stimulates a material, such as cork, granite, marble, or canvas. ***Pattern fill*** adds designs, such as dots or dashes, which repeat in rows across the slide (Freund, et al., 2017).

Fills can be adjusted by using features such as ***transparency***, which allows you to see through the background. Another feature is to set custom colors that are unique to your company or organization. ***Offset*** is another background feature that allows the user to move the background away from the slide borders in various distances by percentage. ***Tiling*** repeats the background image many times both vertically and horizontally.

SLIDE 2

Step 1. With Slide 2 displayed, ***CLICK*** the ***DESIGN*** tab to view the design ribbon

Step 2. In the Customize Group, ***CLICK FORMAT BACKGROUND***

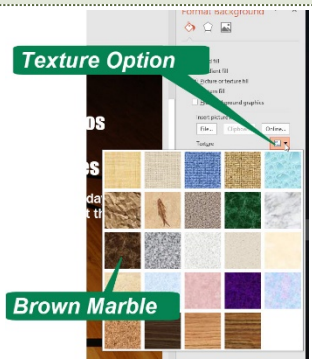
Step 3. ***CLICK PICTURE OR TEXTURE FILL***

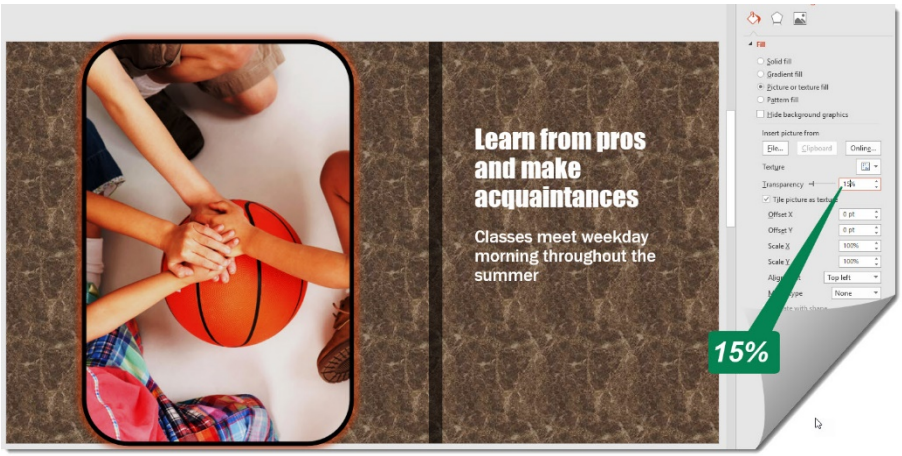
Step 4. ***CLICK*** the ***TEXTURE OPTION***

Step 5. ***CLICK*** the ***BROWN MARBLE*** texture

Step 6. ***CLICK*** the ***TRANSPARENCY*** slider

Step 7. ***DRAG*** to ***RIGHT*** until ***15%*** is displayed in the ***TRANSPARENCY BOX***





SLIDE 3

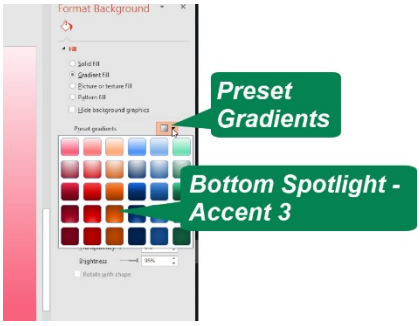
Step 8. Display Slide 3. ***CLICK*** the ***DESIGN*** tab to view the design ribbon

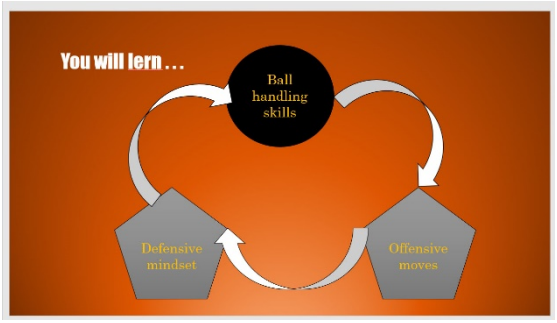
Step 9. In the Customize Group, ***CLICK FORMAT BACKGROUND***

Step 10. ***CLICK GRADIENT FILL***

Step 11. ***CLICK*** the ***PRESET GRADIENTS*** button

Step 12. ***CLICK BOTTOM SPOTLIGHT – ACCENT 3***





SLIDE 4

Step 13. Display Slide 4. ***CLICK*** the ***DESIGN*** tab to view the design ribbon

Step 14. In the Customize Group, ***CLICK FORMAT BACKGROUND***

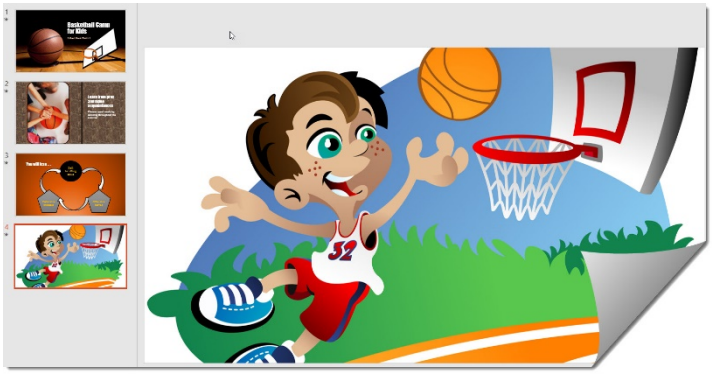
Step 15. ***CLICK PICTURE OR TEXTURE FILE***

Step 16. ***CLICK FILE***.

Step 17. Navigate to your ***UNIT 07 STUDENT FILES***

Step 18. ***CLICK*** the image called ***Basketball Boy***

Step 19. ***CLICK INSERT***. The background of the slide will change to the Basketball boy image.



Step 20. ***CLICK*** the ***TRANSPARENCY*** slider

Step 21. ***DRAG*** until the Transparency is ***set to 30%***

Step 22. ***CLICK*** the ***INSERT*** tab to show the Insert ribbon

Step 23. In the Text group, ***CLICK WORDART***

Step 24. ***CLICK Fill-Red, Accent color 2; Outline: Red Accent color 2***

Step 25. Type ***Register Today!***

Step 26. With the WordArt still selected, ***CLICK*** the ***TEXT EFFECTS*** option in the WordArt Styles group.

Step 27. ***POINT*** to ***TRANSFORM*** to display the various types of transformations available.

Step 28. ***CLICK*** on the ***CHEVRON UP*** option

Step 29. ***DRAG*** the ***LOWER RIGHT HANDLE*** of the ***WORDART*** to resize the letters.

Step 30. ***MOVE*** the ***WORDART*** under the basketball hoop

Step 31. ***SELECT*** the ***WORDART TEXT***

Step 32. In the WordArt Styles group, ***SELECT*** the ***TEXT FILL*** option

Step 33. ***CLICK*** the ***TEXTURE*** option

Step 34. ***CLICK*** on ***MEDIUM WOOD***

Step 35. In the Word Styles group, ***CLICK*** on the ***TEXT OUTLINE***

Step 36. ***CLICK*** on ***WEIGHT 6 PTS.***

Step 37. ***CLICK*** on ***TEXT OUTLINE*** again

Step 38. ***CLICK*** on ***BLACK BACKGROUND 1*** (first option in the theme colors)

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SYNONYMS, NOTES AND SPELL CHECK

A synonym is simply a word that means the same as the given word. It comes from the Greek “syn” and “onym,” which mean “together” and “name,” respectively. When speaking or writing, one of the best ways to expand your vocabulary and to avoid using the same words repeatedly is to use a thesaurus to find synonyms (similar meaning words).

In this project, you want to replace the word acquaintances, on Slide 2. The following steps location the appropriate synonym and replace the word:

Step 1. Display Slide 2. ***CLICK*** on the word ***Acquaintances***

Step 2. ***RIGHT-CLICK*** to view the shortcut menu

Step 3. ***SCROLL*** down to ***SYNONYMS***

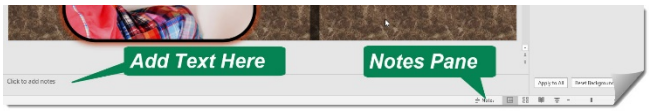
Step 4. ***CLICK*** on the replacement ***Friends***

ADD NOTES

There is no need to memorize your entire presentation speech. Speaker or speech notes are powerful tools that you can use to help you when giving presentations. You can add notes per slide, and you can outline the main points you want to say about each slide. You don't have to write an entire novel in the notes section; key talking points will do.

Speaker notes allow you to give smooth presentations while also making sure you don't miss out on any important points. Follow these steps to add notes to your presentation:

CLICK SLIDE 2



Step 5. ***CLICK*** the ***NOTES*** pane

Step 6. ***CLICK*** the ***ADD NOTES*** area that appears

Step 7. Type ***Every morning begins with a group session that covers the day's agenda. The coaches then separate the campers into groups to cover fundamental skills. Each morning ends with a contest designed to be fun and competitive.***

CLICK SLIDE 3

Step 8. ***CLICK*** the ***ADD NOTES*** area that appears

Step 9. Type ***Campers will gain confidence while learning sportsmanship and strategies.***

CLICK SLIDE 4

Step 10. ***CLICK*** the ***ADD NOTES*** area that appears

Step 11. Type ***Space is limited. Every camper will receive a t-shirt, snacks and water. Parents are encouraged to attend the awards ceremony at the end of the camp session.***

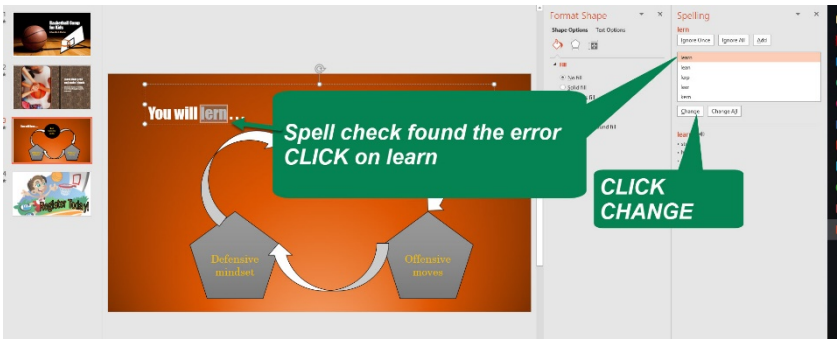
CHECK SPELLING

Although a spell checker is a handy tool for general use, it will never fully take the place of educating yourself properly and polishing your writing skills. Word and PowerPoint have a very large (but not infinite) list of words to which they compare each “word” you type. If a match is not found, it tells you that the word is misspelled. Follow these steps to correct the spelling in the Basketball Camp presentation:

Step 12. ***CLICK*** the ***REVIEW*** tab to reveal the review ribbon

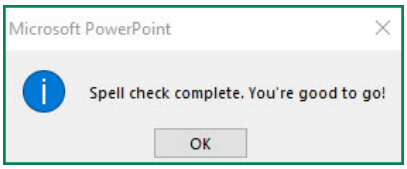
Step 13. In the proofing group, ***CLICK SPELLING***

Step 14. The alternative appears to correct the word “lern” spelled wrong in slide 3. ***CLICK LEARN***



Step 15. ***CLICK CHANGE***

Step 16. Fix any typing mistakes you may have made. When the spell check is complete, you will receive a notice. ***CLICK OK***



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

HEADER AND FOOTER OPTIONS

Although PowerPoint presentations are usually displayed on a screen, they are just like other documents in in the Microsoft Office suite such as Word, Excel, and Publisher. Just like those other applications, you can add custom headers and footers to a PowerPoint presentation to display a variety of important information. In this exercise, you will add a slide number to each of the slides you have created by following these steps:

Step 1. ***CLICK*** on the ***INSERT*** tab to display the insert ribbon

Step 2. In the text group, ***CLICK*** the ***HEADER*** and ***FOOTER*** option

Step 3. Notice you can add many items such as the date, your name and additional information for the pages that contain notes.

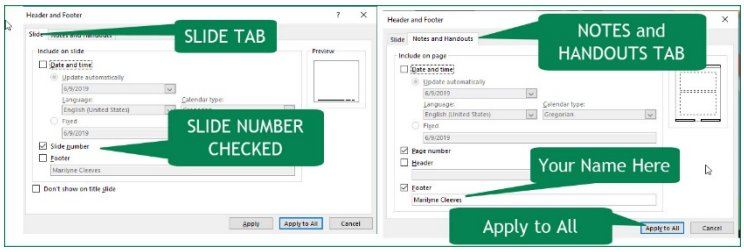
Step 4. ***CHECK SLIDE NUMBER***

a. ***CLICK*** the ***NOTES*** and ***HANDOUTS*** tab

b. ***CHECK*** the ***FOOTER*** option

c. ***ADD YOUR NAME*** to the footer

d. ***CLICK*** on the ***APPLY TO ALL*** option



PRINT PREVIEW

To see the header/footer changes that were made to your presentation, it is necessary to use the print preview. Change the following settings:

Step 5. With the presentation open, ***CLICK*** on the ***FILE*** tab

Step 6. ***CLICK*** on the ***PRINT*** option

Step 7. Set the ***PRINT SETTINGS***

a. Print All Slides

b. Notes Pages

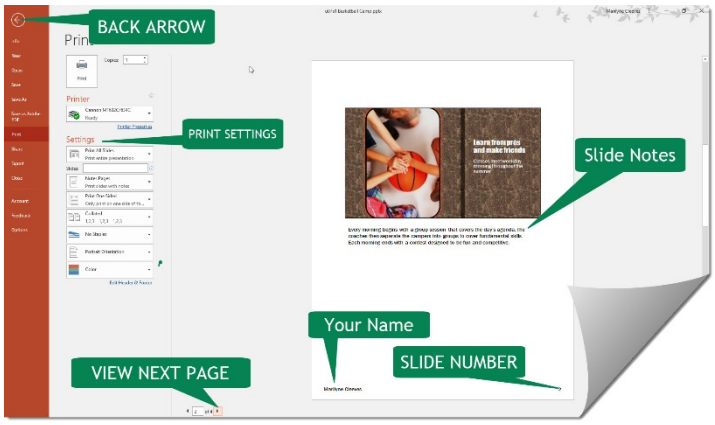
c. Print One Sided

d. Collated

e. No Staples

f. Portrait Orientation

g. Color



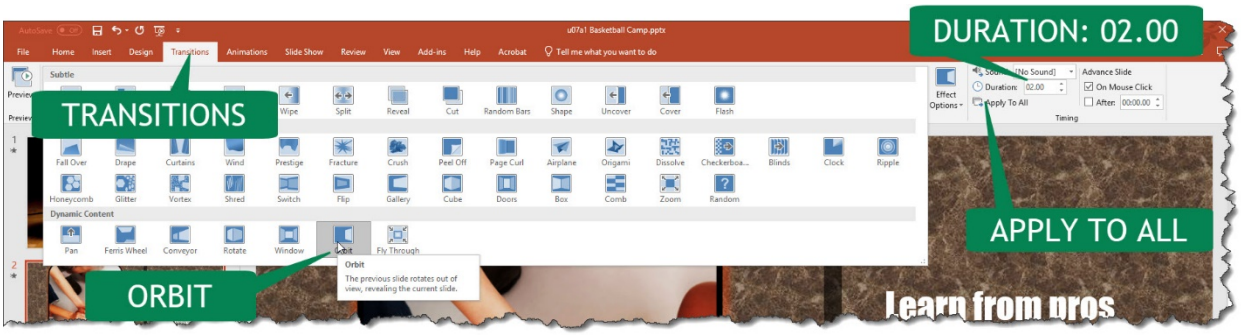
Once you have set the print settings, you can use the next page option at the bottom of the view to see the notes you have entered. Notice your name appears in the left side of the footer and the slide number on the right side of the footer.

Step 8. ***CLICK*** the ***BACK ARROW*** at the top left of the screen to return to the document.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SLIDE TRANSITIONS



The final enhancement you will make to this presentation is to change the slide transitions from Fade to Orbit for all the slides. You will then increase the slide duration. Follow these steps:

Step 1. With the presentation open, ***CLICK*** on the ***TRANSITIONS*** tab to display the transitions ribbon

Step 2. In the transition to this slide group, ***CLICK*** the ***MORE*** option

Step 3. In the dynamic content, ***CLICK*** the ***ORBIT*** option

Step 4. In the timing group, ***CLICK*** on the ***APPLY TO ALL*** option

Step 5. In the timing group, ***CHANGE DURATION to 2:00***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u07a1 Basketball Camp

ON YOUR OWN ACTIVITY

The images for this activity are in the ***UNIT 07 Student Files***

Step 1. Open PowerPoint search for ***NATURE*** in the online templates and themes

Step 2. ***CLICK*** on ***RAINBOW PRESENTATION***

Step 3. ***CLICK CREATE***

Step 4. ***DELETE*** the following ***SLIDES***

a. Slides 12 and 13
b. Slides 6 through 10
c. Slides 3 and 4

Step 5. ***DUPLICATE SLIDE 2***

Step 6. ***MOVE SLIDE 4*** to the ***END*** of the presentation

Step 7. ***CLICK F12***

Step 8. Navigate to your ***Unit 07*** folder

Step 9. ***SAVE*** your file ***AS***: ***u07a2 About Rainbows***

SLIDE 1

Step 10. TITLE: ***Follow Every Rainbow***

- ***WORDART:*** Fill-White, Outline- Accent 1, Shadow
- ***FONT***: 72 PTS
- ***FILL***: Red (standard colors)
- ***OUTLINE***: Purple (standard colors)
- ***WEIGHT***: 3 pt.
- ***TEXT EFFECTS TRANSFORM***: Arch Up

Step 11. SUBTITLE: Type ***By Your Name***

Step 12. PICTURE: UNIT 07 Student files***Rainbow1.png***

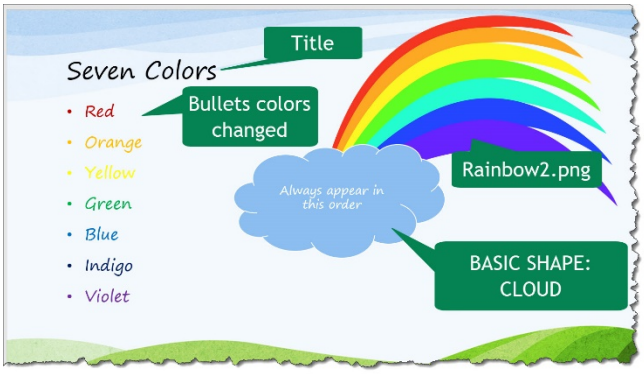
SLIDE 2

Step 13. TITLE: ***Seven Colors***

- ***FONT***: 40 PTS
- ***COLOR***: Black, Text 2

Step 14. ***BULLETS***

- Red
- Orange
- Yellow
- Green
- Blue
- Indigo
- Violet



Step 15. ***CHANGE*** the ***COLOR*** of each ***BULLETED ITEM*** to the color it represents. Use the Standard colors.

Step 16. ***PICTURE***: UNIT 07 Student files***Rainbow2.png***

Step 17. ***INSERT*** basic shape***: CLOUD***

- ***STYLE***: Light 1, Outline, Colored Fill – Light Blue, Accent 2
- ***ADD TEXT***: ***Always appear in this order***

SLIDE 3

Step 18. TITLE: ***Rainbow Formation***

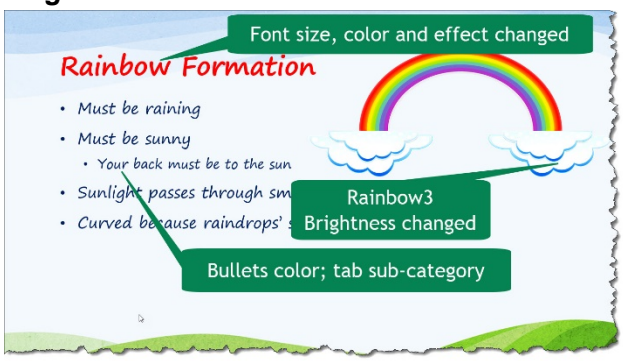
- ***FONT***: 40 PTS
- ***COLOR***: Red
- ***EFFECT***: Bold

Step 19. ***BULLETS Dark Blue*** (standard colors)

- ***Must be raining***
- ***Must be sunny***
  - ***Your back must be to the sun***
- ***Sunlight passes through small droplets of water***
- ***Curved because raindrops' surface is curved***

Step 20. ***PICTURE***: UNIT 07 Student files***Rainbow3.png***

- ***Brightness +20% Contrast +40%***



SLIDE 4

Step 21. TITLE: ***How We See a Rainbow***

- ***FONT***: 40 PTS
- ***COLOR***: Red
- ***EFFECT***: Bold

Step 22. ***INSERT*** basic shape***: SUN***

- ***FILL***: Yellow (Standard Colors)
- ***GRADIENT Dark Variations:*** Linear Diagonal – Top Left to Bottom Right

Step 23. ***INSERT*** basic shape: ***OVAL***

- ***SIZE***: 3" x 3"
- ***FILL***: Light Blue, Accent 2 (theme color)
- ***TEXT***: ***Raindrops***
- ***FONT***: 24 pts

Step 24. ***INSERT Text Box***

- ***TEXT***: ***Red***
- ***COLOR***: RED (standard color)
- ***FONT***: 24 pts
- ***EFFECT***: Bold

Step 25. ***COPY Text Box***

Step 26. ***PASTE*** and change attributes

- ***TEXT***: ***Violet***
- ***COLOR***: Purple (standard color)

Step 27. ***INSERT LINE ARROW***

- ***DIRECTION***: SUN to RAINDROP
- ***SHAPE OUTLINE COLOR***: YELLOW
- ***WEIGHT***: 6 pt

Step 28. ***COPY LINE ARROW***

Step 29. ***PASTE TWICE*** (you will have three arrows total)

Step 30. ***FLIP*** the two new arrows ***HORIZONTAL***

Step 31. ARROW 2

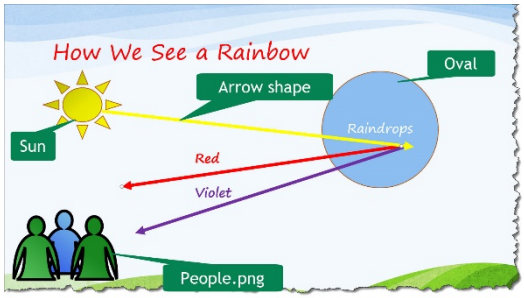
- ***SHAPE OUTLINE COLOR***: RED

Step 32. ARROW 3

- ***SHAPE OUTLINE COLOR***: PURPLE

Step 33. ***ALIGN*** the ***ENDS*** of arrows 2 and 3 with tip of arrow 1

Step 34. ***PICTURE***: UNIT 07 Student files***People.png***



SLIDE 5

Step 35. TITLE: ***It's Sunny and Raining***

- ***FONT***: 40 PTS
- ***COLOR***: Red
- ***EFFECT***: Bold

Step 36. CAPTION: ***Let's look for a rainbow***

- ***FONT***: 24 PTS
- ***COLOR***: Violet
- ***EFFECT***: Bold

Step 37. ***PICTURE BORDER***: Violet

ALL SLIDES

Step 38. ***TRANSITION***: ORIGAMI

Step 39. ***DURATION***: 2.5 seconds

Step 40. ***APPLY TO ALL***

Step 41. ***Preview Your Show***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

SUBMIT ASSIGNMENT:

u07a2 About Rainbows

UNIT 08 REUSING A PRESENTATION AND ADDING MEDIA AND ANNIMATION

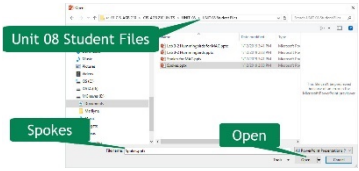
At times. you will need to revise a PowerPoint presentation. The changes may include inserting and adding effects to photos, altering the colors of photos and illustrations, and updating visual elements displayed on a slide. Applying a different theme, changing fonts, and substituting graphical elements can give a slide show an entirely new look. Adding media including sounds, video, and music can enhance a presentation and help audience members retain the information being presented. Adding animation can reinforce important points and enliven a presentation (Freund, et al., 2017).

INSERT AND CHANGE A BACKGROUND PHOTO

The files needed for this activity are in the ***UNIT 08 Student Files***.

Step 1. Run PowerPoint ***CLICK OPEN OTHER PRESENTATIONS***

Step 2. ***BROWSE*** to the UNIT-08 folder ***OPEN UNIT 08 Student Files***



Step 3. ***CLICK*** on ***SPOKES***

Step 4. ***CLICK*** on ***OPEN***

Step 5. ***CLICK*** on ***ENABLE EDITING*** (If it appears)

Step 6. ***CLICK*** on ***SLIDE 1***

Step 7. ***CLICK*** on the ***DESIGN*** tab to display the design ribbon

Step 8. In the customize group, ***CLICK FORMAT BACKGROUND***

Step 9. ***CLICK PICTURE*** or ***TEXTURE FILL***

Step 10. ***CLICK FILE***

Step 11. ***OPEN*** the ***UNIT 08 Student Files***

Step 12. ***CLICK*** on the ***HIDDEN BIKE.JPG***

Step 13. In the format background task pane, ***CLICK PICTURE***

Step 14. ***CLICK*** on ***PICTURE COLOR SATURATION PRESETS***

Step 15. ***CLICK*** on ***400***% to change the color saturation on the image.

Step 16. ***SELECT SLIDE TITLE***

Step 17. ***RIGHT-ALIGN*** the ***TEXT***

Step 18. ***CLICK*** on the ***SUBTITLE PLACE HOLDER***

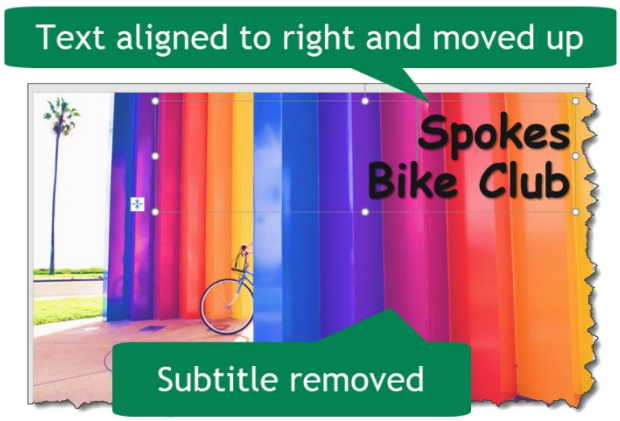
Step 19. ***CLICK DELETE***

Step 20. ***MOVE THE TITLE HIGHER ON THE PAGE***

Step 21. ***HIT F12*** on your keyboard

Step 22. ***SAVE AS*** option appears

Step 23. Navigate to the ***UNIT-08*** folder on your computer. Save using ***u08a1 SPOKES*** as the file name.



UNGROUP AN ILLUSTRATION

Step 1. ***OPEN SLIDE 2***

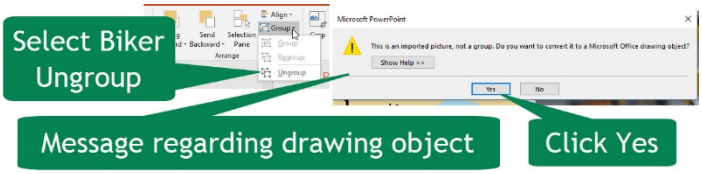
Step 2. ***CLICK*** the ***BIKER CLIP***

Step 3. ***CLICK*** the Picture Tools ***FORMAT*** tab to open the format ribbon

Step 4. In the arrange group, ***CLICK GROUP***

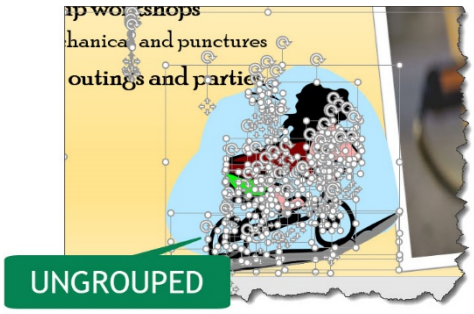
Step 5. ***CLICK UNGROUP***

Step 6. PowerPoint will display a message regarding converting the picture to a drawing object. ***CLICK YES***



Step 7. ***CLICK UNGROUP*** after you have confirmed converting the drawing object.

Step 8. ***CLICK AWAY*** from the biker image to deselect it. Each section of the biker is now separate and can be changed individually.



CHANGE THE BIKER'S SHIRT AND WHEEL HUB COLORS

Step 9. ***CLICK*** the ***BIKER'S SHIRT*** to select it.

Step 10. ***CLICK*** the ***FORMAT*** tab to display the Format ribbon

Step 11. In the drawing group, ***CLICK*** the ***SHAPE FILL*** option

Step 12. ***SELECT YELLOW*** on the standard colors group.

Step 13. ***CLICK*** the ***REAR WHEEL HUB***

Step 14. ***CLICK*** the ***SHAPE FILL*** option

Step 15. ***SELECT YELLOW*** from the standard colors group.

Step 16. ***REPEAT*** the ***PROCESS*** for the ***FRONT WHEEL HUB***

DELETE THE BACKGROUND

Step 17. ***CLICK*** the BLUE ***BACKGROUND*** behind the biker

Step 18. ***CLICK*** your ***DELETE*** key. This will remove the background.

REMOVE THE SWEAT DROPLETS

Step 19. ***CLICK*** on one of the ***SWEAT DROPLETS***

Step 20. ***HOLD DOWN*** your ***SHIFT*** key

Step 21. ***CLICK*** on the remaining ***SWEAT DROPLETS***. If you change your view to 400%, it will be easier to select the droplets successfully (***VIEW*** tab ***ZOOM 400%***)

Step 22. ***CLICK*** your ***DELETE*** key.

SELECT THE IMAGE TO GROUP

Step 23. This first part of the next step is important. You should ***CLICK*** the ***BOTTOM LEFT*** corner of the image and ***DRAW A BOX*** all around the ***ENTIRE IMAGE***. This selects all the images that now make up this one image.

Step 24. ***CLICK*** the ***FORMAT*** tab to display the format ribbon.

Step 25. In the Arrange group, ***CLICK GROUP***

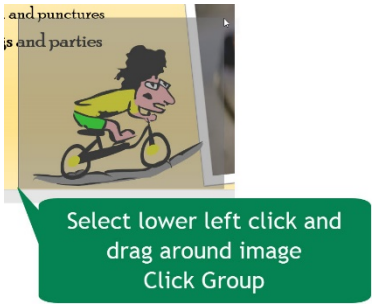
Step 26. ***CLICK GROUP*** from the drop-down box that appears.

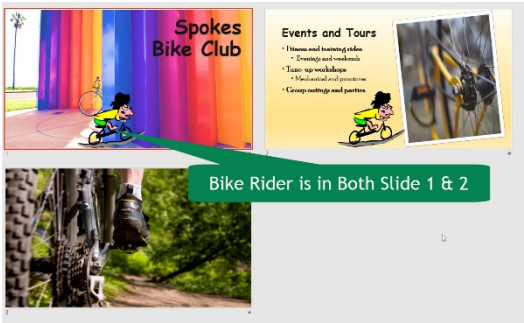
Step 27. ***RIGHT-CLICK*** the ***BIKE RIDER***

Step 28. ***CLICK COPY***

Step 29. ***CLICK SLIDE 1***

Step 30. ***CLICK PASTE***





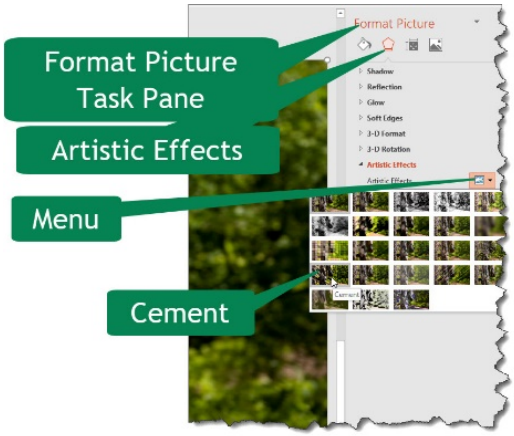
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD MEDIA TO SLIDES

A video file can be produced with a camera and editing software. Sound files can come from the Internet, files stored on your computer, or an audio track on a CD. To hear the sounds, you need a sound card and speakers or headphones on your system.

Once an audio or video clip is inserted into a slide, you can specify options that affect how the file is displayed and played. Follow the steps below to edit a video presentation in PowerPoint:



SLIDE 3

Step 1. With the u08a1 Spokes demonstration open in normal view, ***CLICK*** on ***SLIDE 3*** to bring it into view.

Step 2. ***CLICK*** on the ***IMAGE***

Step 3. In the *Format Picture Task* pane, ***CLICK EFFECTS***

Step 4. ***CLICK ARTISTIC EFFECTS***

Step 5. ***OPEN*** the ***ARTISTIC EFFECTS MENU***

Step 6. ***CLICK*** on ***CEMENT***. This will change the look of the image that will be behind the video.

Step 7. ***CLICK*** on the ***INSERT*** tab to display the insert ribbon.

Step 8. ***CLICK*** on the ***VIDEO*** option location in the media group

Step 9. ***CLICK*** on ***VIDEO ON MY PC***

Step 10. ***NAVIGATE*** to the ***UNIT-08*** folder containing the ***UNIT 08 Student Files.*** When you open the folder, you may note that there are two videos called Mountain Bike video. This is because I found in previous lessons that Mac computers will not read .wmv files. I have changed the original video to .mp4. A Windows based PC will read both file formats.

Step 11. ***CLICK*** on ***MOUNTAIN BIKE VIDEO***. This will insert the video into Slide 3.

Step 12. ***CLICK*** on the ***PLAY*** button to view the video you just inserted. Notice that the bicycle does not appear in the video until a few seconds after it starts. The next step is to trim the video.

Step 13. With the video selected, ***CLICK*** the ***PLAYBACK*** tab to reveal the playback ribbon.

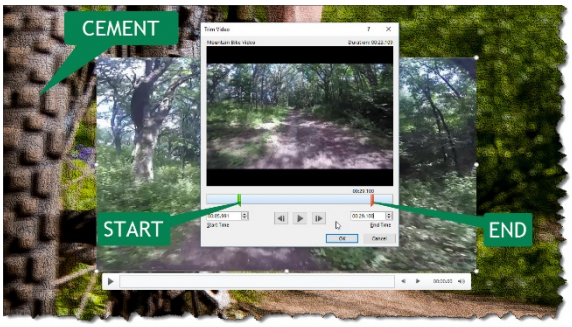
Step 14. ***CLICK*** on the ***TRIM VIDEO*** option in the editing group

Step 15. ***SLIDE*** or ***DRAG*** the green marker to the right to change the start time.

Step 16. ***START TIME*** should be approximately ***00:05.991***

Step 17. ***SLIDE*** or ***DRAG*** the red marker to the left to establish the end time.

Step 18. ***END TIME*** should be approximately ***00:29.100***

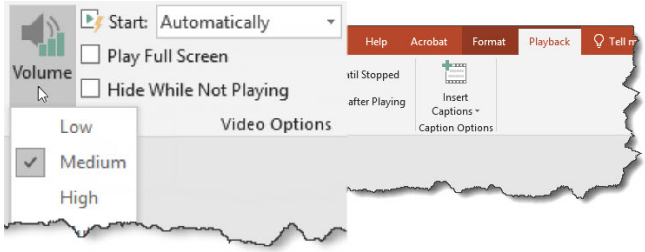


Step 19. ***CLICK OK*** to confirm the change

Step 20. In the Video Options group, ***CLICK*** the ***START*** drop-down menu

Step 21. By default, the menu says In Click Sequence, ***CLICK*** to change this to ***AUTOMATICALLY***.

Step 22. ***CLICK*** the ***VOLUME*** button and change the volume to ***MEDIUM***



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CHANGE THE VIDEO VIEW

Resizing a video clip is very similar to the process used for resizing a picture.

Step 1. With the u081a Spokes PowerPoint demonstration open in normal view, ***CLICK SLIDE 3***

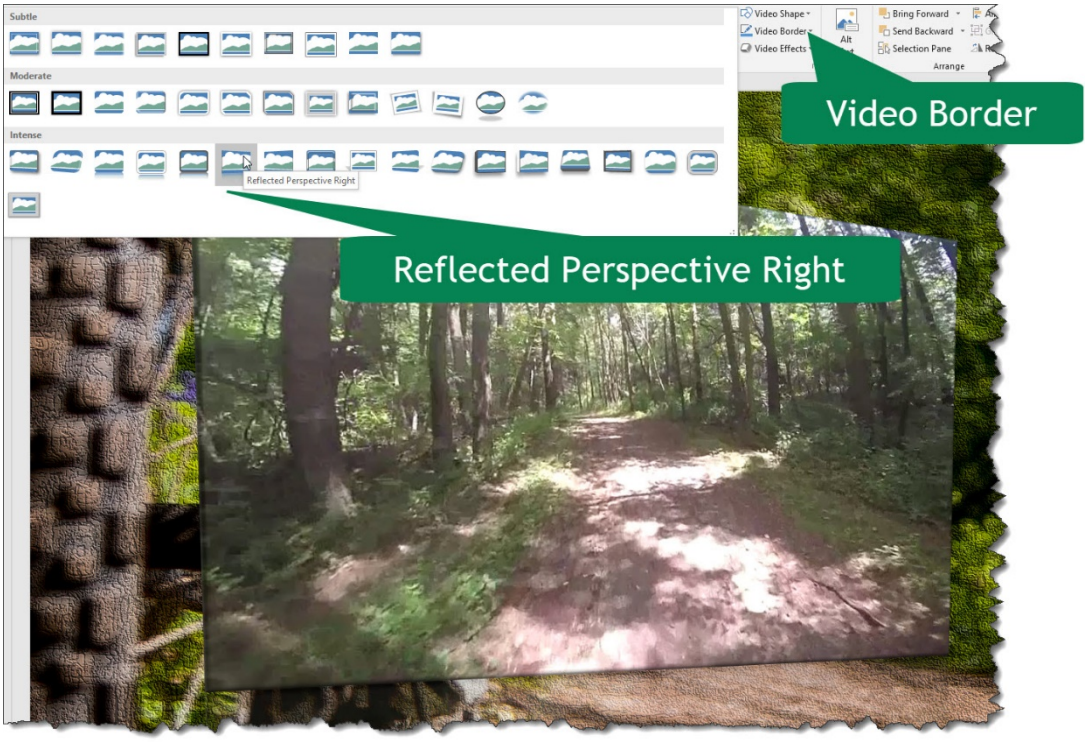
Step 2. ***CLICK*** on the ***VIDEO*** to select it.

Step 3. CLICK the ***FORMAT*** option to display the Format ribbon

Step 4. Resize the ***VIDEO IMAGE*** to ***5.5" by 9.78".***

Step 5. With the video still selected, ***CLICK*** to expand the ***VIDEO STYLES*** menu

Step 6. In the Intense group, ***CLICK REFLECTED PERSPECTIVE RIGHT***



Step 7. With the video selected, ***CLICK VIDEO BORDER***

Step 8. Change the ***LINE WEIGHT*** to ***2 ¼ points***

Step 9. Change the ***COLOR*** to ***YELLOW*** from the standard colors

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ADD ANIMATION TO SLIDES

Step 1. In the u08a1 Spokes demonstration, ***DISPLAY SLIDE 2***

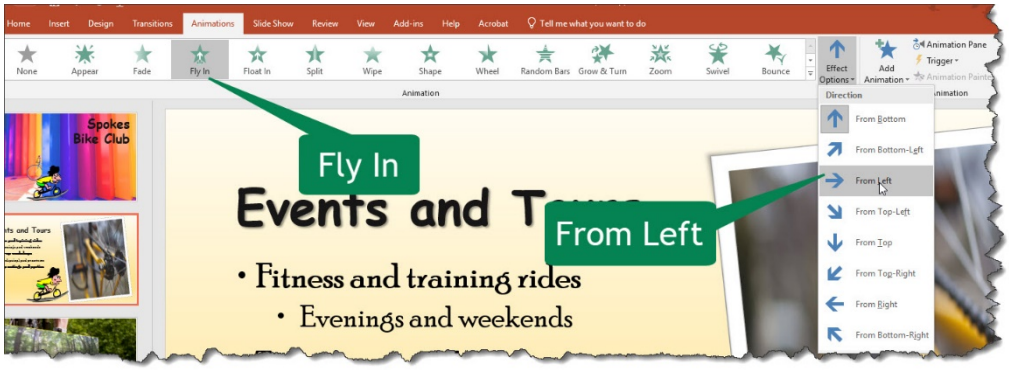
Step 2. ***CLICK*** on the ***ANIMATIONS*** tab to display the Animations ribbon

Step 3. ***CLICK*** on the ***MAN ON THE BIKE***

Step 4. ***CLICK*** on the ***FLY IN*** entrance to select an entrance for the man on the bike.

Step 5. ***CLICK*** on the ***EFFECT OPTIONS***

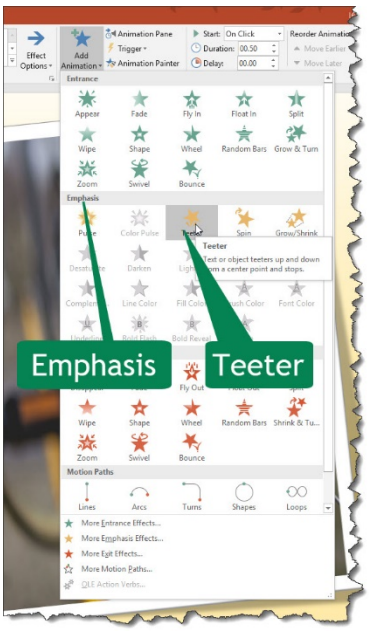
Step 6. ***CLICK*** on the ***FROM LEFT*** option. Notice that you have a demonstration of the animation every time you click on a new effect.



ADD EMPHASIS

Step 7. With the Man on the Bike selected, ***CLICK ADD ANIMATION*** on the advanced animation group.

Step 8. In the Emphasis group ***CLICK TEETER***



ADD EXIT EFFECT

Step 9. With the Man on the Bike selected, ***CLICK ADD ANIMATION***

Step 10. In the Exit group, ***CLICK FLY OUT***

Step 11. ***CLICK*** on the ***EFFECT OPTIONS***

Step 12. ***CLICK*** on the ***TO RIGHT*** option

The Man on the Bike should enter from the left, teeter in the middle and exit right. Notice that PowerPoint has numbered the animation effects.

Step 13. ***CLICK*** on the ***ANIMATION PANE***. This will display the animations you have just created. It also contains additional options you can create with the animations.

SAVE YOUR UPDATES

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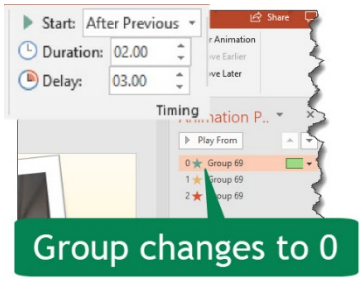
MODIFY EFFECTS AND TIMINGS

To create a dramatic effect, you can change the timing. The default setting is to start each animation with a click, but you can change this setting so that the entrance effect is delayed until a specified number of seconds has passed.

Step 1. With Slide 2 open, ***CLICK*** on the ***ANIMATIONS PANE*** to view the animations created.

Step 2. ***SELECT*** the ***FIRST ANIMATION*** (This is an entrance effect. It has a green star next to it). Using the timing group, change the effects using the following settings:



a. START: ***After Previous***

b. DURATION: ***2.00***

c. DELAY: ***3.00***

Step 3. ***SELECT*** the ***SECOND ANIMATION*** (This is an emphasis effect. It has a gold star next to it). Notice that after you choose the After Previous option, the number changes. This is because the animations are linked to each other. Use the timing group, to change the effects with of the following settings:

a. START: ***After Previous***

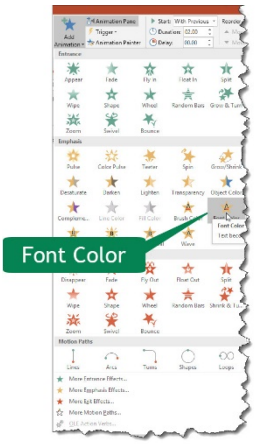
b. DURATION: ***2.00***

Step 4. ***SELECT*** the ***THIRD ANIMATION*** (This is an exit effect. It has a red star next to it. Use the timing group, to change the effects with the following settings:

a. START: ***After Previous***

b. DURATION: ***1.00***

ANIMATE A CONTENT PLACEHOLDER



Step 5. With ***SLIDE 2*** open, ***DOUBLE-CLICK*** the ***CONTENT PLACEHOLER*** for the bulleted items

Step 6. ***CLICK*** the ***MORE*** option in the ***ANIMATION*** group

Step 7. ***CLICK*** the ***FADE*** entrance effect

a. START: ***With Previous***

b. DURATION: ***2.00***

Step 8. ***CLICK*** on ***ADD ANIMATION*** in the advanced animation group

Step 9. ***CLICK*** the ***MORE*** option in the ***ANIMATION*** group

Step 10. ***CLICK*** the ***FONT COLOR*** emphasis effect

Step 11. In the animation pane, ***CLICK*** on the ***ANIMATION*** (In the last place on the list but numbered 1). This will activate the effect options for the placeholder animation.

Step 12. In the animation group, ***CLICK*** on ***UNDERLINE***

a. START: ***With Previous***

SAVE YOUR UPDATES

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CHANGE THE THEME AND VARIANT

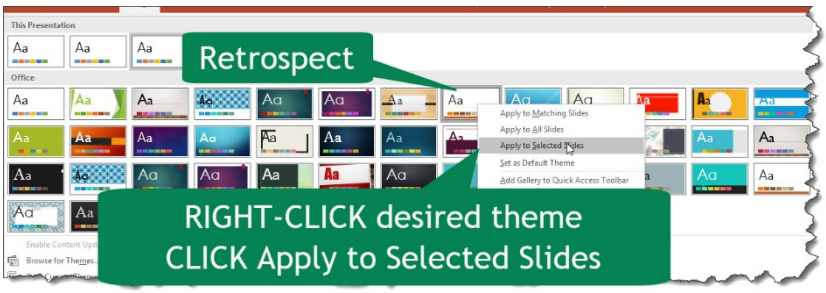
To call attention to the material in the bulleted list, on Slide 2 we are going to change the theme of the one slide.

Step 1. Open Slide 2 in normal view, ***CLICK*** the ***DESIGN*** tab to display the design ribbon

Step 2. ***CLICK*** the ***MORE*** option to display the themes

Step 3. ***RIGHT-CLICK*** on ***RETROSPECT***

Step 4. In the drop-down menu ***CLICK Apply to Selected Slides***



Step 5. In the list of variants, ***RIGHT-CLICK*** the ***GREEN VARIANT***

Step 6. In the drop-down menu ***CLICK Apply to Selected Slides***

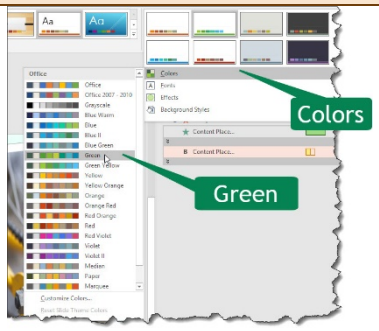
CHANGE THE THEME COLORS

Every theme has at least 10 standard colors: two for texts; two for backgrounds; and six for accents.

Step 7. In the ***VARIANT*** group, ***CLICK*** the ***MORE*** option

Step 8. ***CLICK*** the ***COLORS*** option

Step 9. ***CLICK*** the ***GREEN*** color option



SAVE YOUR UPDATES

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ADD AN AUDIO FILE

If you have a digital recorder or smart phone, you can record sounds to insert into your presentation. The following steps show how to insert and audio clip into slide 1:

Step 1. In the normal view of your presentation, ***CLICK*** on ***SLIDE 1*** to bring it into view

Step 2. ***CLICK*** on the ***INSERT*** tab to bring the insert ribbon into view

Step 3. In the media group, ***CLICK*** the ***AUDIO*** option

Step 4. ***CLICK AUDIO ON MY PC***

Step 5. Navigate to the ***Unit 08 Student Files folder***

Step 6. ***CLICK*** on ***Peddling Sounds***

Step 7. ***CLICK INSERT***

Step 8. ***DRAG*** the ***SOUND ICON*** to lower left corner of the slide

Step 9. ***DRAG*** the ***Bike Rider*** under the title and adjust the size

Step 10. ***CLICK*** the ***AUDIO ICON***

Step 11. ***CLICK*** the ***PLAYBACK*** tab to bring the playback ribbon into view

Step 12. In the Audio Options group ***CHANGE*** the ***AUDIO OPTIONS***

a. START: ***Automatically***

b. ***LOOP UNTIL STOPPED***

c. ***HIDE DURING SHOW***

PREVIEW THE SLIDE SHOW

Step 13. ***CLICK*** the ***SLIDE SHOW*** option to display the slide show ribbon

Step 14. In the Start Slide Show group, ***CLICK FROM BEGINNING***

If you are satisfied with your show, save the file and submit the assignment.

ASSIGNMENT TO SUBMIT:

u8a1 Spokes

ON YOUR OWN ACTIVITY

The images, videos and sound files for this activity are in the ***UNIT 08 Student Files***

Step 2. Run PowerPoint ***CLICK OPEN OTHER PRESENTATIONS***

Step 3. ***BROWSE*** to the UNIT-08 folder ***OPEN UNIT 08 Student Files***

Step 4. ***CLICK*** on ***Lab 3-2 Hummingbirds***

Step 5. ***CLICK*** on ***OPEN***

Step 6. ***CLICK*** on ***ENABLE EDITING*** (If it appears)

Step 7. ***HIT F12*** on your keyboard

Step 8. ***SAVE AS*** option appears

Step 9. Navigate to the ***UNIT-08*** folder on your computer.

a. ***SAVE*** using ***u08a2 Hummingbirds*** as the file name.

Step 10. ***CHANGE*** the ***AUDIO FILE***

a. HIGH VOLUME
b. PLAY ACROSS SLIDES
c. LOOP UNTIL STOPPED
d. REWIND AFTER PLAYING
e. HIDE DURING SHOW

Step 11. ***CUT*** the ***Humming Bird*** from ***SLIDE 2***

Step 12. ***PASTE*** the ***Humming Bird*** to ***SLIDE 1***

SLIDE 1

Step 13. **HUMMING BIRD**

a. PLACEMENT: At the bottom right corner next to the feeder
b. SIZE: 1.7” X 1.87”
c. ENTRANCE: Fly In
d. EFFECT: From Top-Right
e. START TIMING: After Previous
f. DURATION 2.50

Step 14. **TITLE TEXT**

a. SIZE: 72 pts
b. EMPHASIS: Bold
c. COLOR: Red
d. DECREASE TEXT PLACEHOLDER SIZE: 1.65 X 7.62
e. POSITION: Top of red rectangle
f. ENTRANCE: Fly in
g. EFFECT: From Top
h. START TIMING: After Previous
i. DURATION: 02.50

Step 15. **RED RECTANGLE**

a. SHAPE FILL: Lime, Accent 1

b. SIZE: 1.7 X 6.96

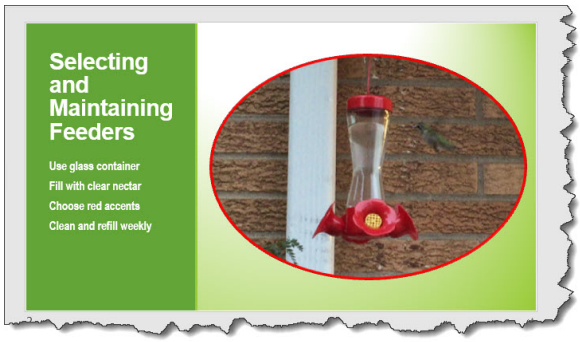
Step 16. **PARAGRAPH 1, 2, 3** Make sure each line is formatted individually. The lines should enter come in one after another. The format is for each line separately.

a. FONT: 28 pts
b. EMPHASIS: Bold
c. ENTRANCE: Appear
d. START TIMING: After Previous
e. DURATION: 2.50

SLIDE 2

Step 17. **VIDEO**

a. MOVE TO: Center of right section
b. SIZE: 5.84 X 8.2
c. FORMAT: Beveled Oval
d. STYLE: Black
e. BORDER COLOR: Red
f. BORDER WEIGHT: 3 pt.
g. TRIM END TIME: 00:17.88
h. VOLUME: High
i. START VIDEO: Automatically



Step 18. **TITLE**

a. ENTRANCE: Float
b. DIRECTION: Down
c. START TIMING: With Previous
d. DURATION: 03.00

SLIDE 3

Step 19. **TITLE**

a. ENTRANCE: Shape
b. START TIMING: With Previous
c. DURATION: 3:00

Step 20. **HUMMINGBIRD AND FLOWERS**

a. UNGROUP
b. FLOWERS FILL COLOR: Red
c. GREEN LEAVES: Delete (Keep the stems)
d. REGROUP
e. CHANGE SIZE: 3.14 X 4.85
f. MOVE FLOWERS: Refer to illustration

Step 21. **FLOWER PICTURE**

a. STYLE: Reflected Bevel, White
b. CHANGE SIZE: 3.1 X 4.17
c. MOVE: Right side of slide
d. ENTRANCE: Zoom
e. START TIMING: On Click
f. DURATION: 2:00

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ASSIGNMENT TO SUBMIT:

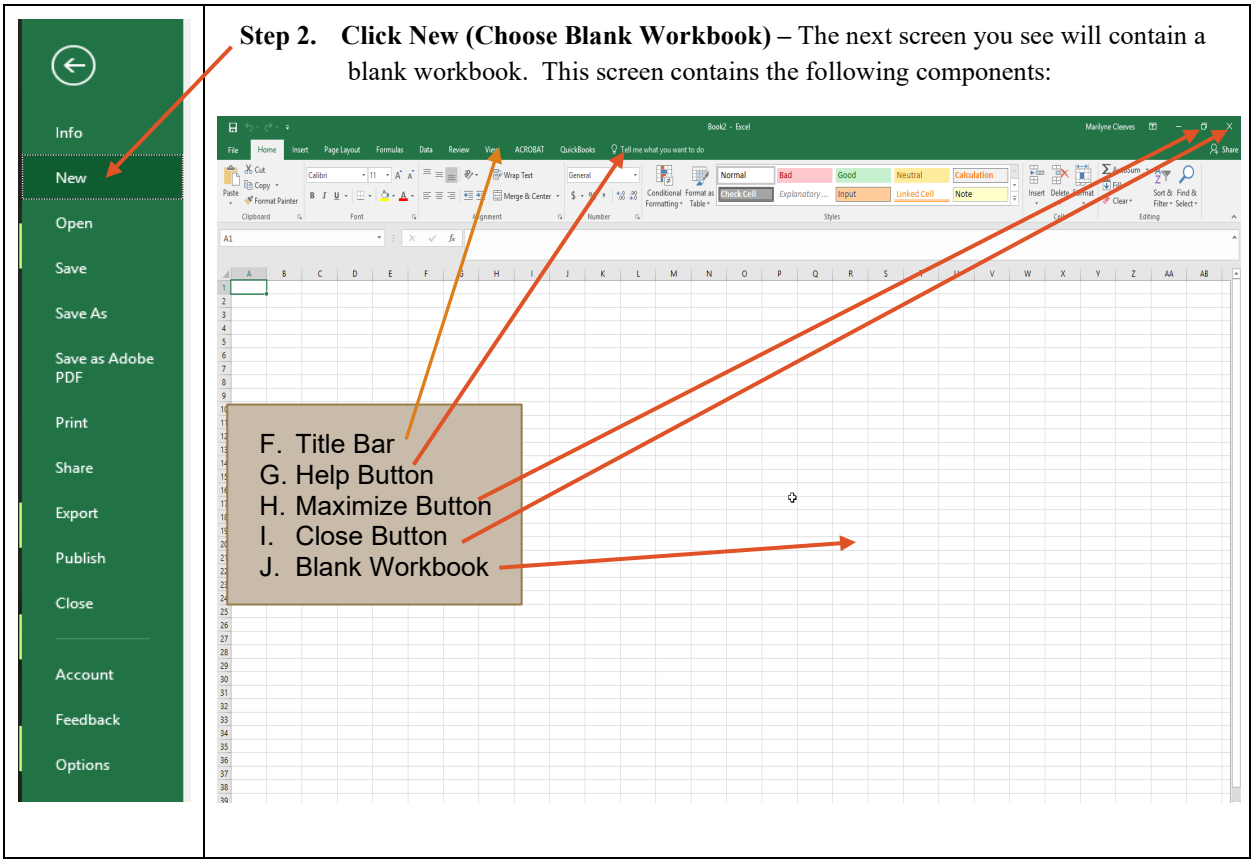
u8a2 Hummingbirds

UNIT 9 - MICROSOFT EXCEL

Excel is a powerful spreadsheet app that allows users to organize data, complete calculations, make decisions, graph data, develop professional-looking reports, publish organized data to the web, and access real-time data from websites. The four major parts of Excel are:

- **WORKBOOKS AND WORKSHEETS** – A workbook is like a notebook. Inside the workbook are sheets, each of which is called a worksheet. Thus, a workbook is a collection of worksheets. Work sheets allow users to enter, calculate, manipulate, and analyze data, such as numbers and text. The terms worksheet and spreadsheet are interchangeable.
- **CHARTS** – Excel can draw a variety of charts, such as column charts and pie charts.
- **TABLES**– Tables organize and store data within worksheets. For example, once a user enters data into a worksheet, an Excel table can sort the data, search for specific data and select data that satisfies defined criteria.
- **WEB SUPPORT**— Web support allows users to save Excel worksheets or parts of a worksheet in a format that a user can view in a browser, so that a user can view and manipulate the worksheet using a browser. Excel web support also provides access to real-time data, such as stock quotes, using web queries.

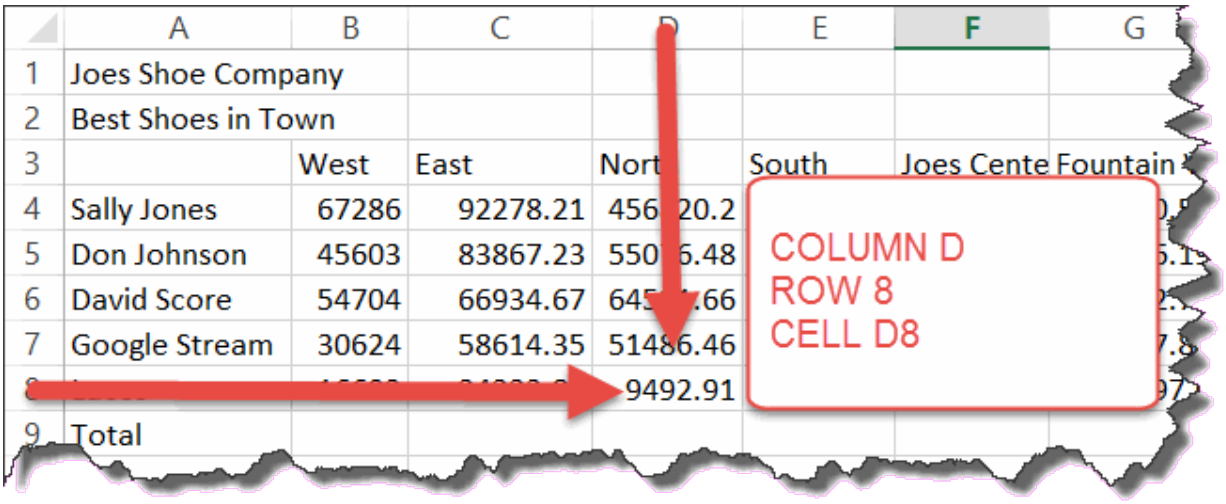
Microsoft Office Applications are set with similar features. The following is a view of the Excel features. If you have used any of the office applications, you may note the similarities:



Step 2. Click New (Choose Blank Workbook) – The next screen you see will contain a blank workbook. This screen contains the following components:

COLUMNS, ROWS AND CELLS

Every calculation created in Excel references a cell within a worksheet. The Cell is a reference point of the spot where the column and row meet.



OPEN THE EXCEL LESSON FILE

Your **UNIT 09 Student Lesson files** contain a startup workbook. Follow these instructions to access the correct file:

Step 1. ***OPEN*** a blank ***EXCEL WORKBOOK*** on your computer**.**

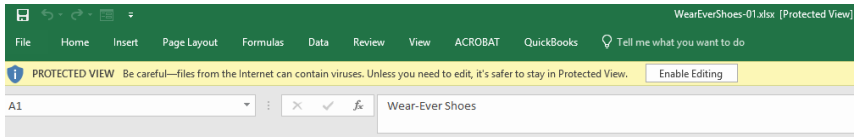
Step 2. ***CLICK FILE*** then choose ***OPEN***

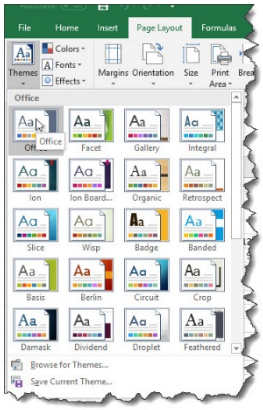
Step 3. ***BROWSE*** to the ***UNIT 09 Student Lesson Files*** on the your computer. Click on the filename (in this case, **Lesson 1a-Excel.xlsx)**

Step 4. ***CLICK OPEN***

Step 5. If the workbook has opened in Protected view, ***CLICK*** on the ***ENABLE EDITING*** option.

Step 6. ***CLICK*** the ***PAGE LAYOUT*** tab to view the Page Layout ribbon





Step 7. ***CLICK*** the ***THEMES***
MORE options ***ARROW***

Step 8. ***CLICK*** the ***OFFICE*** theme to select it for this document.

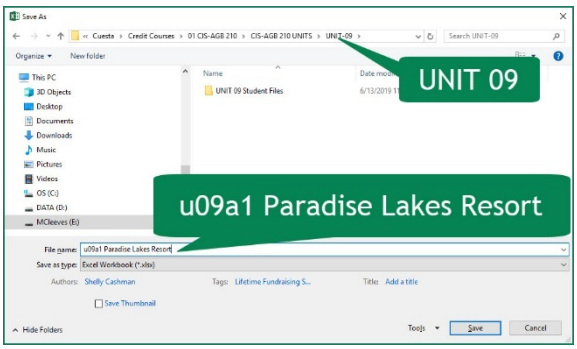
SAVE THE WORKBOOK WITH A DIFFERENT NAME

Step 9. ***Tap*** the ***F12*** key on your keyboard to open the Save as dialog box

Step 10. Select the ***UNIT-09*** folder on your computer

Step 11. Change the file name to ***u09a1 Paradise Lakes Resort*** in the File name area

Step 12. Click **Save** to save the file and close the Save As dialog box



ENTER DATA

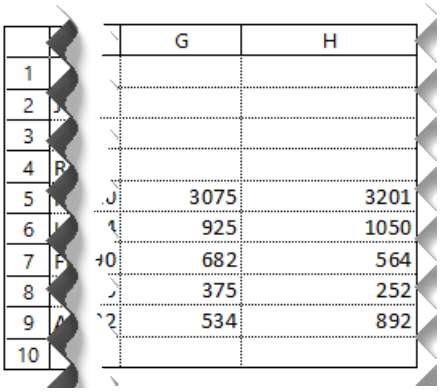
Step 1. ***CLICK*** cell ***A1*** and type ***Paradise Lakes Resort***

Step 2. ***HIT*** the ***ENTER*** key on your keyboard

Step 3. ***CLICK*** cell ***A10***, type ***Total***, and

Step 4. ***HIT*** the ***ENTER*** key on your keyboard

Step 5. Type the values shown to the right in cells **G5:H9.** Pay close attention to the column and row numbers where you are entering the data



	G	H
1		
2		
3		
4		
5	3075	3201
6	925	1050
7	682	564
8	375	252
9	534	892
10		

USE THE FILL HANDLE TO COMPLETE A SERIES

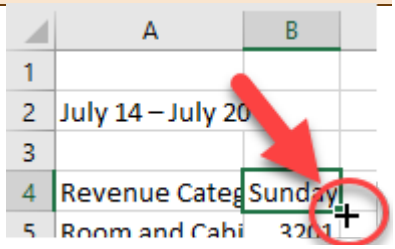


Figure 2: Fill Handle

Step 6. ***CLICK*** cell ***B4***

Step 7. ***POINT*** to the ***FILL HANDLE*** (small, black square in the lower right corner) until the *Fill* pointer (***thin, black plus sign***) appears

Step 8. ***CLICK*** and ***DRAG*** the ***POINTER*** to reach cell ***H4***

Step 9. ***RELEASE*** the ***POINTER*** button. You should see the names of the week fill in automatically. This is one of the many auto-fill options available in Excel. You will be using this feature later in the assignments. To learn more regarding these features, you may be interested in some of the online resources and demonstrations available for Excel.

EDIT WORSHEET DATA

Step 10. ***DOUBLE-CLICK*** cell ***A4*** to start edit mode

Step 11. Click to position the insertion point and ***DELETE*** the ***"i"*** in ***"Categories"***(You are creating a deliberate spelling error).

Step 12. ***TAP ENTER*** to accept the edit

Step 13. ***CLICK A9*** and type ***Aparel*** with the error (You will correct this later).

Step 14. ***PRESS ENTER*** to replace the entry.

INDENT AND ALIGN TEXT

Step 15. ***SELECT*** cells ***A5:A9*** this can be done by with a click and a drag of your mouse. Another method would be to click on cell A5; hold down your shift key; and hit the right arrow on your keyboard until you reach cell A9.

Step 16. ***CLICK*** the ***INCREASE INDENT*** button twice (Home tab, Alignment group)

Step 17. ***SELECT*** cells ***B4:H4*** using the keystroke method or the mouse method.

Step 18. ***CLICK*** the ***CENTER*** button (Home tab, Alignment group)

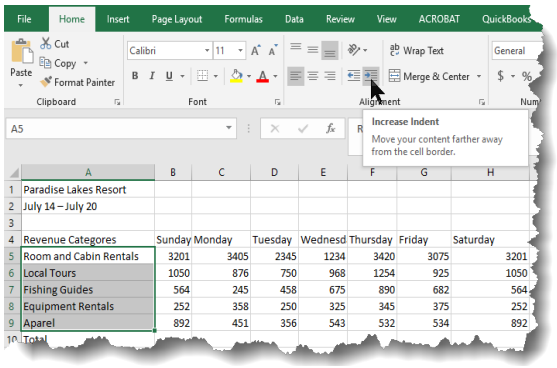


Figure 3: Increase Indent Button

SAVE YOUR UPDATES

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CUT AND PASTE DATA

Step 1. ***SELECT*** cells ***B4:H4***

Step 2. ***CLICK*** the **CUT** button (Home tab, Clipboard group)

Step 3. ***CLICK I4*** (Column I row 4)

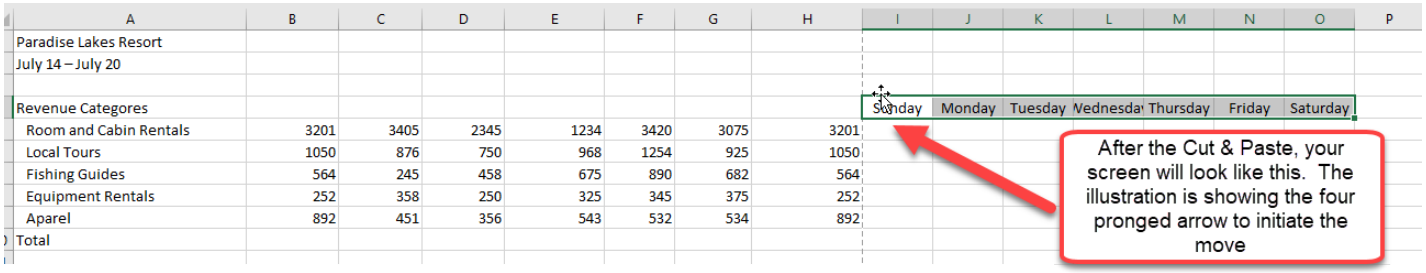
Step 4. Click the **Paste** button (Home tab, Clipboard group)

Step 5. Select cells **I4:O4**

Step 6. Point to any boarder of the selected range to display a four-pointed arrow with a white arrow

Step 7. Drag the range to start in cell **B4** and release the pointer button

Step 8. Click cell **A1**



SAVE YOUR UPDATES

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CHANGE THE WIDTH OF COLUMNS B THROUGH I

Step 1. ***POINT*** to the ***COLUMN B*** heading to display a down-pointing arrow

Step 2. ***CLICK*** and ***DRAG*** to reach ***COLUMN I.***

Step 3. ***CLICK*** the ***FORMAT*** button (Home tab, Cells group).

Step 4. ***SELECT COLUMN WIDTH*** from the menu

Step 5. ***ENTER 14*** in the Column Width dialog box.

Step 6. ***CLICK OK*** to set the row height for both rows.

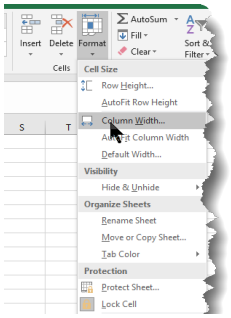

Figure 4: Column Width Option (Home Tab,

CHANGE THE ROW HEIGHT (ROWS 4 AND 10):

Step 7. ***RIGHT-CLICK*** the ***ROW 4 HEADING***

Step 8. Press ***CTRL*** and click the ***ROW 10 HEADING***. Two rows are selected

Step 9. ***RIGHT-CLICK*** the ***ROW 4*** heading

Step 10. Choose **ROW HEIGHT** from the menu.

Step 11. ***ENTER 24*** as the new height.

Step 12. ***CLICK OK*** to set the row height for both rows.

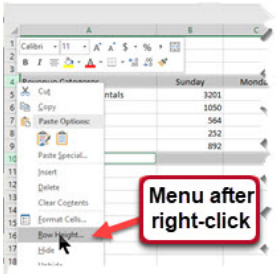

Figure 5: Changing Row Height (select rows first)

CENTER TITLES ACROSS A SELECTION

Step 13. ***SELECT*** cells ***A1:I2***

Step 14. ***CLICK*** the ***ALIGNMENT*** launcher (Home tab, Alignment group)

Step 15. ***CLICK*** the ***HORIZONTAL*** drop-down arrow and choose ***Center Across Selection***.

Step 16. ***CLICK OK***.

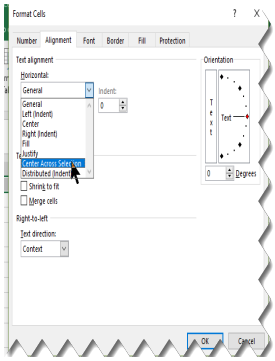

Figure 6: Center Across a Selection

SAVE YOUR UPDATES

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TOTAL USING AUTOSUM:

If you need to sum a column or row of number, let Excel do the math for you. AutoSum is a powerful feature that can save you time if you need to add up cells or columns of data quickly. It is often faster than creating a formula by hand, especially when you have a large amount of data to add up.

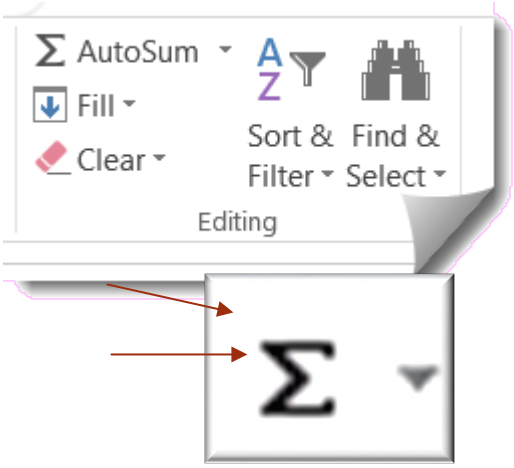
When you click AutoSum, Excel automatically enters a formula (that users the SUM function) to sum the numbers.

Step 1. ***CLICK*** the ***HOME*** tab to open the home ribbon

Step 2. ***CLICK*** Cell ***B10*** (we will be inserting the formula into this cell).

Step 3. In the Editing group, ***CLICK*** the **AutoSum** Button (Home Tab, Editing Group)

Step 4. ***HIT ENTER***



AutoSum Button (Home Tab, Editing Group)

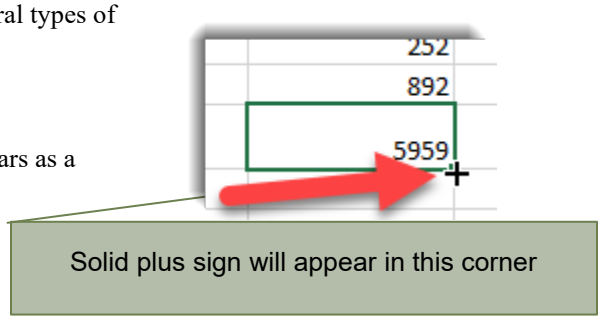
COPY USING THE FILL HANDLE

Instead of entering data manually on a worksheet, you can use the Auto Fill feature to fill cells with data that follows a pattern or that is based on data in other cells. To quickly fill in several types of data series, you can select cells and drag the fill handle

Step 5. ***CLICK*** cell ***B10***

Step 6. ***POINT*** to the ***FILL HANDLE***. The fill handle appears as a solid square on the bottom right corner of the cell. When you hover your mouse of the handle, your mouse turns into a solid plus. This signifies that you have selected the option to fill the current cell across a column or row of cells.

Step 7. ***CLICK*** and ***DRAG*** the fill pointer to ***H10***



Fill Handle to Copy Formula

Step 8. ***RELEASE*** your ***MOUSE*** and you will see how the formula or text has been filled using the fill handle.

CALCULATE SALES CATEGORY TOTALS

Step 9. **CLICK cell I4**

Step 10. Type the word ***Total*** in the cell

Step 11. **CLICK ENTER**

Step 12. This should put you in cell I5. If you have navigated away from the cell, ***CLICK*** cell ***I5***

Step 13. ***DOUBLE-CLICK*** the ***AutoSum*** button (Home tab, Editing Group to accept and complete the formula)

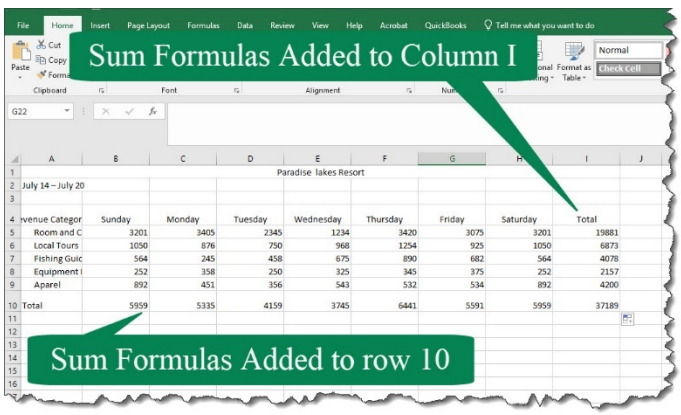
COPY A FUNCTION USING THE FILL HANDLE

Step 14. ***CLICK*** Cell ***I5***

Step 15. ***POINT*** to the ***FILL HANDLE***.

Step 16. ***CLICK*** and ***DRAG*** the ***FILL POINTER*** to cell ***I10.***

Step 17. ***RELEASE*** your ***MOUSE*** and you will see how the formula or text has been filled using the fill handle.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

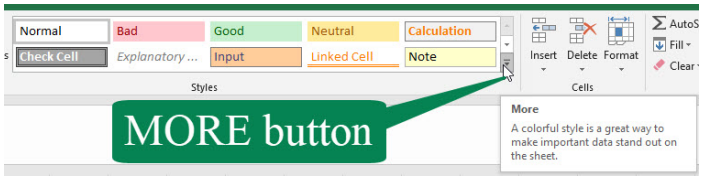
APPLY CELL STYLES

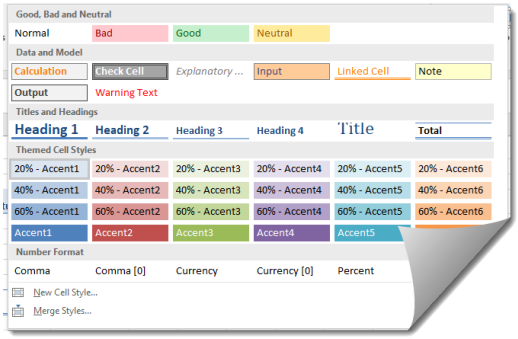
To apply several formats in one step, and to make sure that cells have consistent formatting, you can use a cell style. A cell style is a defined set of formatting characteristics, such as fonts and font sizes, number formats, cell borders, and cell shading. To prevent anyone from making changes to specific cells, you can also use a cell style that locks cells.

Step 1. ***CLICK*** cell ***A1***

Step 2. ***CLICK*** the ***HOME*** tab to display the home ribbon

Step 3. In the styles group, ***CLICK*** the ***MORE*** (bottom right corner of the group) button to open the Cell Styles gallery.





Styles Group

Step 4. ***CLICK TITLE*** in the Titles and Headings group

Step 5. ***CLICK*** cell ***A2***

Step 6. ***CLICK*** the ***CELL STYLES*** button or the ***MORE*** button

Step 7. ***SELECT*** the option for ***Heading 4*** in the Titles and headings group.

Step 8. ***SELECT A4:I4***. Sometimes selecting a range of cells is difficult for new users. If you are having difficulty try the alternate method

- **ALTERNATE METHOD**: ***CLICK A4*** hold down your ***SHIFT KEY*** and ***HIT*** the ***RIGHT ARROW*** button on your keyboard until you have selected through ***I4***

Step 9. ***CLICK*** the ***CELL STYLES*** button or the ***MORE*** button

Step 10. ***SELECT*** the option for ***Heading 3*** in the Titles and headings group

Step 11. ***SELECT*** cells ***A10:I10***

Step 12. ***CLICK*** the ***CELL STYLES*** button or the ***MORE*** button

Step 13. ***SELECT*** the ***Total*** option in the Titles and Headings group.

SELECT A SPLIT RANGE OF CELLS

Step 14. ***SELECT A4:A10***

Step 15. Press ***CTRL***

Step 16. ***SELECT*** cells ***B4:I4*** to add them to the selection

Step 17. ***CLICK*** the ***CELL STYLES*** button or the ***MORE*** button

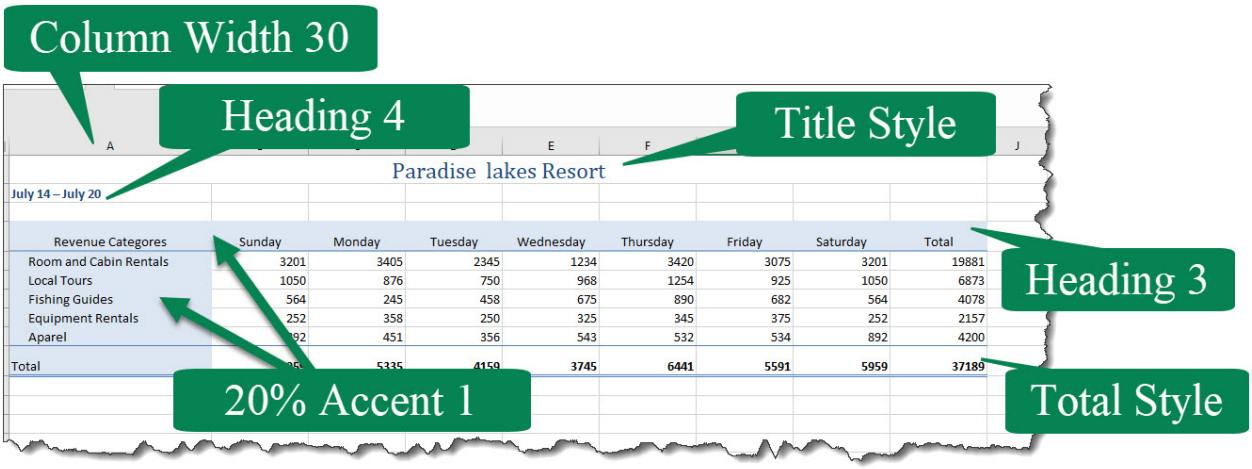
Step 18. ***SELECT 20% Accent1*** in the Themed Cells Styles category

Step 19. ***CLICK*** cell ***A1*** to deselect cells and view the styles.

SET COLUMN WIDTH

Step 20. Select Column A:

- ***CLICK*** on the column heading ***A***
- ***RIGHT-CLICK*** your mouse on the letter ***A*** to view the shortcut menu
- ***CLICK on COLUMN WIDTH***
- ***SET*** the width to ***30***
- ***CLICK OK***



Revenue Categores	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Room and Cabin Rentals	3201	3405	2345	1234	3420	3075	3201	19881
Local Tours	1050	876	750	968	1254	925	1050	6873
Fishing Guides	564	245	458	675	890	682	564	4078
Equipment Rentals	252	358	250	325	345	375	252	2157
Aparel	92	451	356	543	532	534	892	4200
Total		5335	4159	3745	6441	5591	5959	37189

SAVE YOUR UPDATES

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APPLY NUMBER FORMATS AND ALIGN THE TEXT

Step 1. ***CLICK*** the ***HOME*** tab to display the home ribbon

Step 2. ***SELECT*** cells ***B5:I9***

- In the number group, ***CLICK*** the ***Comma Style*** button and leave cells B5:I9 selected.
- In the number group, ***CLICK*** the ***Decrease Decimal*** button ***TWO TIMES*** while cells B5:I99 are selected.

Step 3. ***SELECT*** cells ***B10:I10***

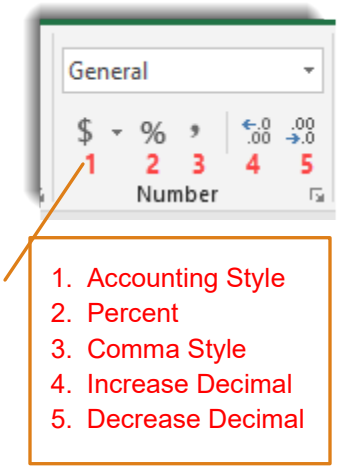
- In the number group, ***CLICK*** the ***Accounting Style*** dollar sign. You may see a series of # symbols in the cells. This means the cell is not wide enough for the numbers.
- In the number group, ***CLICK*** the ***Decrease Decimal*** button ***TWO TIMES***.

Step 4. ***SELECT*** cells ***B4:I4***

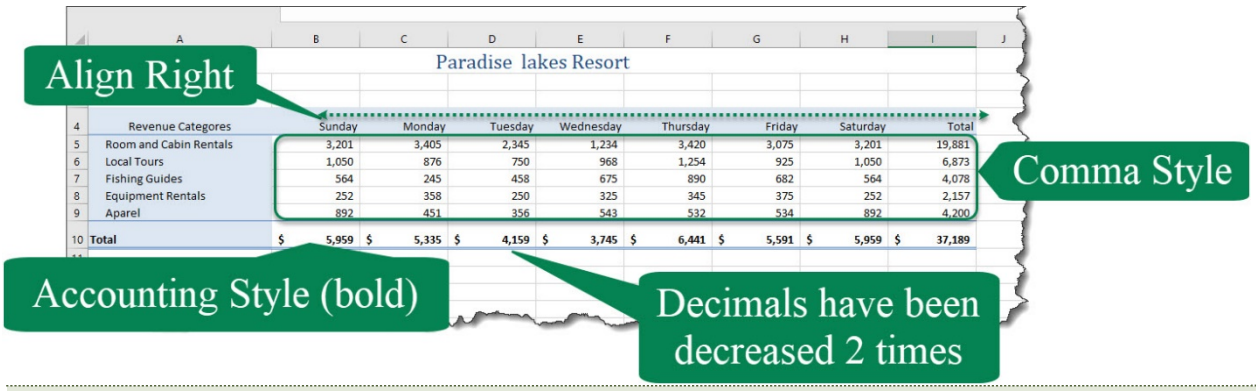
- In the align group, ***CLICK*** the ***Align Right*** button. Not all labels are visible with this alignment setting.

Step 5. ***SELECT*** cell ***A10***.

Step 6. In the font group, ***CLICK*** the ***B(BOLD)***



Number Formats



Revenue Categores	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Room and Cabin Rentals	3,201	3,405	2,345	1,234	3,420	3,075	3,201	19,881
Local Tours	1,050	876	750	968	1,254	925	1,050	6,873
Fishing Guides	564	245	458	675	890	682	564	4,078
Equipment Rentals	252	358	250	325	345	375	252	2,157
Aparel	892	451	356	543	532	534	892	4,200
Total	**$ 5,959**	**$ 5,335**	**$ 4,159**	**$ 3,745**	**$ 6,441**	**$ 5,591**	**$ 5,959**	**$ 37,189**

SAVE YOUR UPDATES

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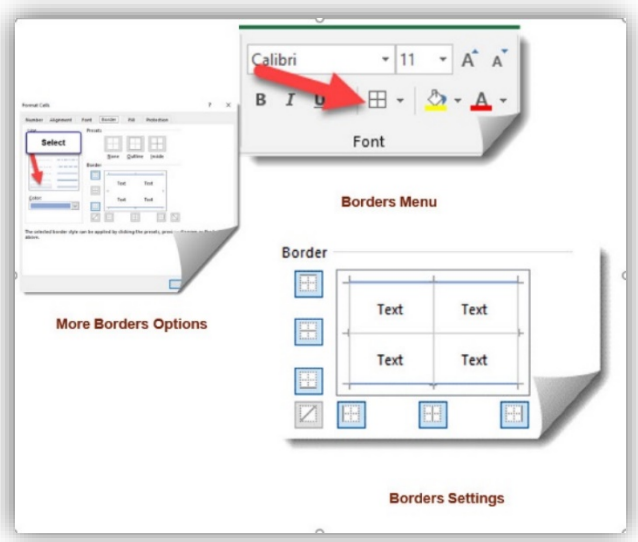
ADD BORDERS



Step 1. ***CLICK*** the ***HOME*** tab to display the home ribbon

Step 2. ***SELECT A5:I9***

Step 3. In the font group, ***CLICK*** the ***BORDER*** button arrow

Step 4. ***SELECT*** the ***MORE BORDERS*** option (bottom item on the list).

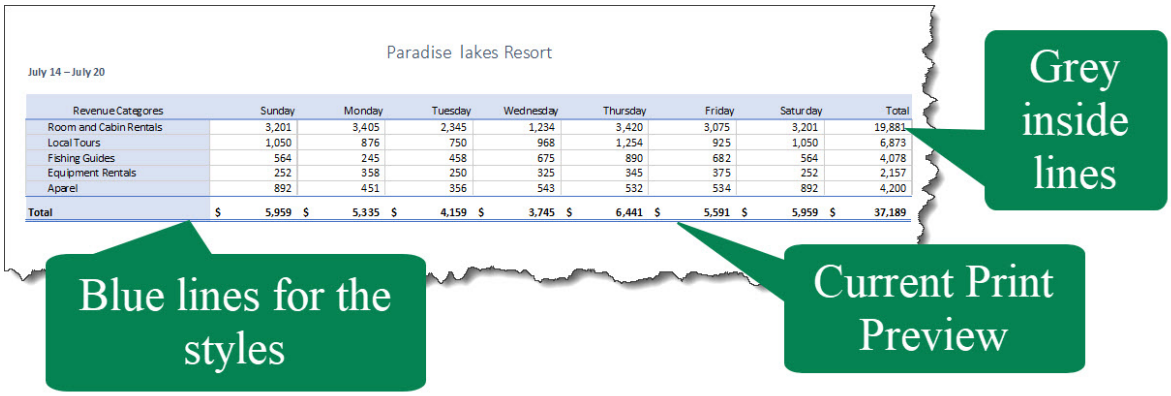
Step 5. In the ***LINE STYLE*** section

- ***CLICK*** the **6th line in the left column**.
- ***CLICK*** the ***DOWN ARROW*** for the ***COLOR*** selection.
- ***CLICK Light Grey, Background 2, darker 10%***

Step 6. ***CLICK inside the Border box*** to create light grey lines in the areas that don't already have them. ***KEEP THE EXISTING TOP AND BOTTOM LINES.***

Step 7. ***CLICK OK***

Step 8. ***CLICK*** your ***HOME*** key on your keyboard. Notice the worksheet now has grey interior lines.



Revenue Categores	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Room and Cabin Rentals	3,201	3,405	2,345	1,234	3,420	3,075	3,201	19,881
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Fishing Guides	564	245	458	675	890	682	564	4,078
Equipment Rentals	252	358	250	325	345	375	252	2,157
Aparel	892	451	356	543	532	534	892	4,200
Total	**$ 5,959**	**$ 5,335**	**$ 4,159**	**$ 3,745**	**$ 6,441**	**$ 5,591**	**$ 5,959**	**$ 37,189**

SAVE YOUR UPDATES

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CHANGE THE THEME AND APPLY FONT ATTRIBUTES

Step 1. ***CLICK*** on the ***PAGE LAYOUT*** tab to display the page layout ribbon

Step 2. ***CLICK*** the ***THEMES*** button

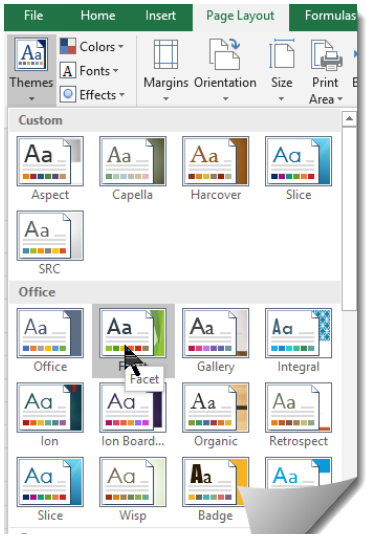
Step 3. ***CLICK*** on ***Facet*** from the theme gallery

Step 4. ***SELECT*** cell ***A4***

- ***CLICK*** the ***HOME*** tab to display the home ribbon
- ***CLICK*** the ***FONT*** drop-down list
- ***CLICK*** ***Candra*** in the Fonts section
- ***CLICK*** the ***Font Size*** drop-down list select ***16 pt.***
- ***CLICK*** the ***Bold*** button from the font group

Step 5. ***SELECT*** cells ***A5:I10***

- Click the ***Font Size*** drop-down list and choose ***12 pt.***



Apply Theme
(Page Layout tab, Theme Group)

	A	B	C	D	E	F	G	H	I
1	Paradise Lakes Resort								
2	July 14 - July 20								
3									
4	**Revenue Categores**	**Sunday**	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Total**
5	Room and Cabin Rentals	3201	3405	2345	1234	3420	3075	3201	1988
6	Local Tours	1050	876	750	968	1254	925	1050	687
7	Fishing Guides	564	245	458	675	890	682	564	407
8	Equipment Rentals	252	358	250	325	345	375	252	215
9	Aparel	892	451	356	543	532	534	892	4200
10	Total	5959	5335	4159	3745	6441	5591	5959	3718

Work Sheet After Theme & Font Changes

SAVE YOUR UPDATES

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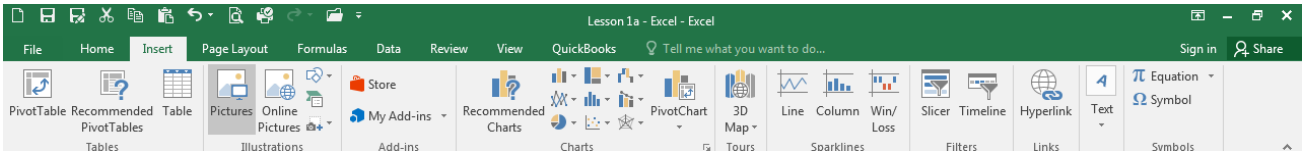
ADDING A CLUSTERED CYLINDER CHART TO THE WORKSHEET

Excel spreadsheets are all about numbers. But tons of numbers are often not the most effective way to communicate. That's where charts come in handy. Charts can display numeric data in a graphical format, making it easy to understand large quantities of data and the relationships among data.

Step 1. ***CLICK*** on the ***INSERT*** tab to display the insert ribbon



Step 2. ***SELECT*** Range to be charted – ***A4:H9***

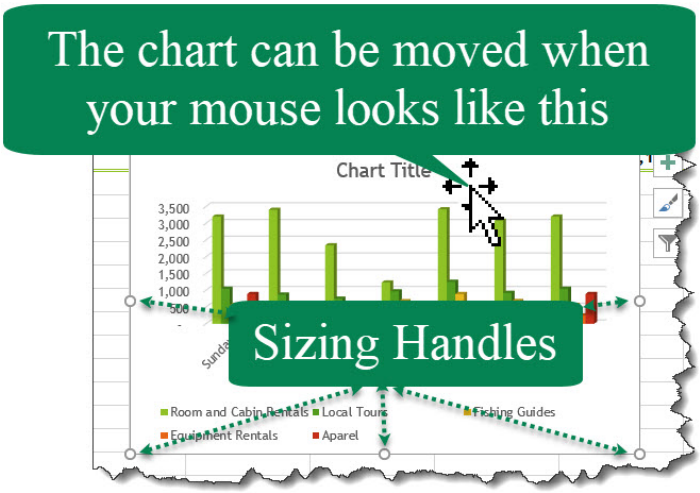
Step 3. In the charts group, ***CLICK*** the ***Recommended Charts***

Step 4. ***CLICK*** on the ***All Charts tab*** to display the Column gallery

Step 5. ***CLICK*** the ***3-D Clustered Column*** chart type (third option) of the column group

Step 6. ***CLICK OK***

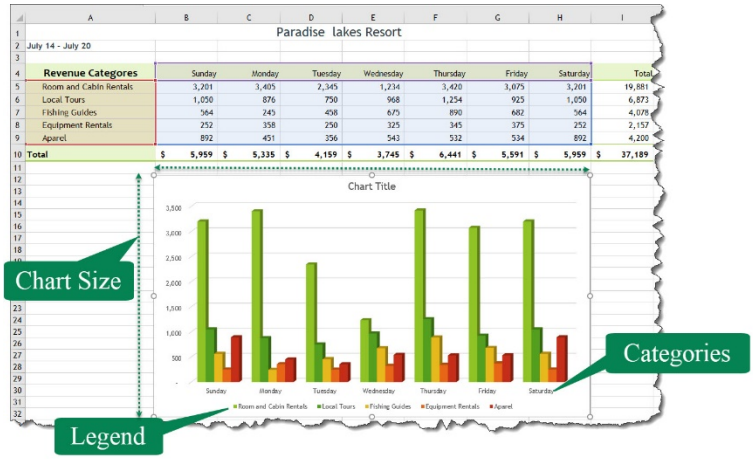
Step 7. When you click over the chart with your mouse, it will look like a four-pronged arrow. ***CLICK*** and ***DRAG*** the ***CHART*** to the desired location on the worksheet.



Step 8. ***CLICK*** and ***DRAG*** the ***SIZING HANDLES*** to resize the chart.

Step 9. The ***CHART SIZE*** should cover cells ***B12:H32***

Notice that because we selected the days of the week and the revenue categories, the labels appear in the chart legend.



SAVE YOUR UPDATES

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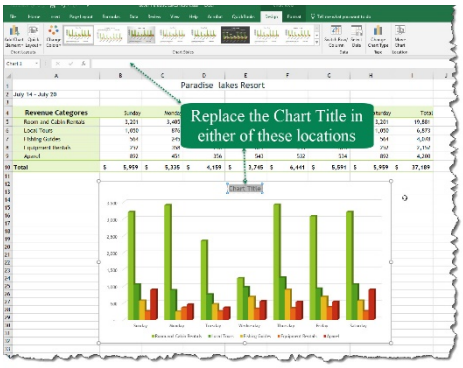
FORMAT THE CHART TITLE AND LEGEND

To format the chart, it needs to be selected. In your worksheet, make sure you have the chart selected by clicking on it. You will see handles like the image handles you saw in MS Word. We are going to change the chart title.



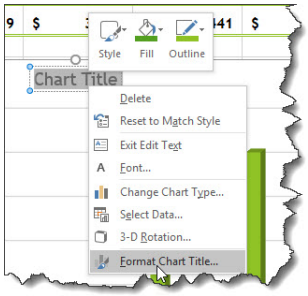
Step 1. ***CLICK*** on the ***CHART TITLE*** and type ***Paradise Lake Resort***. You can type this directly into the box to replace the words *Chart Title* or type in the formula bar and hit enter.

Step 2. ***RIGHT-CLICK*** the ***TITLE***

Step 3. ***CLICK*** on the ***Format Chart Title*** option at the bottom of the short-cut menu that appears**.** You should see a menu appear to the side of your excel sheet. This menu contains additional information to format various elements of the chart.

Step 4. ***CLICK Text Options***

Step 5. ***CLICK Text Effects***



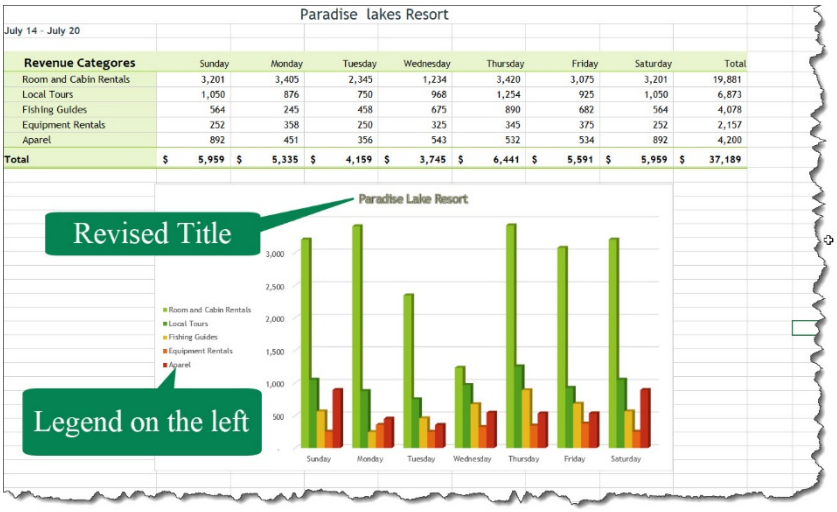
- TEXT FILL: ***Solid Fill***
  - COLOR: ***Dark Green, Accent 2, Lighter 80%***
- TEXT OUTLINE: ***Solid Line***
  - COLOR: ***Brown, Accent 6, Darker 50%***
  - WIDTH: ***1.25 pt***
  - COMPOUND TYPE: ***Double***
  - DASH TYPE: ***Solid***
  - CAP TYPE: ***Round***
  - JOIN TYPE: ***Round***

Step 6. ***CLICK*** on the ***LEGEND***. Notice that the menu to the right changes to the say "Format Legend"

Step 7. ***CLICK*** on the ***Legend Options***

- POSITION: ***Left***
- Show the legend without overlapping the chart: ***Checked***

Experiment – use the menus to explore the different options available for creating the chart. Each area has unique components that can be used for various chart styles depending on the desired results.



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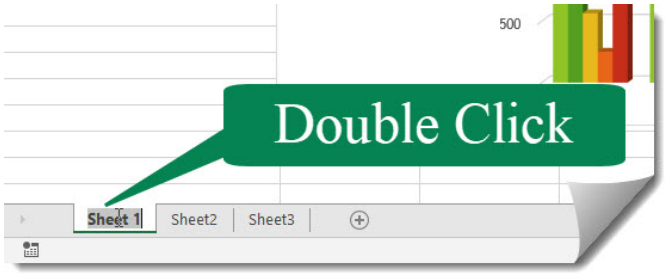
CHANGING THE WORKSHEET NAME

Naming sheets can be a very useful tool to identify the contents of the sheet in the workbook. The sheet tabs can also be colored to help identify easily when multiple sheets are used. Note: when you are changing the color of a sheet tab, the new color appears to be white until you select a different sheet in the workbook.

Step 1. ***DOUBLE-CLICK*** the ***SHEET TAB*** you wish to change (**Sheet 1**) in the lower-left corner of the window



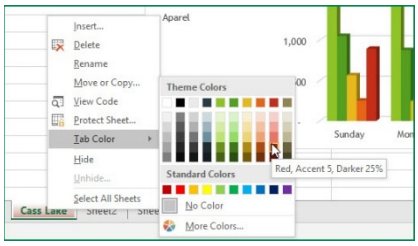
Step 2. Type the new worksheet name ***Cass Lake***

Step 3. ***HIT*** the ***ENTER*** key

Step 4. ***RIGHT-CLICK*** the ***SHEET TAB*** you just renamed to display a shortcut menu

Step 5. ***SELECT*** the ***TAB COLOR*** option on the shortcut menu to display the color gallery.

- COLOR: ***Red, Accent 5, Darker 25%***



Step 6. ***CLICK*** on ***A DIFFERENT SHEET*** tab in the workbook in order to view the new color tab you have just created.

ADD FOOTER INFORMATION

Excel 2019 lets you create customer headers and footers. Most of the time, the stock headers and footers available on Excel's Header button's and Footer button's drop-down menus are sufficient for your report-printing needs. Occasionally, however, you may want to insert information not available in these list boxes or in an arrangement that Excel doesn't offer in the ready-made headers and footers.

For those times, you need to use the command buttons that appear in the Header & Footer Elements group of the Design tab on the Header & Footer Tools contextual tab in Excel 2019. These command buttons enable you to blend your own information with that generated by Excel into different sections of the custom header or footer you're creating.

In Excel 2019, the command buttons in the Header & Footer Elements group include

- **Page Number:** Click this button to insert the &[Page] code that puts in the current page number.
- **Number of Pages:** Click this button to insert the &[Pages] code that puts in the total number of pages.
- **Current Date:** Click this button to insert the &[Date] code that puts in the current date.
- **Current Time:** Click this button to insert the &[Time] code that puts in the current time.
- **File Path:** Click this button to insert the &[Path]&[File] codes that put in the directory path along with the name of the workbook file.
- **File Name:** Click this button to insert the &[File] code that puts in the name of the workbook file.
- **Sheet Name:** Click this button to insert the &[Tab] code that puts in the name of the worksheet as shown on the sheet tab.
- **Picture:** Click this button to insert the &[Picture] code that inserts the image that you select from the Insert Picture dialog box that enables you to select a local image (using the From File option) or download one from an online source (using the Bing Image Search, OneDrive, or Facebook and Flickr options).
- **Format Picture:** Click this button to apply the formatting that you choose from the Format Picture dialog box to the &[Picture] code that you enter with the Insert Picture button without adding any code of its own.

To use these command buttons in the Header & Footer Elements group to create a custom header or footer, follow these steps:

Step 1. Put your worksheet into Page Layout view using one of the following methods:

- STATUS BAR METHOD: ***CLICK*** the ***PAGE LAYOUT VIEW*** button on the Status bar
- RIBBON TAB METHOD: ***CLICK*** on the ***VIEW*** tab to display the view ribbon
  - In the Workbooks Views Group, ***CLICK*** on the ***PAGE LAYOUT*** View
- KEYSTROKE METHOD: ***ALT+WP.***

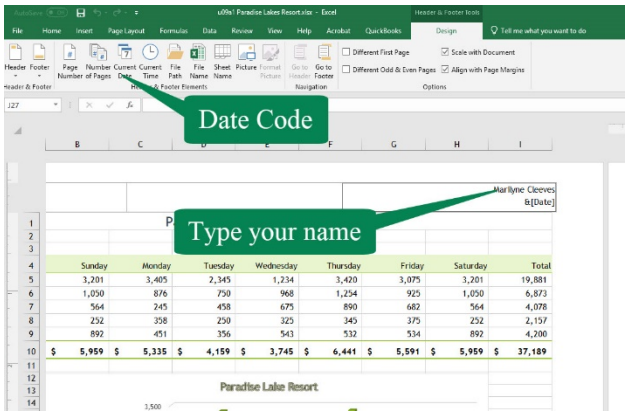
Step 2. In Page Layout view, the text ***CLICK*** to ***Add Header*** appears centered in the top margin.

Step 3. ***CLICK*** inside the ***RIGHT SECTION*** of the ***HEADER***. The Header & Footer Tools will appear in the ribbon.

Step 4. Type ***Your Name***

Step 5. ***HIT ENTER*** to move your cursor below your name

Step 6. ***CLICK*** on the ***CURRENT DATE*** option in the headers and footers elements group.



SAVE YOUR UPDATES

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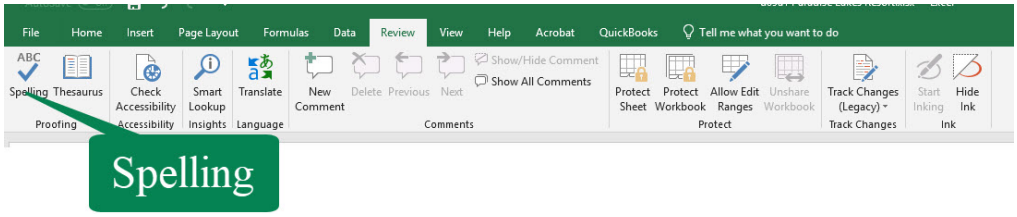
SPELL CHECK YOUR DOCUMENT

Step 1. Hold down your ***CTRL*** key and ***TAP*** the ***HOME*** button on your keyboard. This will automatically take you to cell A1 of the document.

Step 2. ***CLICK*** the ***REVIEW*** tab to display the review ribbon



Step 3. In the proofing group, ***CLICK*** the ***SPELLING*** option

Step 4. ***Choose the appropriate spelling*** for the misspelled words in the work sheet.

Step 5. Click ***Change*** Repeat until you have finished with the worksheet and Spell check is complete

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ASSIGNMENT TO SUBMIT:

u09a1 Paradise Lakes Resort

ON YOUR OWN ACTIVITY

Your **UNIT 09 Student Lesson files** contain a startup workbook. Follow these instructions to access the correct file:

OPEN THE EXCEL LESSON FILE

Step 1. Run Excel ***CLICK*** the FILE tab

Step 2. ***CLICK OPEN***

Step 3. ***BROWSE*** to the UNIT-09 folder ***OPEN*** the ***UNIT 09 Student Files***

Step 4. ***CLICK*** on ***Lesson 1b-Excel***

Step 5. ***CLICK OPEN***

Step 6. ***CLICK F12***

Step 7. ***SAVE*** the file ***AS u09a2 Sable River Foundation***

COLUMN WIDTHS AND ROW HEIGHTS

Step 8. COLUMNS ***A, B, C, D, E, F, G, H width: 15***

Step 9. ROWS ***3*** and ***9 height: 30***

CELL STYLES AND THEME

Step 10. **Cells A1:H1**

- HORIZONTAL ALIGNMENT: ***CENTER ACROSS SELECTION***
- CELL STYLE: ***TITLE***

Step 11. **Cells A2:H2**

- HORIZONTAL ALIGNMENT: ***CENTER ACROSS SELECTION***
- CELL STYLE: ***HEADING 1***

Step 12. **Cells A3:H3**

- CELL STYLE: ***HEADING 2***

Step 13. **Cells A9:H9**

- CELL STYLE: ***TOTAL***

Step 14. **Cells A4:A8 and A3:H3**

- CELL STYLE: ***20%-Accent 1***

Step 15. Change the ***Theme*** to ***ION***

Step 16. **ROW 3**

- FONT: ***BOLD***
- ALIGNMENT**:** ***RIGHT***

Step 17. **CELLS H4:H8**

- FONT**:** ***BOLD***

NUMBER FORMATS

Step 18. **HIGHLIGHT Cells B4:G8 >** Home Ribbon Band >Number >***Comma Style***

Step 19. **HIGHLIGHT Cells B9:H9 >** Home Ribbon Band >Number >***Accounting***

Step 20. **HIGHLIGHT Cells H4:H8 >** Home Ribbon Band >Number >***Accounting***

TOTAL USING AUTOSUM:

Step 21. Place your cursor in ***CELL H4***
Step 22. ***HIT*** the ***AutoSum*** button
Step 23. ***HIT ENTER***
Step 24. Place your cursor in ***CELL B9***
Step 25. ***HIT*** the ***AutoSum*** button
Step 26. ***HIT ENTER***

COPY USING THE FILL HANDLE

Step 27. Place your curser in ***CELL H4***
Step 28. Hover over the bottom right corner of the cell with your mouse until the mouse pointer turns to a solid plus sign. Then ***CLICK*** and ***DRAG*** your mouse ***DOWN TO CELL H8.*** This will initiate the auto fill option.
Step 29. Place your curser in ***CELL B9***
Step 30. Use the ***AutoFill*** to ***H9.*** This will fill the formulas for the totals across the bottom of the page.

ADD A 3-D CLUSTERED COLUMN CHART TO THE WORKSHEET

Step 31. ***SELECT RANGE*** to be charted – ***A3:G8***
Step 32. ***CLICK*** the ***Recommended Charts***> All Charts to display the Column gallery
Step 33. ***CLICK*** the ***3-D Clustered Column*** chart type (third option) of the column group to add the selected chart to the middle of the worksheet in a rectangle.
Step 34. ***DRAG*** the ***CHART BORDER*** to ***CELL B11***
Step 35. ***DRAG*** the ***SIZING HANDLES*** to resize the chart into ***B11:H31***
Step 36. Type ***Sable River Foundation*** as the chart title
Step 37. ***MOVE*** the ***LEGEND*** to the ***RIGHT*** of the chart

CHANGE THE WORKSHEET NAME

Step 38. ***DOUBLE-CLICK*** the ***sheet tab*** you wish to change (Sheet 1) in the lower-left corner of the window
Step 39. Type the new worksheet name, ***Lifetime Fundraising Company.***
Step 40. **HIT** the **ENTER** key
Step 41. Change the sheet tab color to ***Purple Accent 6, Darker 25%***

HEADER AND FOOTER

Step 42. Add ***YOUR NAME*** to the ***RIGHT PANEL*** of the header
Step 43. ***INSERT*** the ***DATE*** code below your name

PAGE LAYOUT

Step 44. ***CLICK*** the ***PAGE LAYOUT*** option.

Step 45. Set the ***PAGE SETUP*** to print ***Landscape***

Step 46. ***OPEN*** the ***Page Setup*** dialog box

Step 47. ***CLICK*** the ***FIT TO: 1*** option

Step 48. ***Check your spelling and fix any errors***

Marilyne Cleeves
6/15/2019

Save Sable River Foundation
Lifetime Fundraising Summary

	Allentown	Chamber City	Pattonsville	Sable Village	Strongville	Town of Cary	Total
Corporate	74,029.35	92,278.21	63,081.74	84,210.02	61,644.26	89,820.51	$ 465,064.09
Direct Mail	67,286.06	83,867.23	55,076.48	55,547.28	79,779.02	84,366.19	$ 425,922.26
Fun Runs	54,704.39	66,934.67	64,581.66	28,895.86	32,690.37	64,242.72	$ 312,049.67
Government	30,623.99	58,614.35	51,486.46	36,387.09	51,642.55	40,177.87	$ 268,932.31
Phone-a-thon	16,692.14	24,223.81	9,492.91	17,328.74	12,305.85	21,097.60	$ 101,141.05
Total	**$ 243,335.93**	**$ 325,918.27**	**$ 243,719.25**	**$ 222,368.99**	**$ 238,062.05**	**$ 299,704.89**	**$ 1,573,109.38**

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ASSIGNMENT TO SUBMIT:

u09a2 Sable River Foundation

UNIT 10 - RELATIVE, ABSOLUTE, AND MIXED CELL REFERENCES

Spreadsheets provide important tools to business managers and owners. They can be used for inventory purposes or for calculating prices and other types of record-keeping. Spreadsheets have several built-in tools that can be used for various types of calculations. One of these tools is the absolute formula or absolute reference formula.

There are three types of references that can be used in Excel and Google spreadsheets. They are easily identified by the presence or absence of dollar signs ($) within the cell reference:

	A	B	C
1	Data	Result	Formula
2	14	71	=A2+A4
3	7	78	=SUM(A2:A4)
4	57	71	=$A$2+$A$4
5		71	=$A2+A$4
6		12	=A3 +Sheet2!A2

Relative Cell Reference

Absolute Cell Reference

Mixed Cell Reference

- **RELATIVE CELL REFERENCES** contain no dollar signs - as shown in the formula in row 2: = A2 + A4;
- **ABSOLUTE CELL REFERENCES** have dollar signs attached to each letter or number in a reference - as shown in the formula in row 4: =$A$2+$A$4;
- **MIXED CELL REFERENCES** have dollar signs attached to either the letter or the number in a reference but not both - as shown in the formula in row 5: =$A2+A$4.

The general purpose of an absolute formula in Microsoft Excel or most other common spreadsheet programs is to provide a fixed reference point by which various calculations can be performed. This is done by simply putting a "$" in front of the cell value you want to use as the fixed reference point. For instance, a formula containing the cell reference

"$A$5" differs from one that reads "A5." The "$" designation indicates that any other formulas containing that reference point back to that specific cell and its value, when you copy the cell. If the reference is "A5," it is a relative formula, and the spreadsheet will automatically adjust the formula using its default programming.

OPEN AND SAVE THE LESSON FILE

Your **UNIT 10 Student Lesson files** contain a startup workbook. Follow these instructions to access the correct file:

Step 1. ***OPEN*** a blank ***EXCEL WORKBOOK*** on your computer**.**

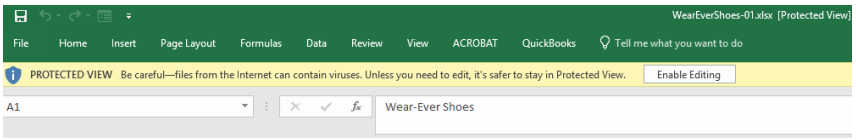
Step 2. ***CLICK FILE*** then choose ***OPEN***

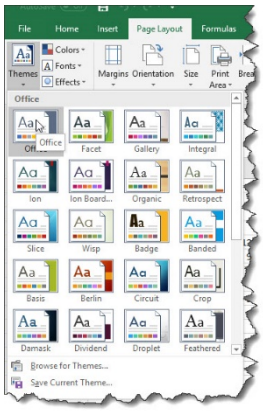
Step 3. ***BROWSE*** to the ***UNIT 10 Student Lesson Files*** on your computer. Click on the filename (in this case, **Lesson 2-Excel.xlsx)**

Step 4. ***CLICK OPEN***

Step 5. If the workbook has opened in Protected view, ***CLICK*** on the ***ENABLE EDITING*** option.

Step 6. ***CLICK*** the ***PAGE LAYOUT*** tab to view the Page Layout ribbon





Step 7. ***CLICK*** the ***THEMES***
MORE options ***ARROW***

Step 8. ***CLICK*** the ***OFFICE*** theme to select it for this document.

SAVE THE WORKBOOK WITH A DIFFERENT NAME

Step 9. ***Tap*** the ***F12*** key on your keyboard to open the Save as dialog box

Step 10. Select the ***UNIT-10*** folder on your computer

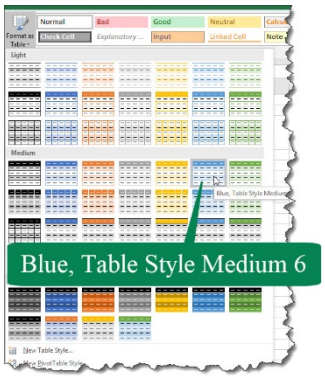
Step 11. Change the file name to ***u10a1 Mobile Masses*** in the File name area

Step 12. ***CLICK SAVE*** to save the file and close the Save As dialog box

FORMAT AS TABLE

Clicking the Format as Table command button opens its rather extensive Table Styles gallery with the formatting thumbnails divided into three sections — Light, Medium, and Dark — each of which describes the intensity of the colors used by its various formats.

As soon as you click one of the table formatting thumbnails in this Table Styles gallery, Excel makes its best guess as to the cell range of the data table to apply it to (indicated by the marquee around its perimeter).



Step 1. ***CLICK*** the ***HOME*** tab to display the home ribbon

Step 2. ***SELECT*** the table to be formatted ***CELLS A3:J13***

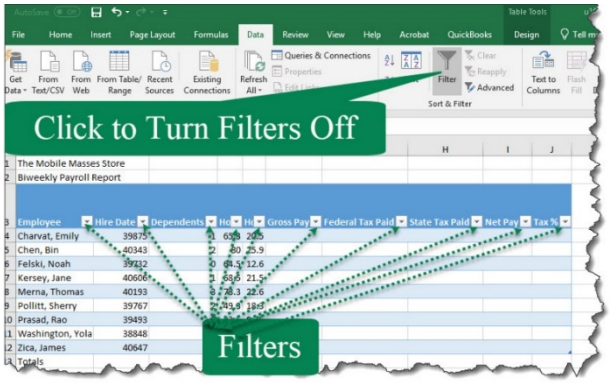
Step 3. In the styles group, ***CLICK*** the ***FORMAT AS TABLE*** option

Step 4. In the Medium group, ***CLICK*** the option for ***BLUE, TABLE STYLE MEDIUM 6*** a dialog box will popup asking if you table has headers.

Step 5. ***CLICK*** the check box for ***MY TABLE HAS HEADERS***

Step 6. ***CLICK OK***

The table will appear with arrows pointing down next to each column heading. These are called filters. We won't be using them for this exercise. Follow these steps to turning the filters off:



Step 7. ***CLICK*** the ***DATA*** tab to display the Data Ribbon

Step 8. In the Sort & Filter group, you will notice the highlighted filter icon. ***CLICK*** on ***FILTER*** to turn the filter off.

Step 9. ***CLICK*** on ***ROW 3*** to select it

Step 10. ***CLICK*** on the ***HOME*** tab to reveal the Home Ribbon

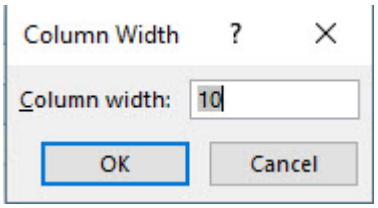
Step 11. In the Alignment Group, ***CLICK*** on the ***WRAP TEXT*** option

Step 12. ***CLICK*** on ***COLUMNS D*** and ***E***

Step 13. In the Cells Group, ***CLICK*** on the ***FORMAT*** option

Step 14. ***CLICK*** on ***COLUMN WIDTH***

Step 15. ***ENTER*** the number ***10*** for the new column width



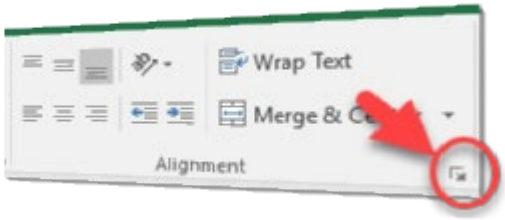
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

TEXT ALIGNMENT, SIZE AND STYLE

Step 1. ***CLICK*** on the ***HOME TAB*** to activate the home ribbon band

SELECT CELLS A1:J2



Step 2. In the alignment group, ***CLICK*** the ***ALIGNMENT DIALOG BOX*** icon to open the dialog box.

Step 3. In the Text alignment group, ***CLICK*** on the ***HORIZONTAL*** options

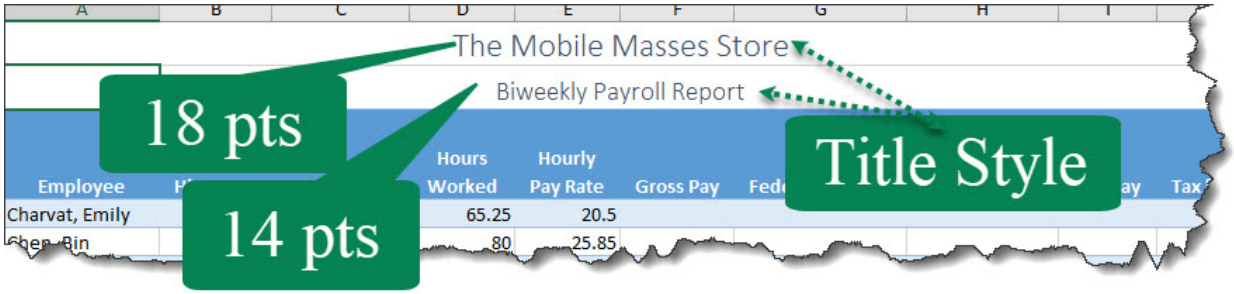
Step 4. ***CLICK*** on ***CENTER ACROSS SELECTION***

Step 5. In the ***STYLES*** group, ***CLICK*** on the ***MORE*** option

Step 6. ***CLICK*** on ***TITLE*** to choose the title style

Step 7. ***CLICK*** on ***CELL A2***

Step 8. ***CHANGE*** the ***FONT SIZE*** to ***14***



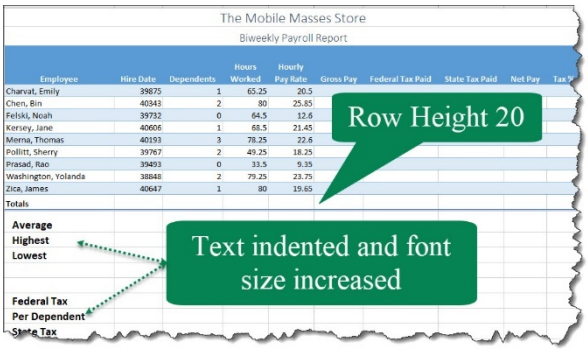
SELECT CELLS A13:J13

Step 9. In the ***STYLES*** group, ***CLICK*** on the ***MORE*** option

Step 10. ***CLICK*** on ***TOTAL*** to choose the total style

Step 11. ***CLICK ROW 13*** to select the entire row

Step 12. Change the ***ROW HEIGHT*** to ***20***



SELECT CELLS A14:A21

Step 13. Increase ***INDENT ONCE***

Step 14. FONT: ***BOLD***

Step 15. SIZE: ***14***

Step 16. ***CLICK COLUMN A*** to select the entire column

Step 17. Change the ***COLUMN WIDTH*** to ***25***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CREATE CONDITIONS FOR ABSOLUTE REFERENCES

Step 1. ***CLICK Cell B19***

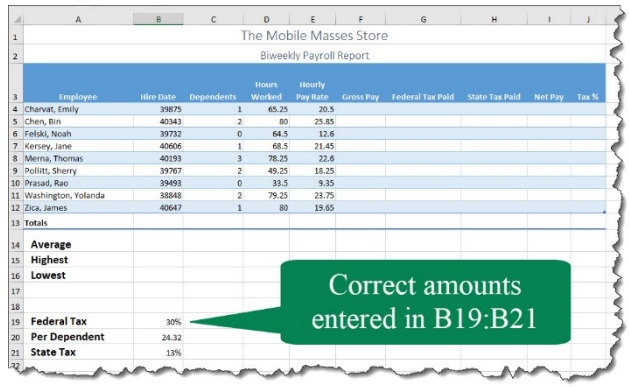
- Type ***30%***
- HIT ENTER

Step 2. ***CLICK Cell B20***

- Type ***24.32***
- HIT ENTER

Step 3. ***CLICK Cell B21***

- Type ***13%***
- HIT ENTER



The Mobile Masses Store

Biweekly Payroll Report

	Employee	Hire Date	Dependents	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax Paid	State Tax Paid	Net Pay	Tax %
4	Charvat, Emily	39875	1	65.25	20.5					
5	Chen, Bin	40343	2	80	25.85					
6	Felski, Noah	39732	0	64.5	12.6					
7	Kersey, Jane	40606	1	68.5	21.45					
8	Mema, Thomas	40193	3	78.25	22.6					
9	Pollitt, Sherry	39767	2	49.25	18.25					
10	Prasad, Rao	39493	0	33.5	9.35					
11	Washington, Yolanda	38848	2	79.25	23.75					
12	Zica, James	40647	1	80	19.65					
13	Totals									
14	Average									
15	Highest									
16	Lowest									
19	Federal Tax	30%								
20	Per Dependent	24.32								
21	State Tax	13%								

THE MATH BASICS OF EXCEL

The backbone of Excel is its ability to perform calculations. There are two ways to set up calculations in Excel: using formulas or using functions. Formulas are mathematical expressions that you build yourself. You need to follow proper math principles to obtain the expected answer. Building the formula is simply a matter of combining the proper cell addresses with the correct operators in the right order. This module will explore how to build, edit, and copy formulas.

IMPORTANT NOTES

1. Start formula with **=** sign
2. DO NOT use spaces between math operators and cell references.
3. **Use your cursor to point to the appropriate cell Excel will do the rest.**
4. Make sure you **HIT ENTER** to confirm each formula!
5. **Use your F4 function** key to create the absolute cell references

ARITHMETIC OPERATORS

+ **Plus Sign** - Adds values
- **Minus Sign** - Subtracts values
* **Asterisk** - Multiplies values
/ **Forward slash** - Divides values
% **Percent sign** - Finds the percentage of a value
^ **Caret** - Exponentiation - Finds the exponential value

COMPARISON OPERATORS

= **Equals sign** - Equates values
> **Greater than sign** - Indicates that one value is greater than the other
< **Less than sign** - Indicates that one value is less than the other
>= **Greater than or equal to** - Indicates that one value is greater than or equal to the other
<= **Less than or equal to** - Indicates that one value is less than or equal to the other
<> **Not Equal** - Indicates that values are not equal

Text concatenation allows you to combine text from different cells into a single piece of text. The operator is the **&**sign.
The reference operators combine a range of cells to use together in an operation. The reference operators are:

: **Colon** - A Range operator that produces a reference to all the cells between the references on either side of the colon
, **Comma** - A Union operator that combines multiple range references
<space> - An intersection operator that returns a reference to the cells common to the ranges in the formula

SAVE YOUR UPDATES

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FORMULA 1: GROSS PAY = HOURLY PAY RATE * HOURS WORKED

To start this formula, you will be clicking on the blank cell representing gross pay for the employee. Because we used the table feature in Excel, the formulas automatically contain the names of the cells that you click on. **DO NOT TYPE THE CELL REFERENCES!** Follow these steps to complete the formula:

Step 1. ***CLICK*** on ***CELL F4*** (this cell represents the Gross Pay)

- ***TAP*** = on your keyboard to start the formula
- ***CLICK*** on ***CELL D4***
- ***TAP*** * on your keyboard to enter the multiplication symbol
- ***CLICK*** on ***CELL E4***
- ***HIT*** your ***ENTER*** key

IMPORTANT NOTICE!

When you finish the formula in the first cell of the column, the formulas for the entire column are entered automatically. This is because the table feature was applied.

Excel assumes all the items in the column should have the same formula.

FORMULA 2: FEDERAL TAX PAID = *FEDERAL TAX**(GROSS PAY-DEPENDENTS * *PER DEPENDENT*)

This formula is complicated in that it refers to the table at the bottom of the spreadsheet representing the absolute conditions. Because we used the table feature in Excel, the formulas automatically contain the names of the cells that you click on. **DO NOT TYPE THE CELL REFERENCES!** Follow these steps to complete the formula:

Step 2. ***CLICK*** on ***CELL G4*** (this cell represents the Federal Tax Paid)

- ***TAP*** = on your keyboard to start the formula
- ***CLICK*** on ***B19*** (cell represents the Federal Tax percentage)
- ***HIT*** your ***F4 FUNCTION KEY***, to make the cell reference absolute
- ***TAP*** * and type (on your keyboard
- ***CLICK*** on ***F4*** (cell representing gross pay)
- ***TAP*** – on your keyboard number pad
- ***CLICK*** on ***C4*** (cell represents the number of dependents)
- ***TAP*** * on your keyboard number pad
- ***CLICK*** on ***B20*** (cell represents amount allowed per dependent)
- ***HIT*** your ***F4 FUNCTION KEY*** to make the reference absolute
- ***TAP***) on your keyboard
- ***HIT*** your ***ENTER*** key to complete the formula

FORMULA 3: STATE TAX PAID = *STATE TAX* * GROSS PAY

Step 3. ***CLICK*** on ***CELL H4*** (this cell represents the State Tax Paid)

- ***TAP*** = on your keyboard to start the formula
- ***CLICK*** on ***B21*** (cell amount representing the State Tax percentage)
- ***HIT*** your ***F4 FUNCTION KEY***, to make the cell reference absolute

- ***TAP*** * on your keyboard
- ***CLICK*** on ***F4*** (cell representing gross pay)
- ***HIT*** your ***ENTER*** key to complete the formula

FORMULA 4: NET PAY = GROSS PAY – (FEDERAL TAX PAID + STATE TAX PAID)

Step 4. ***CLICK*** on ***CELL I4*** (this cell represents the Net Pay)

- ***TAP*** = on your keyboard to start the formula
- ***CLICK*** on ***F4*** (the cell on this row representing the Gross Pay)
- ***TAP*** – on your keyboard to signify subtraction
- Type ***(*** on your keyboard to start a formula enclosed in parenthesis
- ***CLICK*** on ***G4*** (the cell on this row representing the Federal Tax Paid)
- ***TAP*** + on your keyboard to signify addition
- ***CLICK*** on ***H4*** (the cell on this row representing the State Tax Paid)
- Type ***)*** on your keyboard
- ***HIT*** your ***ENTER*** key to complete the formula

FORMULA 5: TAX % =(FEDERAL TAX PAID + STATE TAX PAID)/GROSS PAY

Step 5. ***CLICK*** on ***CELL J4*** (the cell represents the Tax %)

- ***TAP*** = on your keyboard to start the formula
- Type ***(*** on your keyboard to start a formula enclosed in parenthesis
- ***CLICK*** on ***G4*** (the cell representing the Federal Tax Paid)
- ***TAP*** + on your keyboard to signify addition
- ***CLICK*** on ***H4*** (the cell representing the State Tax Paid)
- Type ***)*** on your keyboard to close the parenthesis
- ***TAP*** / on your keyboard to signify division
- ***CLICK*** on ***F4*** (the cell representing the Gross Pay)
- ***HIT*** your ***ENTER*** key to complete the formula

SAVE YOUR UPDATES

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SUM, AVERAGE, MAXIMIMUM AND MINIMUM

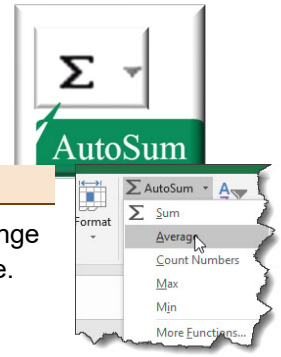
The AVERAGE, MAX (for maximum), and MIN (for minimum) functions in Excel 2019 are the most commonly used of the statistical functions because they are of use to both the average number cruncher as well as the dedicated statistician. All three functions follow the same syntax as the good old SUM function.

CALCULATE THE SUM

Step 1. ***CLICK*** on the ***HOME TAB*** to display the home ribbon

Step 2. ***CLICK*** in cell ***D13***

- In the editing group, ***CLICK*** the ***AutoSum Button***
- ***HIT ENTER***



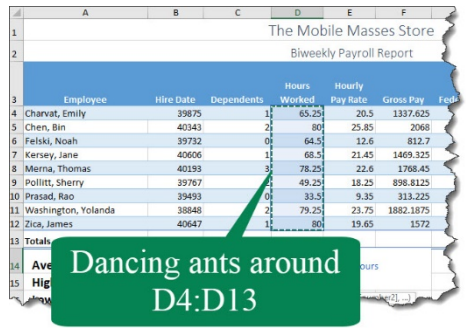
CALCULATE THE AVERAGE

The AVERAGE function computes the arithmetic mean of the values in this range by summing them and then dividing them by the number of values in the range. This AVERAGE function is equivalent to the following formula:

Step 3. ***CLICK*** on the ***HOME TAB*** to display the home ribbon

Step 4. ***CLICK*** in cell ***D14***

- In the editing group, ***CLICK*** the ***MORE*** option next to ***AutoSum***
- ***CLICK*** on the ***Average*** option
- Notice that the default selection includes the sum you just calculated. Be careful to adjust the range to calculate the average correctly. ***CLICK D4*** and highlight down to ***D12***. You should now have dancing ants around the range of ***D4:D12***
- ***HIT*** the ***ENTER*** key



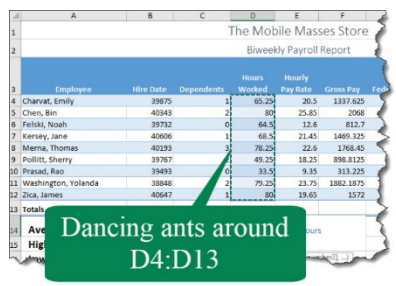
CALCULATE THE MAXIMUM (HIGHEST)

The Excel MAX function returns the largest numeric value in a range of values. The MAX function ignores empty cells, the logical values TRUE and FALSE, and text values.

Step 5. ***CLICK*** on the ***HOME TAB*** to display the home ribbon

Step 6. ***CLICK*** in cell ***D15***

- In the editing group, ***CLICK*** the ***MORE*** option next to ***AutoSum***
- ***CLICK*** on the ***Max*** option
- Notice that the default selection includes the sum and the average you just calculated. Be careful to adjust the range to calculate the maximum correctly. ***CLICK D4*** and highlight down to ***D12***. You should now have dancing ants around the range of ***D4:D12***
- ***HIT*** the ***ENTER*** key



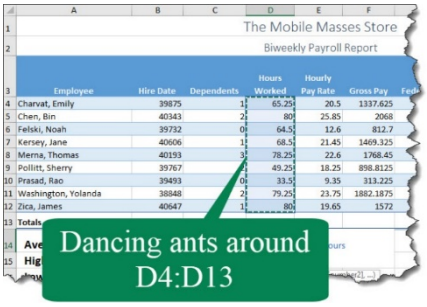
CALCULATE THE MINIMUM (LOWEST)

The MIN Excel function is used to find out the minimum value from a given set of data/ array. It returns the minimum value from a given set of numeric values. It will count numbers but ignore empty cells, text, the logical values TRUE and false, ant text values. It can be used to calculate the minimum salary of the employee, the minimum time/score lowest expense or revenue amount, etc.

Step 7. ***CLICK*** on the ***HOME TAB*** to display the home ribbon

Step 8. ***CLICK*** in cell ***D16***

- In the editing group, ***CLICK*** the ***MORE*** option next to ***AutoSum***
- ***CLICK*** on the ***Min*** option
- Notice that the default selection includes the sum, average, and maximum you just calculated. Be careful to adjust the range to calculate the maximum correctly. ***CLICK D4*** and highlight down to ***D12***. You should now have dancing ants around the range of ***D4:D12***
- ***HIT*** the ***ENTER*** key



SAVE YOUR UPDATES

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COPY FORMULAS AND FORMAT NUMBERS

The AutoFill (or fill) handle looks like this — **+** — and appears only when you position the mouse on the lower-right corner of the active cell (or the last cell, when you've selected a block of cells). If you drag a cell selection with the white-cross mouse pointer rather than the AutoFill handle, Excel simply extends the cell selection to those cells you drag through. If you drag a cell selection with the arrowhead pointer, Excel moves the cell selection.

Step 1. ***SELECT CELLS D13:D16***

Step 2. Hover over the bottom right corner of the cell with your mouse until the mouse pointer turns to a solid plus sign. Then ***CLICK*** and ***DRAG*** your mouse ***ACCROSS*** to ***CELLS J13:J16***. This will initiate the auto fill option.

Step 3. ***RELEASE*** your ***MOUSE*** button to view the formulas in the cells.

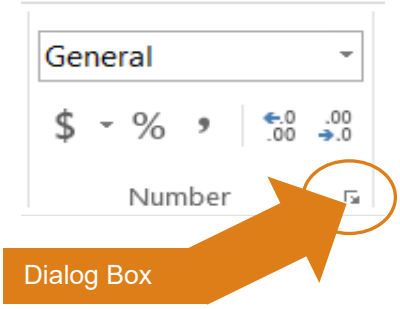
FORMAT DATES

In Excel, a date is the number of days since 01/01/1900 (which is the first date in Excel). A number is a date in Excel; the software uses a very simple approach to manage dates: imagine a line number from 1 to 2,958,465: number 1 is January 01 1900 and number 2,958,465 is December 31 9999. This serial number system (1 to 2,958,465) is called the Excel Date-Time Code.

Step 4. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

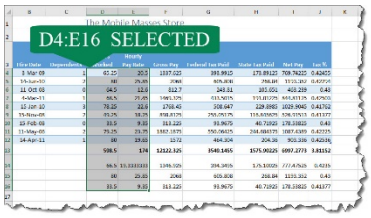
Step 5. ***SELECT*** Cells ***B4:B12***

- In the number group, ***CLICK*** to ***OPEN*** the number ***DIALOG BOX***
- In the Category area, ***CLICK*** the ***DATE*** option
- Scroll through the different date options. These are all different formats that can be used for the date. In the ***TYPE*** box choose ***14-Mar-12***. This is just an example of the format. The actual dates represented by the numbers will appear.



NUMBERS SHOWING SIMILAR FORMATS

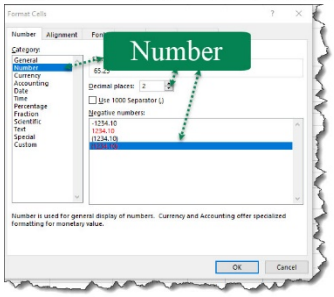
When you are working with accounting principles, it is best to have your decimals align in the columns. This next exercise will help format consistency in the Hours Worked and Hourly Pay Rate columns.



Step 6. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

Step 7. ***SELECT*** Cells ***D4:E16***

- In the number group, ***CLICK*** to ***OPEN*** the number ***DIALOG BOX***
- In the Category area, ***CLICK*** the ***NUMBER*** option
- DECIMAL PLACES: ***2***
- NEGATIVE NUMBERS: ***(1234.10)***
- ***CLICK OK***

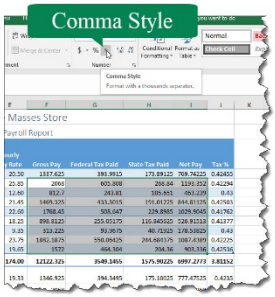


ACCOUNTING FORMAT RULES

Although word processing and spreadsheet programs provide a specific accounting number format, practices vary by company. Sometimes the power of company culture and habit overpowers the convenience of software standards. Because of this, many companies maintain a standard for accounting number formatting that's slightly different than the software default. Mismatched number formats can look unprofessional, so compare notes with staff and managers before choosing a format. These are some common formatting rules to follow:

- **DESCRIPTIONS** - All amounts, including totals, should have a description
- **FIRST ROW** - Amounts at the top of each column should have dollar signs
- **TOTALS** - Totals should be double-underscored and have dollar signs.

Even though many of the amounts on the spreadsheet represent currency, it is not standard practice to use dollar signs on every entry. The dollar signs are reserved for the first row of currency and the totals.



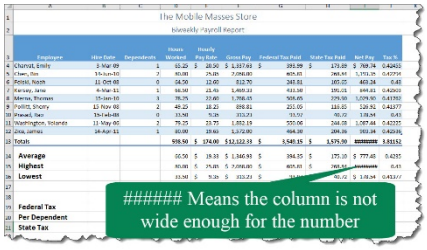
FORMATTING COMMA STYLE

Step 8. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

Step 9. ***SELECT*** Cells ***F5:I12***

- In the number group, ***CLICK*** to ***COMMA STYLE***

ACCOUNTING STYLE FORMAT



Step 10. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

Step 11. ***SELECT*** Cells ***E4:I4***

- In the number group, ***CLICK*** on the Accounting Style icon, (the ***DOLLAR SIGN***).

Step 12. ***SELECT*** Cells ***E13:I16***

- In the number group, ***CLICK*** on the Accounting Style icon, (the ***DOLLAR SIGN***).
- If your formatting shows a series of hash marks #######, it means the column needs to be wider for the content of the cell. ***Adjust your column width where necessary.***

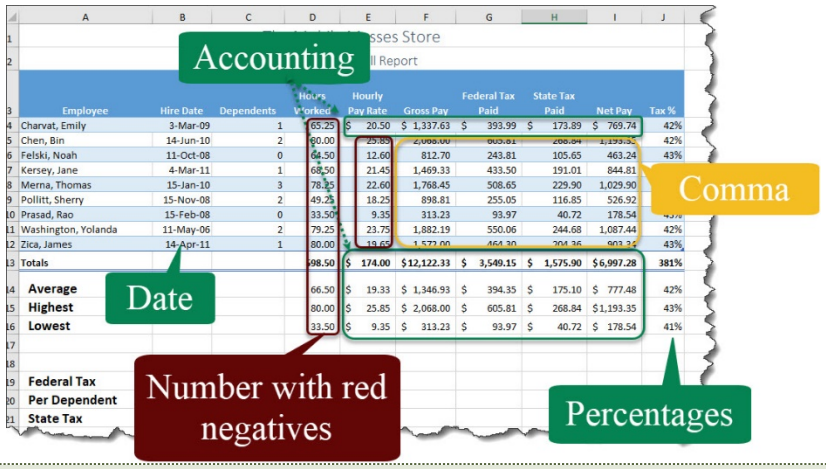
PERCENTAGES

Currently the numbers in column J are displayed in decimal fraction form. They should be displayed as percentages. These are the steps to completing that process:

Step 13. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

Step 14. ***SELECT*** Cells ***J4:J16***

- In the number group, ***CLICK*** on the ***PERCENT SYMBOL*** icon



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

EDIT THE WORKSHEET

The formula in J13 is not necessary. Follow these directions to edit the contents of the cell.

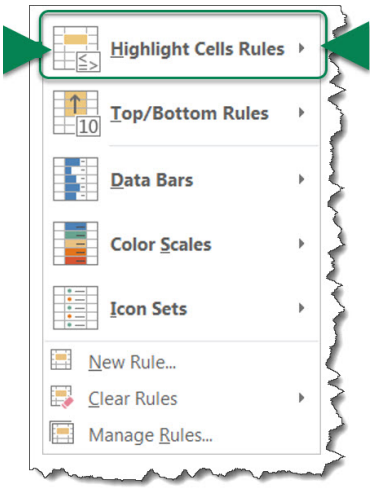
Step 1. ***CLICK*** on ***CELL J13***

- ***TAP*** your ***DELETE*** key on your keyboard

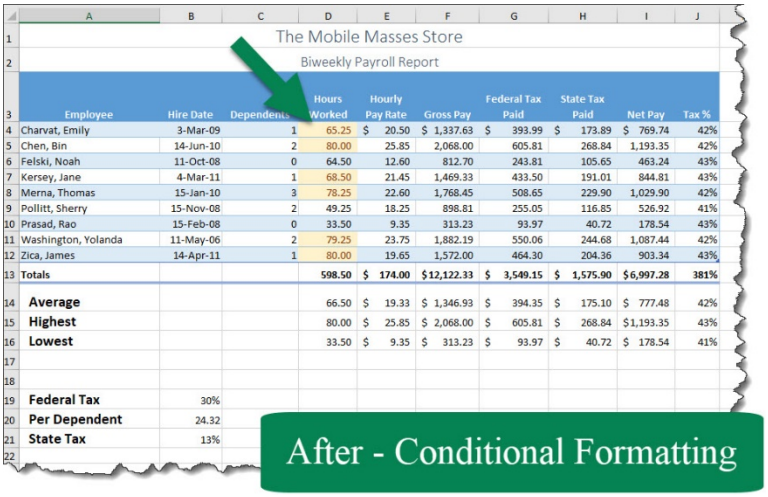
CONDITIONAL FORMATTING

Step 2. ***CLICK*** the ***HOME TAB*** to reveal the home ribbon

Step 3. **SELECT CELLS *D4:D12***



- In the Styles group, ***CLICK*** on ***CONDITIONAL FORMATTING***
- ***CLICK*** on ***HIGHLIGHT CELLS RULES***
- ***CLICK*** the ***GREATER THAN. . .*** option
- Type ***65*** as the number
- In the with drop-down menu ***CLICK CUSTOM FORMAT…***
- ***CLICK*** on the tab for ***FILL***
- ***CLICK*** on the ***LIGHT GOLD*** (Gold Accent 4, Lighter 80%) on the color theme pallet
- ***CLICK*** on the tab for ***FONT***
- ***CLICK*** on the ***DARK ORANGE*** (Orange Accent 2, Darker 50%) on the color theme pallet
- ***CLICK OK*** to end the custom color menu
- ***CLICK OK*** to confirm your custom format



The Mobile Masses Store

Biweekly Payroll Report

Employee	Hire Date	Dependents	Hours Worked	Hourly Pay Rate	Gross Pay	Federal Tax Paid	State Tax Paid	Net Pay	Tax %
Charvat, Emily	3-Mar-09	1	65.25	$ 20.50	$ 1,337.63	$ 393.99	$ 173.89	$ 769.74	42%
Chen, Bin	14-Jun-10	2	80.00	25.85	2,068.00	605.81	268.84	1,193.35	42%
Felski, Noah	11-Oct-08	0	64.50	12.60	812.70	243.81	105.65	463.24	43%
Kersey, Jane	4-Mar-11	1	68.50	21.45	1,469.33	433.50	191.01	844.81	43%
Merna, Thomas	15-Jan-10	3	78.25	22.60	1,768.45	508.65	229.90	1,029.90	42%
Pollitt, Sherry	15-Nov-08	2	49.25	18.25	898.81	255.05	116.85	526.92	41%
Prasad, Rao	15-Feb-08	0	33.50	9.35	313.23	93.97	40.72	178.54	43%
Washington, Yolanda	11-May-06	2	79.25	23.75	1,882.19	550.06	244.68	1,087.44	42%
Zica, James	14-Apr-11	1	80.00	19.65	1,572.00	464.30	204.36	903.34	43%
Totals			**598.50**	**$ 174.00**	**$12,122.33**	**$ 3,549.15**	**$ 1,575.90**	**$6,997.28**	**381%**
Average			66.50	$ 19.33	$ 1,346.93	$ 394.35	$ 175.10	$ 777.48	42%
Highest			80.00	$ 25.85	$ 2,068.00	$ 605.81	$ 268.84	$1,193.35	43%
Lowest			33.50	$ 9.35	$ 313.23	$ 93.97	$ 40.72	$ 178.54	41%

Federal Tax	30%
Per Dependent	24.32
State Tax	13%

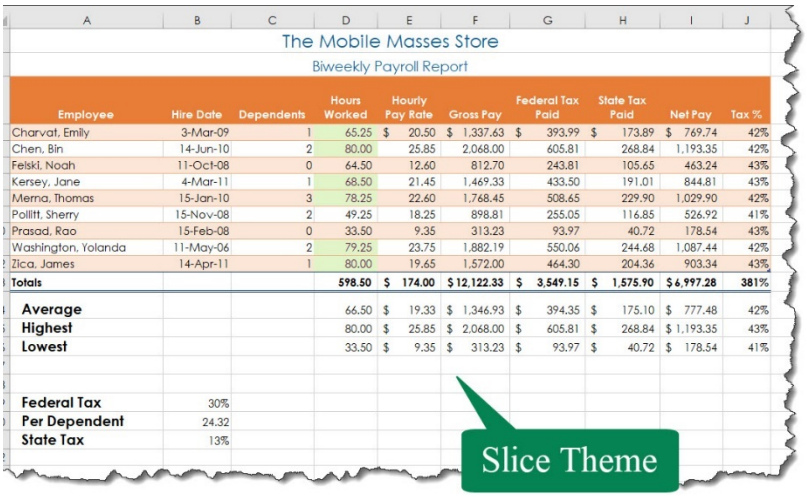
After - Conditional Formatting

CHANGE THE THEME

Since this spreadsheet is made of entirely theme colors and fonts, you can easily change the look of the sheet by changing the document theme. Follow these steps:

Step 4. ***CLICK*** the ***PAGE LAYOUT TAB*** to reveal the page layout ribbon

Step 5. In the themes group, ***CLICK*** on ***SLICE*** as the new theme



The Mobile Masses Store

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FLASH FILL

Flash fill is a feature that was introduced in Excel 2013. Earlier versions of the program do not have the feature available. It is a very useful feature in that Excel recognizes patterns in the data and automatically fills or formats the remaining cells. For example, if column A contains a list of 10 phone numbers without parentheses around the area code or dashes after the prefix, Flash Fill can help create formatted phone numbers with relative ease. To illustrate this feature in the Mobile Masses worksheet, follow these steps:

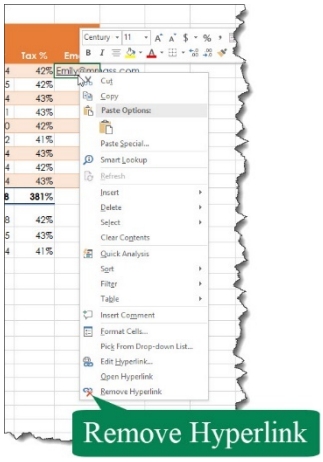
Step 6. ***CLICK*** on the ***HOME TAB*** to reveal the home ribbon

Step 7. ***CLICK*** in ***K3***. Because the table we are using, is using the table feature, when you type a word in K3 it will automatically become a header for the row.

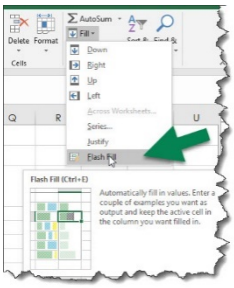
- Type the word ***Email*** in the cell

Step 8. ***CLICK*** in ***K4***. The idea here is to start a series that Excel will recognize. We are going to assume that each of the employees on the list have a company email address. The domain for this email is @mmass.com. Excel is to find the pattern in the employee name that generates an email address using the employee firstname@mmass.com

- Type ***Emily@mmass.com***
- ***TAP*** your ***ENTER*** key
- ***RIGHT-CLICK*** on ***K4***
- In the shortcut menu that appears, ***CLICK*** on ***REMOVE HYPERLINK***

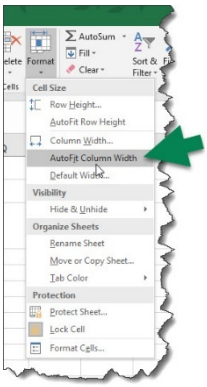


- With K4 selected, ***CLICK*** the ***FILL*** option in the editing group. This will reveal a drop-down menu.
- ***CLICK*** on ***FLASH FILL*** at the bottom of the menu. The email address for each employee should automatically fill with the first name of the employee and the domain name for the email address.



ADJUST COLUMN WIDTH

Whenever you add information such an email address to a column the width of the column will vary depending on the longest entry in the column. There are several ways to expand columns. On way is to simply double click the separator between the columns. In this case it would be a double-click between the K and the L column letters. There is a menu driven option as well. This is how to change the column using the menu option.

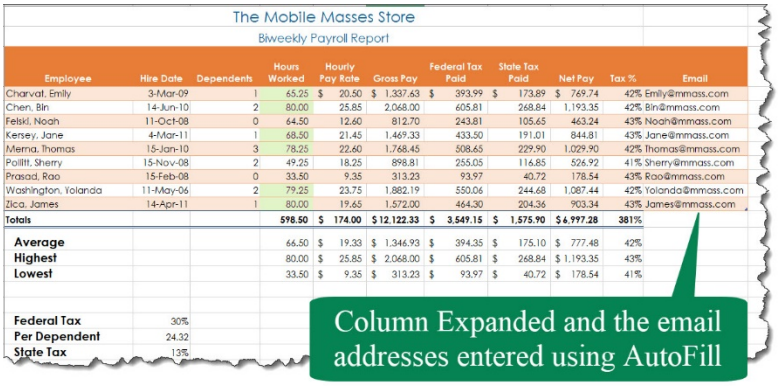


Step 9. ***CLICK*** on the ***HOME TAB*** to reveal the home ribbon

Step 10. ***CLICK*** on the ***COLUMN K*** heading

Step 11. In the cells group, ***CLICK*** on the ***FORMAT*** option to reveal the format drop-down menu

Step 12. ***CLICK*** on the ***AutoFit Column Width*** option



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Pollitt, Sherry	15-Nov-08	2	49.25	18.25	898.81	255.05	116.85	526.92	41%	Sherry@mmass.com
Prasad, Rao	15-Feb-08	0	33.50	9.35	313.23	93.97	40.72	178.54	43%	Rao@mmass.com
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Federal Tax	30%									
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SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

COPY A CHART TO A WORKSHEET

Excel charts can exist in two states: as an embedded object in a worksheet, floating above the worksheet grid, or, in a worksheet all by themselves. In this lesson, we'll look at how to move charts from one state to another.

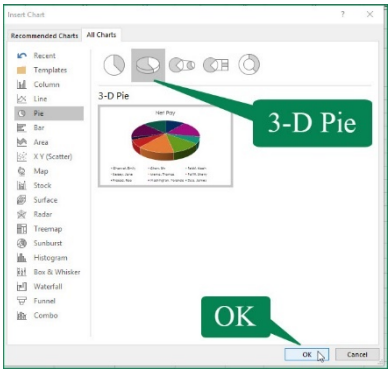
Normally, when you choose a chart type on the ribbon, Excel creates an embedded chart, which floats over the worksheet grid below.

But if you're short on space, or, if you'd just rather have the chart in its own worksheet, you can easily do so. Follow these instructions:

Step 1. ***CLICK*** on the ***INSERT TAB*** to display the insert ribbon band.

Step 2. ***SELECT*** cells ***A3:A12***

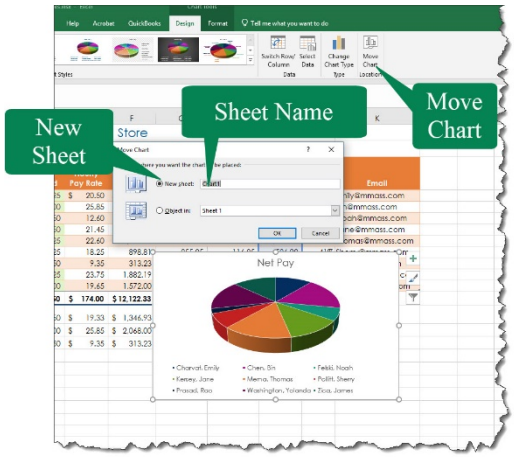
Step 3. Hold down your ***CTRL*** key. This will enable you to select a split range. ***SELECT*** cells ***I3:I12***



- In the Charts group, ***CLICK*** on the ***RECOMMENDED CHARTS*** option
- ***CLICK*** on the ***ALL CHARTS*** tab
- ***CLICK*** on ***PIE*** to display the pie chart options
- ***CLICK*** on the ***3-D PIE*** option (second on the list)
- ***CLICK*** on the ***OK*** button

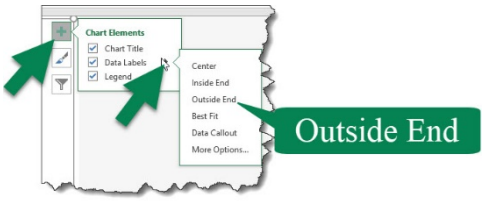
Step 4. The chart appears embedded into the worksheet. With the chart still selected, ***CLICK*** on the Chart Tools ***DESIGN*** tab.

- In the Location group, ***CLICK*** on the ***MOVE CHART*** option
- ***CLICK*** on the ***NEW SHEET*** option
- Type ***Employee Net Pay*** for the sheet tab name
- ***CLICK*** on the ***OK*** button



Step 5. ***CLICK*** on the ***CENTER*** of the ***CHART*** to select the categories

- ***CLICK*** the ***PLUS SIGN*** in the right top corner of the chart
- ***CLICK*** the option called ***DATA LABELS***
- ***CLICK*** on the ***MORE*** options for Data Labels
- ***CLICK*** on the ***OUTSIDE END*** option the have the labels appear on the outside of the chart.

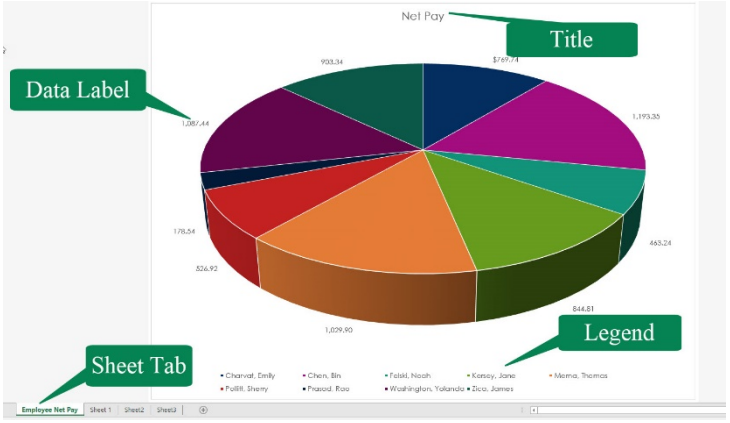


IMPORTANT NOTES:

✓ ***SHEET NAME*** *– The new chart appears on a separate sheet called Employee Net Pay.*

✓ ***CHART TITLE*** *–The chart title came in automatically. This is because when we choose the second range in step 3 it included the header row with the title representing the data charted.*

✓ ***LEGEND*** *– The legend of the chart appears at the bottom because the range you selected in step 2 included the employee names.*



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

WORKSHEET NAME, POSITION AND PRINT SETTINGS

Step 1. ***DOUBLE-CLICK*** the ***SHEET TAB*** you wish to change (**Sheet 1**) in the lower-left corner of the window

Step 2. Type the new worksheet name ***Biweekly Payroll Report***

Step 3. ***TAP*** the ***ENTER*** key

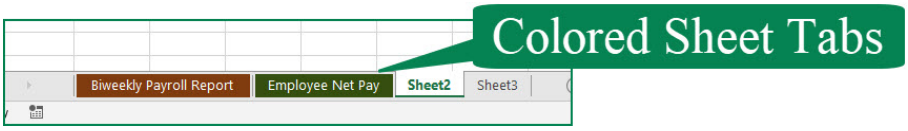
Step 4. ***RIGHT-CLICK*** the ***SHEET TAB*** you just renamed (**Biweekly Payroll Report**) to display a shortcut menu

- ***POINT*** to ***TAB COLOR*** on the shortcut menu to display the color gallery.
- ***CLICK*** the ***DESIRED COLOR*** to change the color of the tab.

Step 5. ***RIGHT-CLICK*** the ***SHEET TAB*** for the sheet containing the chart (**Employee Net Pay**)

- ***POINT*** to ***TAB COLOR*** on the shortcut menu to display the color gallery.
- ***CLICK*** the ***DESIRED COLOR*** (different from the **Biweekly Payroll Report**) to change the color of the tab.
- ***CLICK*** and ***DRAG*** on the ***SHEET TAB*** to the right side of the **Biweekly Payroll Report**. This will put the chart after the report in the workbook.

Step 6. ***CLICK*** on a ***BLANK WORKSHEET TAB*** (Sheet 2 or 3) to select. You should see both newly colored sheet tabs in their selected colors.



GROUP THE WORKSHEETS

You can quickly perform tasks on multiple worksheets at the same time by grouping worksheets together. If you group a set of worksheets, any changes you make on one worksheet are made in all the other worksheets in the group in the exact same location on the worksheets. If you want to create, for example, standard tables or calculations on a large number of worksheets, grouping can save you a lot of time. This works best if the worksheets already have identical data structures.

Step 7. ***CLICK*** on the ***SHEET TAB*** for the ***Biweekly Payroll Report***

Step 8. Hold down your ***CTRL*** key ***CLICK*** on the ***SHEET TAB*** for the ***Employee Net Pay***

Step 9. ***CREATE*** the ***FOOTER*** with both sheets selected

HEADER/FOOTER OPTIONS

Step 7. Put your worksheet into Page Layout view using one of the following methods:

- STATUS BAR METHOD: ***CLICK*** the ***PAGE LAYOUT VIEW*** button on the Status bar
- RIBBON TAB METHOD: ***CLICK*** on the ***VIEW*** tab to display the view ribbon
  - In the Workbooks Views Group, ***CLICK*** on the ***PAGE LAYOUT*** View
- KEYSTROKE METHOD: ***ALT+WP.***

Step 8. In Page Layout view, the text ***CLICK*** to ***Add Footer*** appears centered in the bottom margin.

Step 9. ***CLICK*** inside the ***RIGHT SECTION*** of the ***FOOTER***. The Header & Footer Tools will appear in the ribbon.

Step 10. Type ***Your Name***

Step 11. ***HIT ENTER*** to move your cursor below your name

Step 12. ***CLICK*** the ***DESIGN TAB*** to display the Design Ribbon for the Header & Footer Tools

Step 13. In the Header & Footer Elements Group, ***CLICK*** on the ***SHEET NAME*** option. This will display the sheet tab below your name on both sheets.

PAGE LAYOUT

With the sheets still grouped, change the page layout print settings by following these directions:

Step 14. ***CLICK*** the ***PAGE LAYOUT*** tab to select the Page Layout ribbon

Step 15. In the Page Setup, ***CLICK*** the ***ORIENTATION*** option

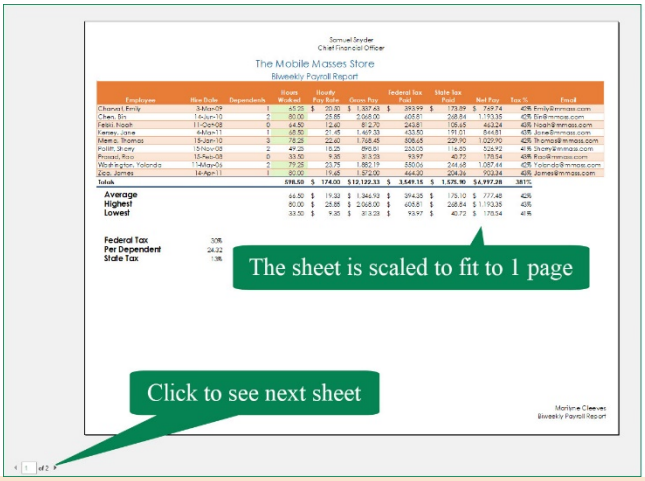
Step 16. ***CLICK*** on ***LANDSCAPE***

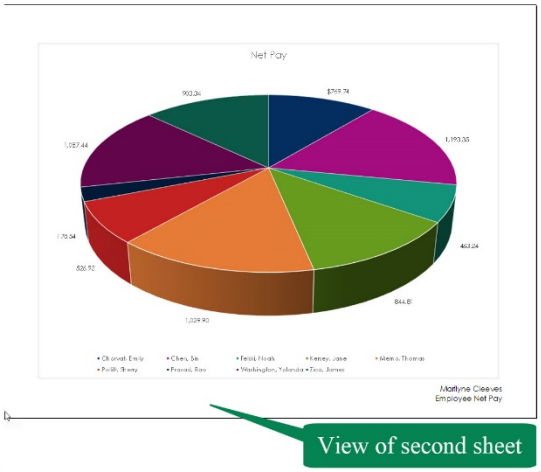
Step 17. In the Scale to Fit group, the settings should be ***WIDTH: 1 page***, ***HEIGHT: 1 page***

Step 18. CLICK on the FILE tab to display the file options

Step 19. CLICK on PRINT to view the print settings for the sheets

NOTICE: Because both sheets are in the print view you have the option to advance onto the next sheet in the view.





UNGROUP SELECTED WORKSHEETS

It is important that after you have grouped worksheets they are ungrouped.

Step 20. KEYSTROKE METHOD: Press and hold the ***CTRL*** key and ***CLICK*** the ***worksheet tabs*** you want to ungroup.

Step 21. SHORTCUT MENU: ***RIGHT-CLICK*** the ***GROUPED SHEETS***

- ***CLICK*** the ***UNGROUP*** option

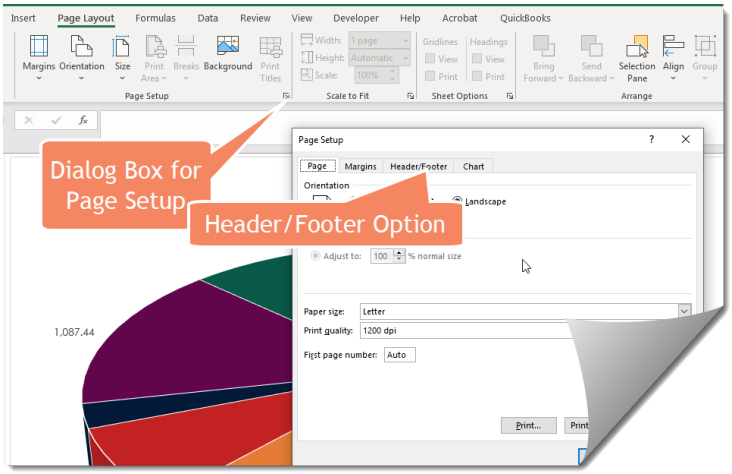
CHECK YOUR CHART

Pull a print preview for the chart. If it does not have a footer, the option did not work properly. Follow these steps to complete the process:

Step 1. Click the Chart sheet to make it in an active view.

Step 2. ***CLICK*** the ***PAGE LAYOUT*** tab to select the Page Layout ribbon

Step 3. ***CLICK*** the Dialog box for the ***PAGE SETUP***

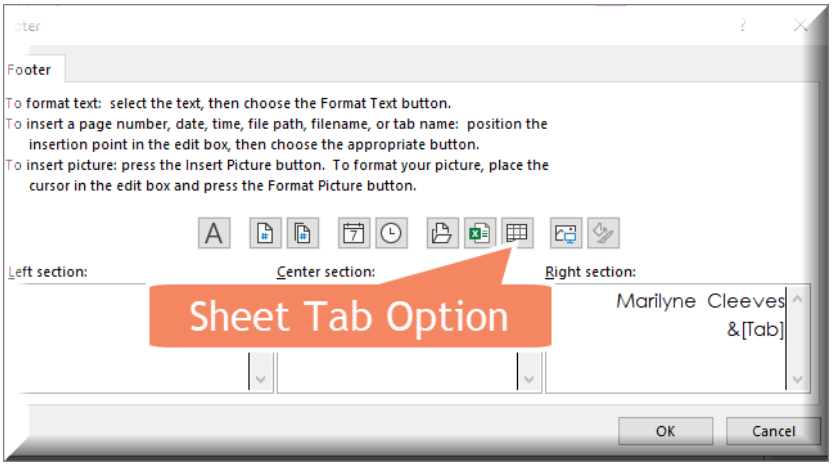


Step 4. In the Header/Footer option, ***CLICK CUSTOM FOOTER***

Step 5. Type ***Your Name***

Step 6. ***HIT ENTER*** to move your cursor below your name

Step 7. ***CLICK*** on the ***SHEET TAB*** option. Excel will insert the correct code



Step 8. ***CLICK OK*** to confirm your selection

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ASSIGNMENT TO SUBMIT:

U10a1 Mobile Masses

ON YOUR OWN ACTIVITY

Step 1. Run Excel and create a NEW BLANK WORKBOOK.

Step 2. **Worksheet Title** - Enter the worksheet title, Kattie's Kicks, in cell A1 and the worksheet subtitle, First Quarter Review Analysis in cell A2.

Step 3. **Change the Theme** – Change the Theme of the document to Facet

Step 4. Beginning in row 4, enter the region data shown in the following table:

	North	South	East	West
Sneakers	72714.58	77627.29	76607.31	49008.32
Shoes	45052.23	69165.66	76243.41	84844.01
Sandals	77630.94	78684.24	56601.25	72716.68
Accessories	65423.73	77690.69	58383.67	54433.07
Miscellaneous	55666.92	78618.97	47317.09	68594.40

Step 5. ***SAVE AS – u10a2 Kattie Kicks***

Step 6. ***Enter Labels – F4*** and ***A10*** Enter the word ***Total***

Step 7. **AutoSum** – Using the auto sum feature, create totals for each region, product, and company grand total

HINT- The sums will appear in Column F and Row 10

Step 8. **Title** – Format the worksheet title with the Title cell style. Center the title across columns A through F.

Step 9. **Subtitle** – Format the worksheet subtitle to 16-point Calibri Light, and change the font color to Blue-Gray, Text 2. Center the subtitle across columns A through F.

Step 10. **Heading 3** – Use cell styles to format the range A4:F4 with the Heading 3 cell style

Step 11. **Accent 1** -- The range B4:F4 with the Accent1 Cell style

Step 12. **A10 = SUM** – In the range B10:E10 format Total cell style

Step 13. **A11 = AVERAGE** -In the range B11:E11, use the Average function to calculate the average of each column

Step 14. **A12 = MAXIMUM** – In the range B12:E12, use the Maximum function to calculate the maximum of each column

Step 15. **A13** = **MINIMUM** – In the range B13:E13, use the Minimum function to calculate the minimum of each column.

Step 16. **Center** – Center the column titles in row 4.

Step 17. **Accounting Style** – Apply the accounting number format to the ranges B5:F5, B10:F10 and B11:B13

Step 18. **Comma Style** – Apply the comma style format to the range B6:F9. Adjust any column widths to the widest text entry in each column.

Step 19. **3-D Pie Chart** – Select the ranges B4:E4 and B10:E10 and then insert a 3-D pie chart.
HINT- use your control key to separate a split range of cells.

Step 20. **Move the Chart** – Move the chart to a new worksheet.
HINT – Right-click a blank area of the chart and choose the move chart option

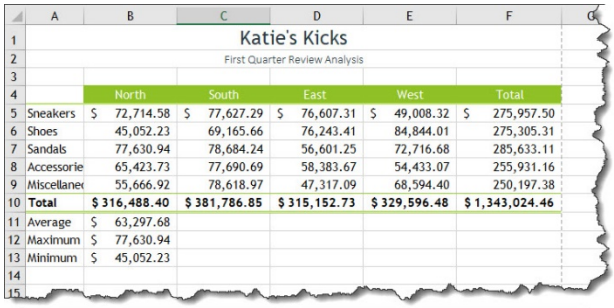
Step 21. **Add Data Labels to the Chart –** Specify the labels should be on the outside end of the chart

Step 22. **Rename Sheet** – Name the new chart worksheet Revenue Analysis Chart. Color the sheet tab Red Accent 5

Step 23. **Chart Title** – Change the chart title to First Quarter Revenue Analysis.

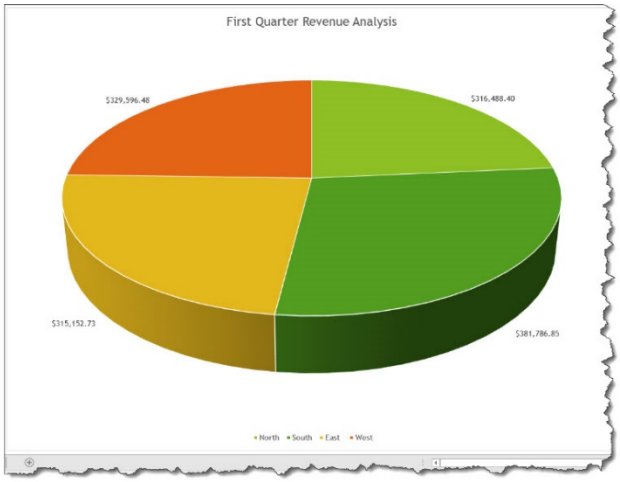
Step 24. **Rename Sheet1** – Rename the Sheet1 tab, First Quarter, and apply the Dark Green color to the sheet tab.

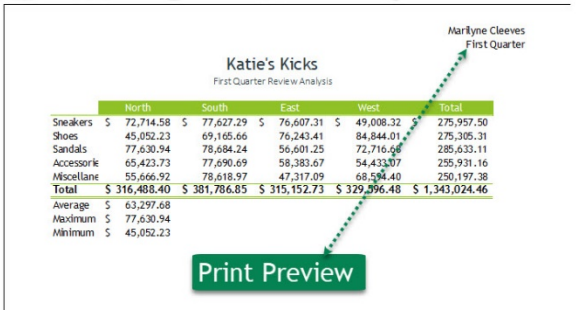
Step 25. **Add a Header** – In the header of both sheets, type your name and include the sheet tab name.



Katie's Kicks
First Quarter Review Analysis

	North	South	East	West	Total
Sneakers	$ 72,714.58	$ 77,627.29	$ 76,607.31	$ 49,008.32	$ 275,957.50
Shoes	45,052.23	69,165.66	76,243.41	84,844.01	275,305.31
Sandals	77,630.94	78,684.24	56,601.25	72,716.68	285,633.11
Accessorie	65,423.73	77,690.69	58,383.67	54,433.07	255,931.16
Miscellanec	55,666.92	78,618.97	47,317.09	68,594.40	250,197.38
Total	**$ 316,488.40**	**$ 381,786.85**	**$ 315,152.73**	**$ 329,596.48**	**$ 1,343,024.46**
Average	$ 63,297.68				
Maximum	$ 77,630.94				
Minimum	$ 45,052.23				





SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

ASSIGNMENT TO SUBMIT: ***U10a2 Katie Kicks***

UNIT 11 –LARGE WORKSHEETS, CHARTING AND WHAT IF ANALYSIS

With large worksheets, that extend beyond the size of a window, it is best to leave titles left-aligned. This allows the user to easily find the worksheet title when necessary. The following steps enter the worksheet titles and change the workbook theme to Savon.

Step 1. Run Excel and create a blank workbook in the Excel Window.

Step 2. Select ***CELL A1***

- Type ***Kaitlyn's Ice Cream Shoppe*** as the worksheet title

Step 3. Select ***CELL A2***

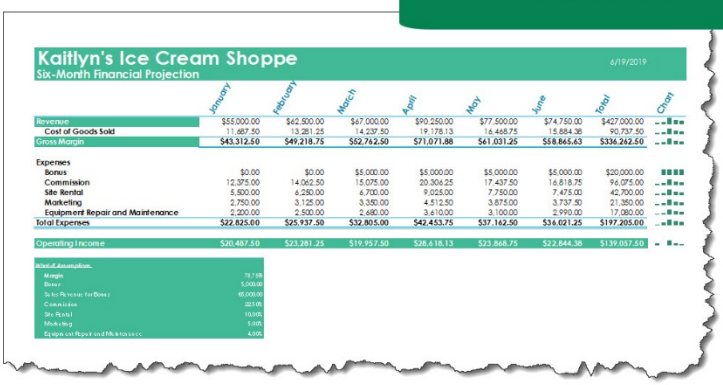
- Type ***Six-Month Financial Projection*** as the worksheet subtitle
- ***PRESS ENTER***

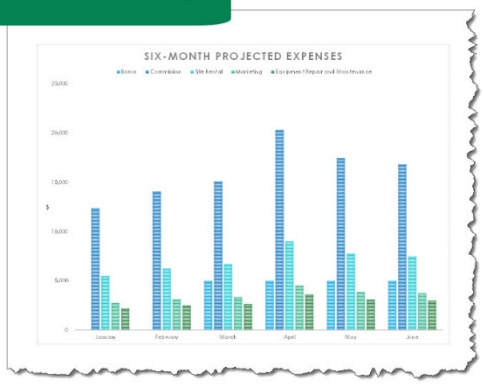
Step 4. ***CLICK*** the ***PAGE LAYOUT TAB*** to display the theme options

Step 5. ***APPLY*** the ***SAVON*** theme to the file

Step 6. ***SAVE AS u11a1 Kaitlyn Financial Projection***

Worksheets to Create for this Activity



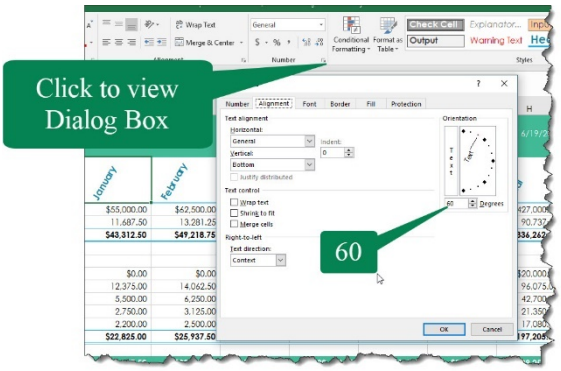


ROTATE TEXT IN A CELL

The design of this worksheet specifies projections for six months sales. Rotating text is one way of making columns visually distinct. Use these steps to setup the columns for the worksheet:

Step 1. ***CLICK CELL B3***

- Type ***January***
- ***HIT ENTER***
- ***CLICK*** back on ***CELL B3***
- ***CLICK*** the ***HOME TAB*** to display the home ribbon band
- In the ***Alignment group, OPEN*** the ***DIALOG*** box
- ***CLICK*** the ***ALIGNMENT*** tab
- In the ***ORIENTATION*** group, ***CLICK 60*** for the number of degrees to rotate the text
- ***CLICK OK***



USE THE FILL HANDLE TO CREATE A SERIES

The Auto Fill option can be used for a series of data. If you use the fill handle to create a series of non-sequential numbers or months, you mush enter the first item in the series in once cell and second item in the series in an adjacent cell, and then select both cells and drag the fill handle through the destination area.

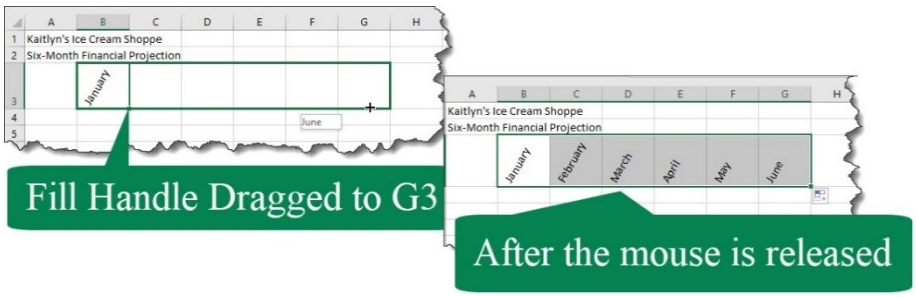
If the fill handle is dragged up or to the left, Excel will decrement the series rather tan increment the series. Words such as January or Monday Excel automatically assumes to fill the sequence. For this exercise, we are going to use the auto fill to complete the series of months. Follow these steps:

Step 1. ***CLICK*** in ***CELL B3*** to select the cell

Step 2. ***MOVE*** your ***MOUSE*** to the lower right corner of the cell until you pointer turns into a solid plus sign.

Step 3. ***DRAG*** the fill handle ***across*** to column ***G (C3:G3)***

Step 4. ***RELEASE*** your ***MOUSE*** to create a month name series in the selected range and copy the format to the selected range.



Step 5. ***CLICK*** to select ***CELL H3***

- Type ***Total*** as the column heading
- ***HIT ENTER***

Step 6. ***CLICK*** to select ***CELL I3***

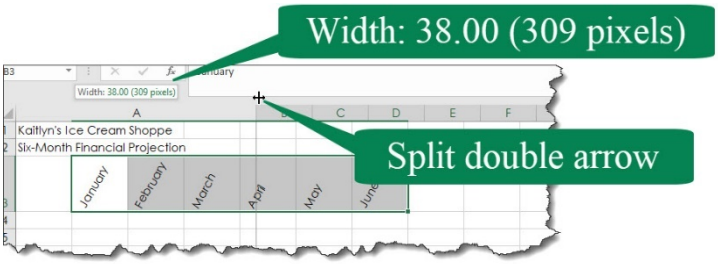
- Type ***Chart*** as the column heading
- ***HIT ENTER***

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

INCREASE COLUMN WIDTHS

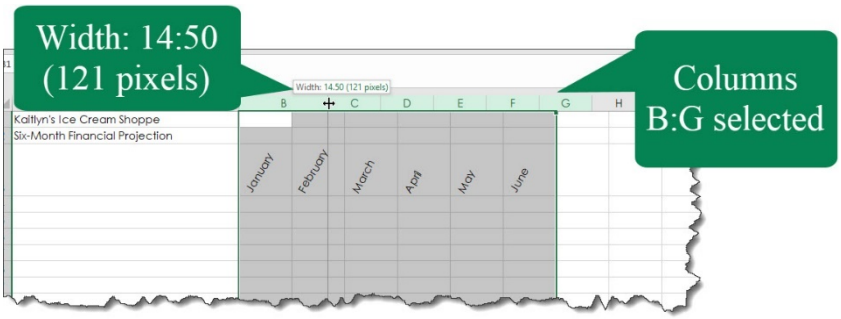
Step 1. Move the pointer to the boundary between column heading A and column heading B so that the pointer changes to a split double arrow in preparation of adjusting the column widths. ***DRAG*** the ***POINTER*** to the ***RIGHT*** until the ScreenTip displays the desired column width, ***Width: 38.00 (309 pixels)***



Step 2. ***RELEASE*** the ***MOUSE*** button to change the width of the column

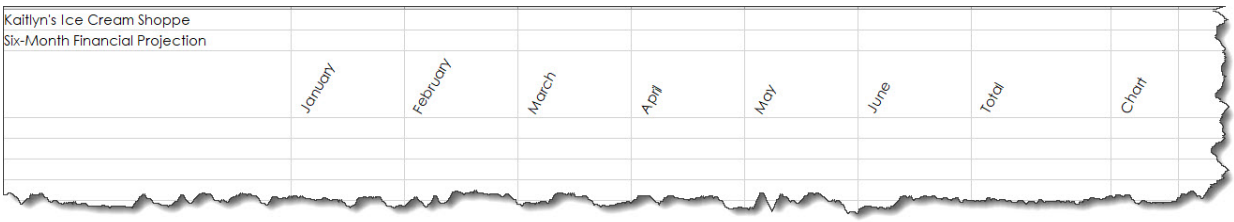
Step 3. ***CLICK*** column ***B*** to select the column ***DRAG*** through column heading ***G*** to select the range of columns that will be changed

- Move the pointer to the ***boundary between column*** headings ***B and C*** in preparation of resizing column B
- ***DRAG*** the ***POINTER*** to the right until the ScreenTip displays the desired width, Width: ***14.50 (121 pixels)*** in this case.
- ***RELEASE*** your ***MOUSE*** to confirm the expansion of the columns ***B:G***



Step 4. If necessary, ***scroll*** the worksheet so that ***column H*** is ***visible***

- ***EXPAND*** the ***COLUMN*** to ***18 (149 pixels)***



SAVE YOUR UPDATES

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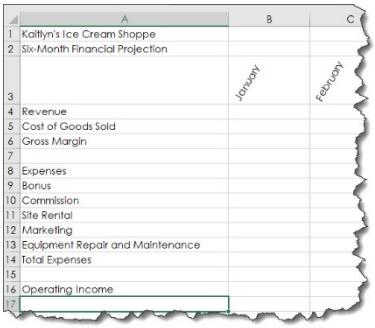
ENTER AND INDENT ROW TITLES

Step 1. Enter the following information in ***column A*** for each of the designated rows:



- CELL A4 – ***Revenue***
- CELL A5 – ***Cost of Goods Sold***
- CELL A6 – ***Gross Margin***
- CELL A8 – ***Expenses***
- CELL A9 – ***Bonus***
- CELL A10 – ***Commission***
- CELL A11 – ***Site Rental***
- CELL A12 – ***Marketing***
- CELL A13 – ***Equipment Repair and Maintenance***
- CELL A14 – ***Total Expenses***
- CELL A16 – ***Operating Income***

INDENT THE ROW TITLES

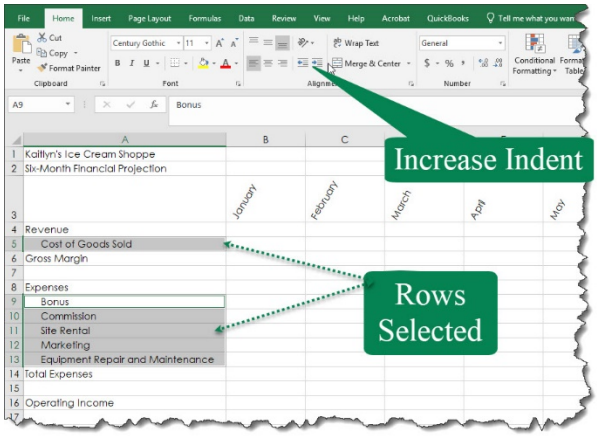
Excel allows you to indent text in cells. The following steps enter the row titles in column A and indent several of the row titles to create a visual hierarchy. You can create a hierarchy by indenting some of t hero titles, like in an outline or table of contents.

Step 2. ***CLICK*** the ***HOME TAB*** to view the home ribbon band

Step 3. ***SELECT CELL A5***

Step 4. ***HOLD*** down your ***CTRL*** key and ***SELECT CELLS A9:A13***. This selects a split range of cells to be formatted.

Step 5. In the alignment group, ***CLICK*** the ***INCREASE INDENT*** option ***TWICE***



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

COPY A RANGE OF CELLS TO A NONADJACENT DESTINATION AREA

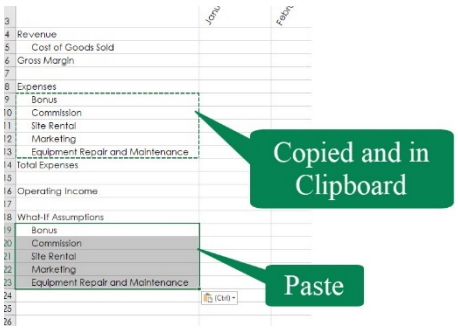
The What-If Assumptions section should be placed in an area of the worksheet that is accessible yet does not impair the view of the main section of the worksheet. In this case, the What-If Assumptions will be placed below the calculations in the worksheet.

Step 6. ***CLICK*** on ***CELL A18***

- Type ***What-If Assumptions***

Step 7. ***SELECT*** the range ***A9:A13***

- ***CLICK*** the ***COPY*** button (home tab | clipboard group)
- ***CLICK*** on ***CELL A19***
- ***CLICK*** the ***PASTE*** button to copy the values and formats of the last items placed in the clipboard.



INSERT A ROW

Step 8. ***RIGHT-CLICK*** the heading for ***ROW 20***

Step 9. ***CLICK*** on the ***INSERT*** option in the short-cut menu that appears. This will insert a new blank row above the Commission area.

Step 10. ***CLICK*** the blank ***CELL A20***

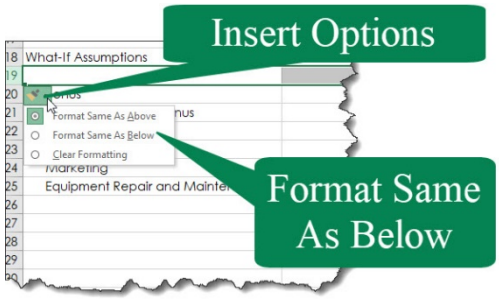
- Type ***Sales Revenue for Bonus***

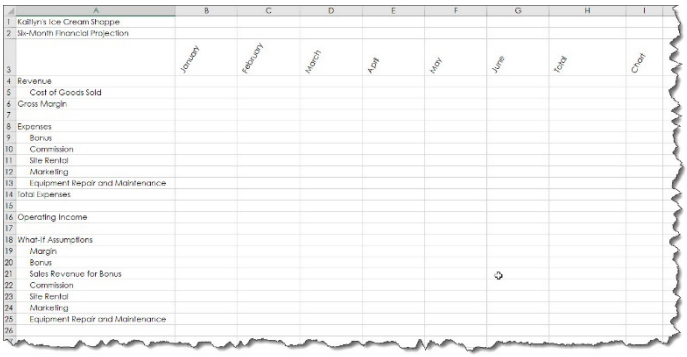
Step 11. ***RIGHT-CLICK*** the heading for ***ROW 19***

Step 12. ***CLICK*** on the ***INSERT*** option in the short-cut menu that appears. This will insert a new blank row above the Bonus area.

Step 13. ***CLICK*** the blank ***CELL A19***

- ***CLICK*** the ***INSERT OPTIONS*** button
- In the menu that appears select ***FORMAT SAME AS BELOW***. This will make the cell using the same formatting with the indents as the bonus cell.
- Type ***Margin***





SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ENTER NUMBERS AND FORMAT SYMBOLS

When a number is entered with a format symbol, Excel displays it with the assigned format. Valid format symbols include the dollar sign ($), comma (,), and percent sign (%).

If you enter a whole number, it appears without any decimal places. If you enter a number with one or more decimal places and a format symbol, Excel displays the number with two decimal places.

Step 1. Enter the information shown in the illustration into your spreadsheet. Each amount should be in the appropriate cell ***B19*** enter ***78.75%***; cell ***B20*** enter ***3,500.00***; cell ***B21*** enter ***65,000.00***; cell ***B22*** enter ***25.00%***; cell ***B23*** enter ***10.00%***; cell ***B24*** enter ***5.00%***; cell ***B25*** enter ***3.50%***

	A	B
16	Operating Income	
17		
18	What-If Assumptions	
19	Margin	78.75%
20	Bonus	3,500.00
21	Sales Revenue for Bonus	65,000.00
22	Commission	25.00%
23	Site Rental	10.00%
24	Marketing	5.00%
25	Equipment Repair and Maintenance	3.50%
26		

PROJECTED MONTHLY SALES

Step 2. Enter the projected revenue for each month. ***CLICK*** the ***HOME TAB*** to display the home ribbon.

Step 3. Enter the information shown in the illustration into your spreadsheet. Each amount should be in the appropriate cell ***B4*** enter ***55,000.00***; cell ***C4*** enter ***62,500.00***; cell ***D4*** enter ***67,000.00***; cell ***E4*** enter ***90,250.00***; cell ***F4*** enter ***77,500.00;*** cell ***G4*** enter ***74,750.00***

	A	B	C	D	E	F	G	H
1	Kaitlyn's Ice Cream Shoppe							
2	Six-Month Financial Projection							
3		January	February	March	April	May	June	Total
4	Revenue	55,000.00	62,500.00	67,000.00	90,250.00	77,500.00	74,750.00	
5	Cost of Goods Sold							
6	Gross Margin							
7								
8	Expenses							

CALCULATE THE REVENUE TOTAL

Step 4. ***CLICK*** on the ***HOME TAB*** to display the home ribbon band

Step 5. ***CLICK*** cell ***H4***

Step 6. In the editing group, ***CLICK*** on the ***AutoSum*** option. Excel automatically selects the numbers in row 4 and places their cell reference into the formula

Step 7. ***TAP ENTER*** on your keyboard to confirm the selection

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ENTER AND FORMAT THE SYSTEM DATE

A simple way to create a date stamp is to use the NOW function to enter the system date tracked by your computer. The NOW function is one of 24 date and time functions available in Excel. When assigned to a cell, the NOW function returns a number that corresponds to the system date and time beginning with December 31, 1899.

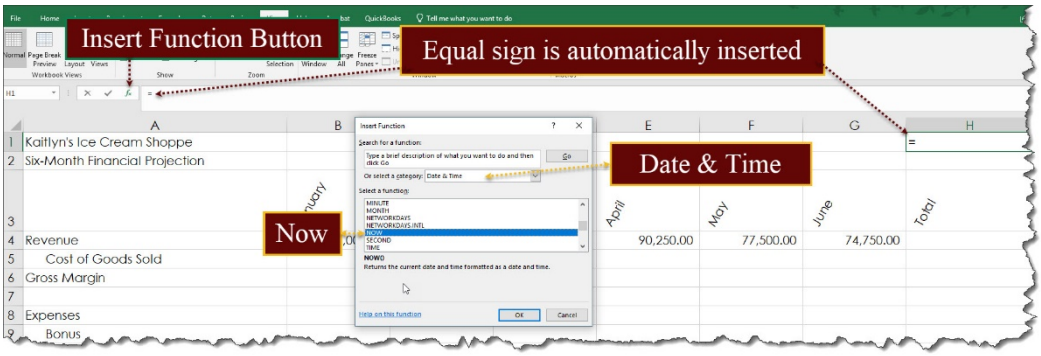
Step 8. ***SELECT*** cell ***H1***

Step 9. ***CLICK*** the ***INSERT FUNCTION*** button on the Excel toolbar. Notice how the function button has automatically inserted an equal sign into the formula bar and the cell.

Step 10. In the dialog box that opens, ***SELECT*** the ***DATE & TIME*** category

Step 11. Scroll through the function list for the ***NOW*** function ***CLICK*** to select the function

Step 12. ***CLICK*** on the ***OK*** button to confirm your selection.



Step 13. ***CLICK*** on ***OK*** a second time to confirm the Functions Arguments box that appears.

Step 14. ***RIGHT-CLICK*** cell ***H1*** to display a shortcut menu and mini toolbar.

Step 15. ***CLICK*** the ***FORMAT CELL*** option to open the dialog box

Step 16. If necessary, ***CLICK*** the ***NUMBER tab***.

Step 17. ***CLICK*** the ***DATE*** option in the Category list

Step 18. Scroll down the ***TYPE*** list and then ***CLICK 3/14/2012*** to display a sample of the data in a sample are in the dialog box

Step 19. ***CLICK*** on the ***OK*** button to confirm your entry.

Step 20. ***DOUBLE-CLICK*** the border between columns ***H*** and ***I*** to change the width of the column to best fit.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ENTER FORMULAS CONTAINING ABSOLUTE CELL REFERENCES

The calculations for each column (month) are the same, except for the reference to the projected monthly revenue in row 4, which varies according to the month (B4 for January, C4 for February, and so on). Thus, the formulas for January can be entered in column B and then copied to columns C through G.

FORMULA 1: COST OF GOODS = Revenue * (1-Margin %)

Step 1. ***CLICK*** cell ***B5*** for the value representing the ***Cost of Goods Sold*** for ***January.***

- ***HIT =*** on your keyboard to start the formula
- ***CLICK*** cell ***B4*** (January Revenue)
- ***HIT **** on your keyboard
- ***HIT (1-*** on your keyboard
- ***CLICK*** cell ***B19***. This is one of the What-If Assumptions; therefore, it is an absolute value
- ***HIT*** the ***F4*** function key to make the formula absolute.
- ***HIT)*** to close the formula
- ***HIT*** your ***ENTER*** key to confirm

FORMULA 2: GROSS MARGIN = Revenue-Cost of Goods Sold

Step 2. ***CLICK*** cell ***B6*** for the value representing the ***Gross Margin*** for ***January.***

- ***HIT =*** on your keyboard to start the formula
- ***CLICK*** cell ***B4*** (January Revenue)
- ***HIT -*** on your keyboard
- ***CLICK*** cell ***B5*** (January Cost of Goods Sold)
- ***HIT*** your ***ENTER*** key to confirm

FORMULA 3: BONUS = If(Revenue>=Sales Revenue for Bonus, Bonus, 0)

IF Statement is one of the most popular instructions among the Decision-Making statements. IF Statement gives the desired intelligence to a program, so that it can take decisions based on a criterion and most importantly decide the program flow.

According to Microsoft Excel, IF statement is defined as a function which “checks whether a condition is met, returns one value if True and another value if False”.

In plain simple English IF function is an instruction that checks any condition, if the condition is found to be TRUE then it returns a predefined value however if the condition is False, it returns a different predefined value.

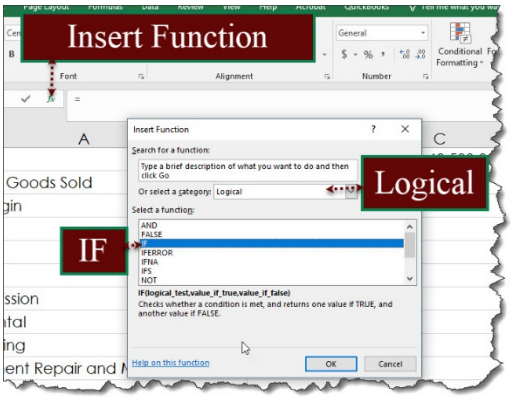
The syntax of If Function in Excel is as follows:

=IF (**Logic_Test**, **Value_if_True**, **Value_if_False**)

- ‘Logic_Test’ refers to the expression that is to be evaluated.
- ‘Value_if_True’ is the output of IF Statement if the ‘Logic_Test’ is TRUE.

- ‘Value_if_False’ is the output of IF Statement if the ‘Logic_Test’ is FALSE.

The logical test for the IF function you will be creating in this sheet is looking to see if the ***Revenue is greater than or equal to the Sales Revenue for the Bonus***. If the result is true a bonus amount is applied. If it is false, there is no bonus applied. Follow theses steps to build the formula:



Step 3. ***CLICK*** on ***CELL B9*** to start the formula

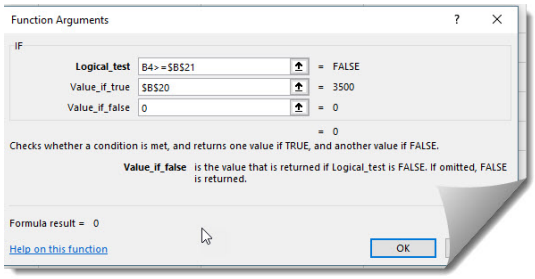
- ***CLICK*** the ***INSERT FUNCTION***
- ***SELECT*** the ***LOGICAL*** category and find ***IF*** on the function list displayed
- ***CLICK*** on the ***OK*** button

Step 4. A functions argument box will appear. ***CLICK*** inside the ***LOGICAL TEST*** area. Once you are inside the box, you can begin building the logical test argument.

- ***CLICK*** cell B4
- Type **>=**
- ***CLICK*** cell ***B21***. Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key. The logical test is complete. Now you need to finish the true portion.

Step 5. ***CLICK*** inside the ***Value if true*** area.

- ***CLICK*** cell ***B20***. Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key. The true portion of the formula is complete. Now you need to finish the false portion.



Step 6. ***CLICK*** inside the ***Value if false*** area.

- ***HIT*** the ***0*** on the keyboard. With this you are simply confirming there is no bonus for revenue that is under the Sales Revenue for Bonus.

Step 7. ***CLICK*** on the ***OK*** button to finish the formula. You may note that this first result is zero. That is because the logical test was false. You will see a result develop when we copy these formulas to the other locations.

FORMULA 4: **COMMISSION = Revenue * Commission %**

Step 8. ***CLICK*** cell ***B10*** (cell represents ***Commission*** for ***January***)

- ***HIT =*** to start the formula
- ***CLICK*** cell ***B4***
- ***HIT **** to begin the multiplication
- ***CLICK*** cell ***B22*** (cell representing the Commission %). Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key on your keyboard

- ***HIT*** your ***ENTER*** key to end the formula.

FORMULA 5: **SITE RENTAL = Revenue * Site Rental %**

Step 9. ***CLICK*** cell ***B11*** (cell represents ***Site Rental*** for ***January***)

- ***HIT =*** to start the formula
- ***CLICK*** cell ***B4***
- ***HIT **** to begin the multiplication
- ***CLICK*** cell ***B23*** (cell representing the Site Rental %). Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key on your keyboard
- ***HIT*** your ***ENTER*** key to end the formula.

FORMULA 6: **MARKETING = Revenue * Marketing %**

Step 10. ***CLICK*** cell ***B12*** (cell represents ***Marketing*** for ***January***)

- ***HIT =*** to start the formula
- ***CLICK*** cell ***B4***
- ***HIT **** to begin the multiplication
- ***CLICK*** cell ***B24*** (cell representing the Marketing %). Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key on your keyboard
- ***HIT*** your ***ENTER*** key to end the formula.

FORMULA 7: **EQUIPMENT REPAIR AND MAINTENANCE = Revenue * Equipment Repair and Maintenance %**

Step 11. ***CLICK*** cell ***B13*** (cell represents ***Equipment Repair and Maintenance*** for ***January***)

- ***HIT =*** to start the formula
- ***CLICK*** cell ***B4***
- ***HIT **** to begin the multiplication
- ***CLICK*** cell ***B25*** (cell representing the Equipment Repair and Maintenance %). Since this is one of the What-If Assumptions, it must be an absolute value
- ***HIT*** the ***F4*** function key on your keyboard
- ***HIT*** your ***ENTER*** key to end the formula.

FORMULA 8: **TOTAL EXPENSES**

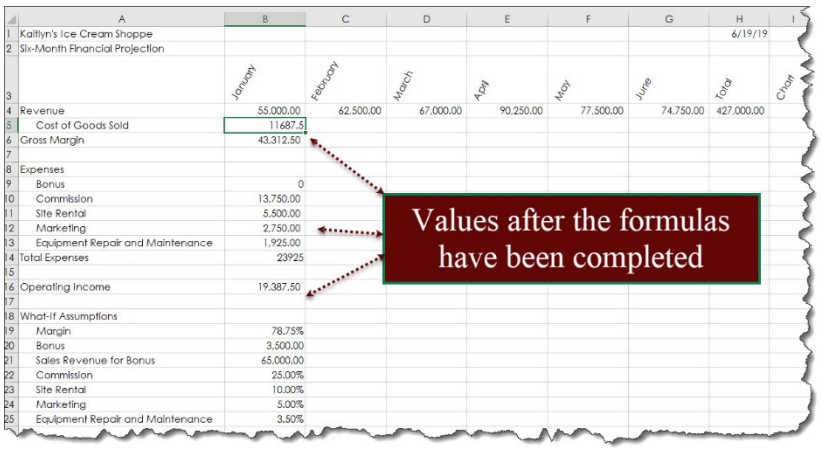
Step 12. ***CLICK*** cell ***B14*** (cell represents ***Total Expenses*** for ***January***)

- In the editing group of the Home ribbon, ***CLICK*** on ***AutoSum.*** Check to make sure the formula has selected cells B9:B13
- ***HIT*** your ***ENTER*** key to end the formula

FORMULA 9: **OPERATING INCOME = Gross Margin – Total Expenses**

Step 13. ***CLICK*** cell ***B16*** (cell represents ***Operating Income*** for ***January***)

- ***HIT =*** to start the formula
- ***CLICK*** cell ***B6*** (Gross Margin)
- ***HIT –*** to begin the subtraction
- ***CLICK*** cell ***B14*** (Total Expenses)
- ***HIT*** your ***ENTER*** key to end the formula



	A	B	C	D	E	F	G	H	I
1	Kaitlyn's Ice Cream Shoppe							6/19/19	
2	Six-Month Financial Projection								
3		January	February	March	April	May	June	Total	Chart
4	Revenue	55,000.00	62,500.00	67,000.00	90,250.00	77,500.00	74,750.00	427,000.00	
5	Cost of Goods Sold	11687.5							
6	Gross Margin	43,312.50							
7									
8	Expenses								
9	Bonus	0							
10	Commission	13,750.00							
11	Site Rental	5,500.00							
12	Marketing	2,750.00							
13	Equipment Repair and Maintenance	1,925.00							
14	Total Expenses	23925							
15									
16	Operating Income	19,387.50							
17									
18	What-If Assumptions								
19	Margin	78.75%							
20	Bonus	3,500.00							
21	Sales Revenue for Bonus	65,000.00							
22	Commission	25.00%							
23	Site Rental	10.00%							
24	Marketing	5.00%							
25	Equipment Repair and Maintenance	3.50%							

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

COMPLETE THE FORMULAS AND ADD A SPARKLINE CHART

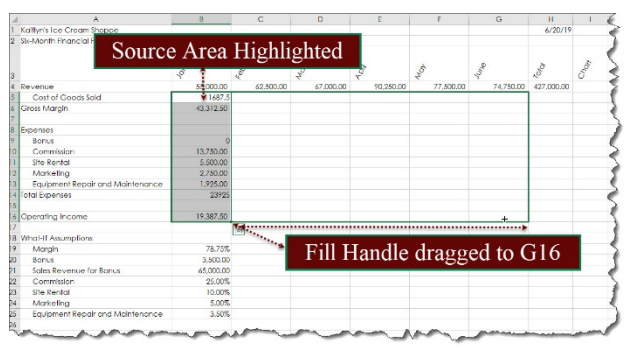
Sometimes you may want to condense a range of date into a small chart to show a trend or variation in the range, and the standard charts in Excel may be too large or extensive for your needs. A Sparkline chart provides a simple way to show trends and variations in a range of data. This next activity will include finishing the formulas in the worksheet and setting up a Sparkline chart to display the results from each row of data.

COPY FORMULAS WITH ABSOLUTE CELL REFERENCES USING THE FILL HANDLE

The following steps use the fill handle to copy the January formulas in column B to the other five months in columns C through G.

Step 1. ***SELECT*** the ***RANGE B5:B16***

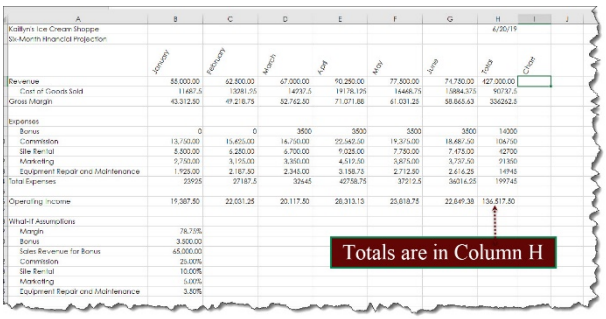
- ***POINT*** to the ***FILL HANDLE*** in the lower right corner of cell, ***B16*** in this case, to display the crosshair pointer.
- ***DRAG*** the ***FILL HANDLE*** to the right to copy the formulas from the source area, B5:B16 in this case, to the destination area, ***C5:G16*** in this case, and display the calculated amounts.



- ***RELEASE*** your ***MOUSE*** the formula amounts will fill in using the absolute cell references created earlier.

DETERMINE ROW TOTALS IN NONADJACENT CELLS

The following steps determine the row totals in column H. To determine the row totals using the Sum button, select only the cells in column H containing numbers in adjacent cells to the left. If totals are calculated on rows without data, Excel will place a zero in the row. We avoid this problem by following these steps:



Step 2. ***SELECT*** the ***RANGE H5:H6***

Step 3. ***PRESS*** the ***CTRL*** key and hold it down

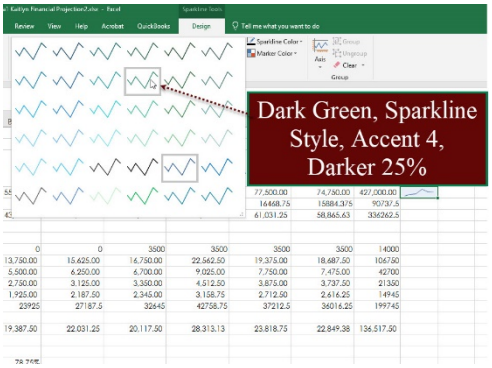
- ***SELECT*** the ***RANGE H9:H14***
- ***SELECT*** the ***CELL H16***
- ***CLICK*** the ***AutoSum BUTTON*** (Home Tab, Editing group). The totals are automatically entered in column H.

ADD SPARKLINE CHART TO THE WORKSHEET

A sparkline chart is a good choice because it shows trends over the six-month period for each row of data. If necessary, scroll the worksheet so that both columns B and I and row 3 are visible on the screen.

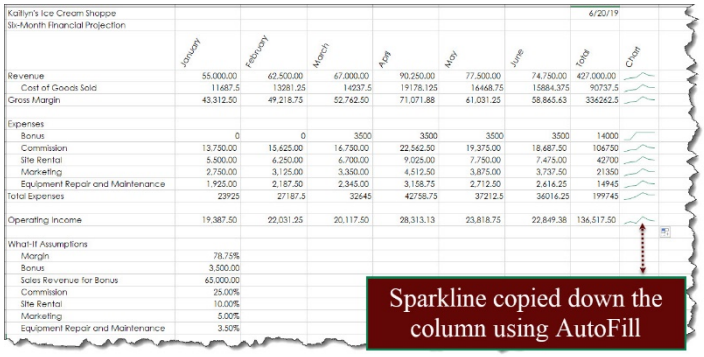
Step 4. ***SELECT*** cell ***I4***

Step 5. ***CLICK*** the ***INSERT TAB*** to display the insert ribbon



- In the Sparklines group, ***CLICK*** the ***LINE*** option
- ***CLICK INSIDE*** the ***DATA RANGE*** dialog box
- ***SELECT*** the ***RANGE B4:G4***
- ***RELEASE*** the ***MOUSE*** button
- ***HIT*** the ***ENTER*** button
- ***CLICK*** on the ***OK*** option
- ***CLICK*** the ***DESIGN*** option for the Sparkline Tools
- In the style group, ***CLICK*** the ***MORE*** option to display the Sparkline gallery
- Click Sparkline Style ***Dark Green, Sparkline Style, Accent 4, Darker 25%***

- ***CLICK*** on the ***fill handle*** in ***CELL I4***
- ***DRAG*** your ***MOUSE*** to ***I16***. This copies the Sparkline chart throughout all the formulas on the sheet.



Kaitlyn's Ice Cream Shoppe							6/20/19	
Six-Month Financial Projection								
	January	February	March	April	May	June	Totals	Chart
Revenue	55,000.00	62,500.00	67,000.00	90,250.00	77,500.00	74,750.00	427,000.00	
Cost of Goods Sold	11687.5	13281.25	14237.5	19178.125	16468.75	15884.375	90737.5	
Gross Margin	43,312.50	49,218.75	52,762.50	71,071.88	61,031.25	58,865.63	336262.5	
Expenses								
Bonus	0	0	3500	3500	3500	3500	14000	
Commission	13,750.00	15,625.00	16,750.00	22,562.50	19,375.00	18,687.50	106750	
Site Rental	5,500.00	6,250.00	6,700.00	9,025.00	7,750.00	7,475.00	42700	
Marketing	2,750.00	3,125.00	3,350.00	4,512.50	3,875.00	3,737.50	21350	
Equipment Repair and Maintenance	1,925.00	2,187.50	2,345.00	3,158.75	2,712.50	2,616.25	14945	
Total Expenses	23925	27187.5	32645	42758.75	37212.5	36016.25	199745	
Operating Income	19,387.50	22,031.25	20,117.50	28,313.13	23,818.75	22,849.38	136,517.50	
What-If Assumptions								
Margin	78.75%							
Bonus	3,500.00							
Sales Revenue for Bonus	65,000.00							
Commission	25.00%							
Site Rental	10.00%							
Marketing	5.00%							
Equipment Repair and Maintenance	3.50%							

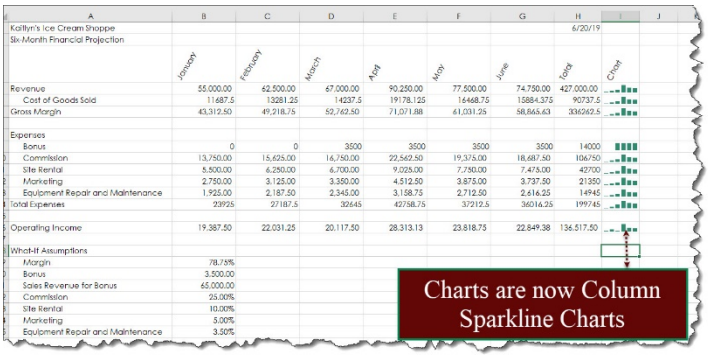
Sparkline copied down the column using AutoFill

CHANGE THE SPARKLINE TYPE

In addition to the change in the Sparkline Chart style, you can also change the type of chart.

Step 1. ***SELECT*** the range ***I4:I16***

- ***CLICK*** the ***SPARKLINE TOOLS*** design tab to make it the active tab.
- ***CLICK*** the ***CONVERT TO COLUMN SPARKLINE*** button on the type group of the design tab.



Kaitlyn's Ice Cream Shoppe							6/20/19	
Six-Month Financial Projection								
	January	February	March	April	May	June	Totals	Chart
Revenue	55,000.00	62,500.00	67,000.00	90,250.00	77,500.00	74,750.00	427,000.00	
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Gross Margin	43,312.50	49,218.75	52,762.50	71,071.88	61,031.25	58,865.63	336262.5	
Expenses								
Bonus	0	0	3500	3500	3500	3500	14000	
Commission	13,750.00	15,625.00	16,750.00	22,562.50	19,375.00	18,687.50	106750	
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Marketing	2,750.00	3,125.00	3,350.00	4,512.50	3,875.00	3,737.50	21350	
Equipment Repair and Maintenance	1,925.00	2,187.50	2,345.00	3,158.75	2,712.50	2,616.25	14945	
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What-If Assumptions								
Margin	78.75%							
Bonus	3,500.00							
Sales Revenue for Bonus	65,000.00							
Commission	25.00%							
Site Rental	10.00%							
Marketing	5.00%							
Equipment Repair and Maintenance	3.50%							

Charts are now Column Sparkline Charts

Step 2. ***CLICK*** cell ***I18*** to move away from the Sparkline feature.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

FORMAT THE WORKSHEET

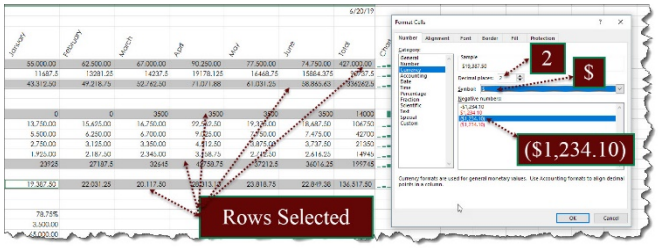
So far, the worksheet is uninteresting and needs some adjustments to the appearance. This section completes the formatting process for this worksheet.

Step 1. ***SELECT*** the ***RANGE B4:H4*** to prepare for formatting.

Step 2. ***HOLD DOWN*** the ***CTRL*** key. Select the following cells:

- ***B6:H6, B9:H9, B14:H14***, and ***B16:H16***
- ***RELEASE*** the ***CTRL*** key

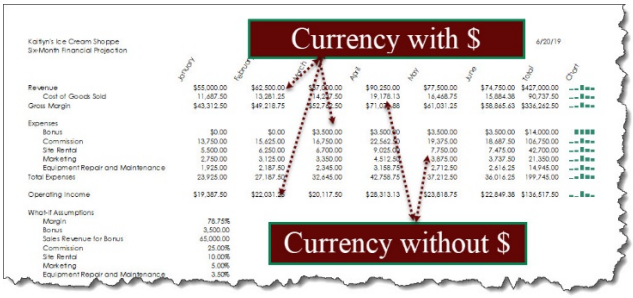
- On the ***HOME TAB*** click the number group to display the ***FORMAT CELLS DIALOG BOX***
- In the Category list ***CLICK*** on the ***CURRENCY*** option
- Decimal Places: ***2***
- Symbol: ***$***
- Negative Numbers: (black) ***($1,234.10)***
- ***CLICK*** on the ***OK*** button to confirm



Step 3. ***SELECT*** the ***RANGE B5:H5***

Step 4. ***HOLD DOWN*** the ***CTRL*** key.

- ***SELECT*** cells ***B10:H13***
- ***RELEASE*** the ***CTRL*** key
- On the ***HOME TAB*** click the number group to display the ***FORMAT CELLS DIALOG BOX***
- In the category list, ***CLICK*** on ***CURRENCY***
- Decimal Places: ***2***
- Symbol: ***NONE***
- Negative Numbers: (black) ***($1,234.10)***
- ***CLICK*** the ***OK*** option to complete the number formats



FORMAT THE WORKSHEET TITLES

Step 1. ***CLICK*** the ***HOME TAB*** to display the home ribbon

Step 2. Hold down ***CTRL*** and ***HIT*** the ***HOME*** key. This will take you to position ***A1*** of the document.

- ***CLICK*** the ***BOLD*** button in the font group
- ***INCREASE*** the ***FONT*** to ***28*** pts

Step 3. ***CLICK*** cell ***A2***

- ***INCREASE*** the ***FONT*** to ***16*** pts

Step 4. ***SELECT*** the ***RANGE A1:I2***

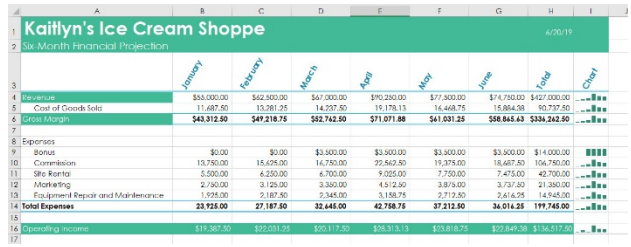
- Change the ***FILL COLOR*** to ***Green, Accent 4***. This will add a background color the selected range.
- Change the ***FONT COLOR*** to ***White, Background 1***

Step 5. ***SELECT*** the ***RANGE A3:I3***

- ***APPLY*** the ***HEADING*** 2 style

Step 6. ***SELECT*** the ***RANGE A6:H6***

- HOLD ***DOWN*** the ***CTRL*** key
- ***SELECT A14:H14, A16:H16***
- ***APPLY*** the ***TOTAL*** cell style



	A	B	C	D	E	F	G	H	I
1	Kaitlyn's Ice Cream Shoppe							6/20/19	
2	Six-Month Financial Projection								
3		January	February	March	April	May	June	Total	Chart
4	Revenue	$55,000.00	$62,500.00	$67,000.00	$90,250.00	$77,500.00	$74,750.00	$427,000.00	
5	Cost of Goods Sold	11,687.50	13,281.25	14,237.50	19,178.13	16,468.75	15,884.38	90,737.50	
6	Gross Margin	$43,312.50	$49,218.75	$52,762.50	$71,071.88	$61,031.25	$58,865.63	$336,262.50	
7									
8	Expenses								
9	Bonus	$0.00	$0.00	$3,500.00	$3,500.00	$3,500.00	$3,500.00	$14,000.00	
10	Commission	13,750.00	15,625.00	16,750.00	22,562.50	19,375.00	18,687.50	106,750.00	
11	Site Rental	5,500.00	6,250.00	6,700.00	9,025.00	7,750.00	7,475.00	42,700.00	
12	Marketing	2,750.00	3,125.00	3,350.00	4,512.50	3,875.00	3,737.50	21,350.00	
13	Equipment Repair and Maintenance	1,925.00	2,187.50	2,345.00	3,158.75	2,712.50	2,616.25	14,945.00	
14	Total Expenses	23,925.00	27,187.50	32,645.00	42,758.75	37,212.50	36,016.25	199,745.00	
15									
16	Operating Income	$19,387.50	$22,031.25	$20,117.50	$28,313.13	$23,818.75	$22,849.38	$136,517.50	
17									

Step 7. ***SELECT A4***

- ***FILL*** the ***CELL Green, Accent 4***
- Change the ***FONT COLOR*** to ***White, Background 1***
- ***DOUBLE-CLICK*** the ***FORMAT PAINTER***

Step 8. ***CLICK*** cell ***A6*** to format the shading and font color from A4 to A6

Step 9. With the format painter still active, ***CLICK*** and ***DRAG*** through ***A16:H16***

Step 10. Apply ***CURRENCY*** style to ***B16:H16***

FORMAT THE WHAT-IF ASSUMPTIONS

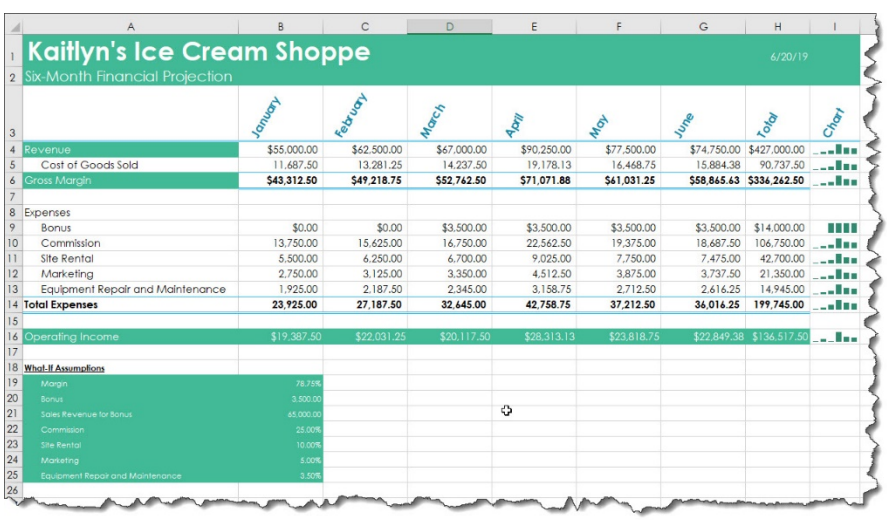
The following steps format the What-IF Assumptions table.

Step 11. ***SELECT*** cell ***A18***

- Change the ***FONT*** size to ***8 pts***
- ***BOLD*** and ***UNDERLINE*** the ***TEXT***

Step 12. ***SELECT*** the ***RANGE A19:B25***

- Change the ***FONT*** size to ***8 pts***
- Change the ***FILL COLOR*** to ***Green, Accent 4***. This will add a background color the selected range.
- Change the ***FONT COLOR*** to ***White, Background 1***
- ***CLICK AWAY*** from the ***RANGE*** to deselect it.



	A	B	C	D	E	F	G	H	I
1	Kaitlyn's Ice Cream Shoppe							6/20/19	
2	Six-Month Financial Projection								
3		January	February	March	April	May	June	Total	Chart
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7									
8	Expenses								
9	Bonus	$0.00	$0.00	$3,500.00	$3,500.00	$3,500.00	$3,500.00	$14,000.00	
10	Commission	13,750.00	15,625.00	16,750.00	22,562.50	19,375.00	18,687.50	106,750.00	
11	Site Rental	5,500.00	6,250.00	6,700.00	9,025.00	7,750.00	7,475.00	42,700.00	
12	Marketing	2,750.00	3,125.00	3,350.00	4,512.50	3,875.00	3,737.50	21,350.00	
13	Equipment Repair and Maintenance	1,925.00	2,187.50	2,345.00	3,158.75	2,712.50	2,616.25	14,945.00	
14	Total Expenses	23,925.00	27,187.50	32,645.00	42,758.75	37,212.50	36,016.25	199,745.00	
15									
16	Operating Income	$19,387.50	$22,031.25	$20,117.50	$28,313.13	$23,818.75	$22,849.38	$136,517.50	
17									
18	What-If Assumptions								
19	Margin	78.75%							
20	Bonus	3,500.00							
21	Sales Revenue for Bonus	65,000.00							
22	Commission	25.00%							
23	Site Rental	10.00%							
24	Marketing	5.00%							
25	Equipment Repair and Maintenance	3.50%							
26									

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

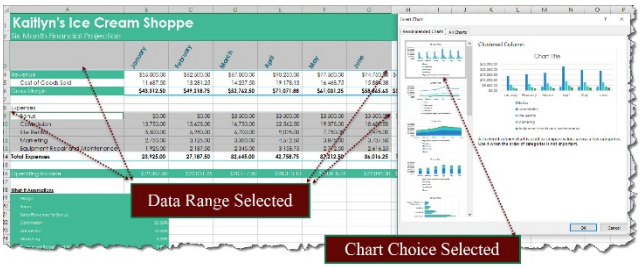
ADDING A CLUSTERED COLUMN CHART TO THE WORKBOOK

Charts can be either embedded in a worksheet or placed on a separate chart sheet. The clustered column chart will reside on its own sheet because if placed on the worksheet, it would not be visible when the worksheet first opens and could be missed.

Step 1. ***CLICK*** on the ***INSERT TAB*** to view the insert ribbon

Step 2. ***SELECT*** the ***RANGE A3:G3***

- ***HOLD*** down your ***CTRL*** key
- ***SELECT*** the ***RANGE A9:G13***



Step 3. In the charts group, ***CLICK*** the ***REOMMENDED CHARTS*** tab to activate the menu

Step 4. ***CLICK*** the first ***CLUSTERED COLUMN RECOMMENDATION***

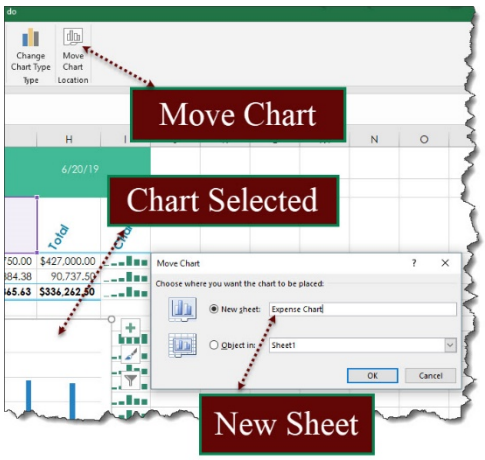
Step 5. ***CLICK OK***

Step 6. After Excel creates the chart, ***CLICK*** the ***MOVE CHART*** button in the location group

Step 7. ***CLICK NEW SHEET***

Step 8. Type ***Expense Chart*** as the sheet name

Step 9. ***CLICK OK***



ADD THE CHART TITLE

Step 10. ***CLICK*** anywhere in the ***CHART TITLE*** to select it

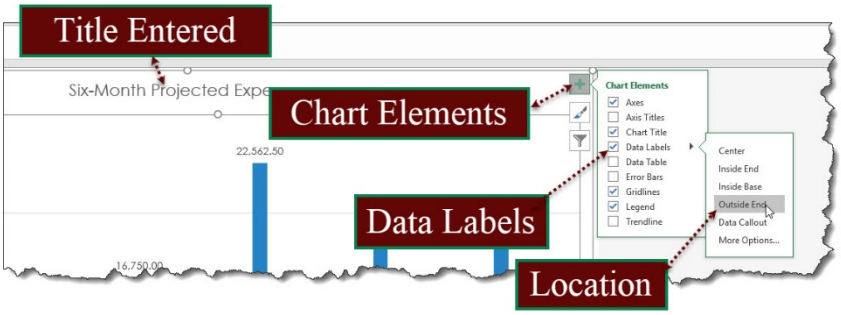
Step 11. Type ***Six-Month Projected Expenses*** as the title

ADD DATA LABELS

Step 12. ***CLICK*** the ***CHART ELEMENTS*** button to display the Chart Elements gallery

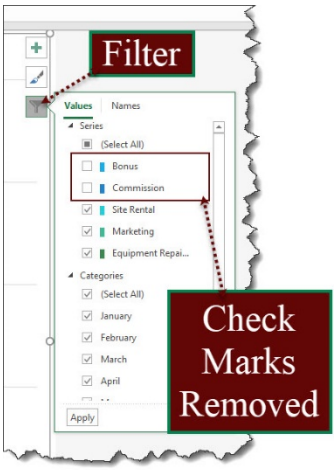
Step 13. ***POINT*** to the ***DATA LABELS*** option

- ***CLICK*** the ***MORE*** option in data labels to display the alternate menu that appears to the right of the option.
- ***CLICK*** the ***OUTSIDE END*** option
- ***CLICK*** the ***CHART ELEMENT*** button to close the gallery



APPLY CHART FILTERS

The amounts for the bonus in January and February are zero. Whit some data you may find that certain data series or categories make it difficult to examine difference and patterns between other series or categories. Excel allows you to easily filter data series and categories to allow more in-depth examinations of subsets of data. In this case, filters can be used to temporarily remove the compensation categories Bonus and Commission from the chart to allow a comparison across the non-compensation expenses.



Step 14. ***CLICK*** the ***CHART FILTERS*** button on the chart to display the Chart Filters gallery

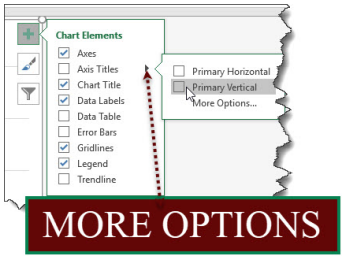
- In the Series section, ***CLICK*** the ***BONUS*** and ***COMMISSION*** to remove the check marks
- ***CLICK*** the ***APPLY*** option

ADD AN AXIS TITLE TO THE CHART

Step 15. ***CLICK*** anywhere in the ***CHART OUTSIDE*** area to select it

Step 16. ***CLICK*** the ***CHART ELEMENTS*** button to display the Chart Elements gallery

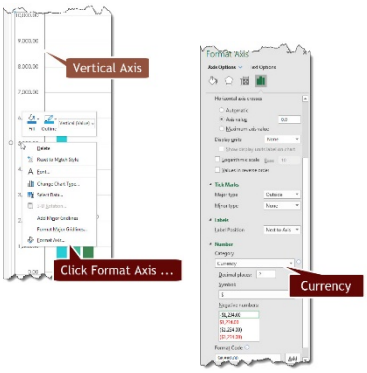
- ***POINT*** to the ***AXIS TITLES***
- ***CLICK*** on the ***ARROW*** to display the menu options
- ***CLICK*** the ***PRIMARY VERTICAL*** option
- ***CLICK*** the ***CHART ELEMENTS*** button to remove the Chart Elements gallery



Step 17. ***SELECT*** the ***PLACEHOLDER TEXT*** in the ***VERTICAL AXIS*** title

Step 18. ***RIGHT CLICK*** the ***VERTICAL AXES LABELS***

Step 19. In the ***NUMBER*** category select ***CURRENCY***



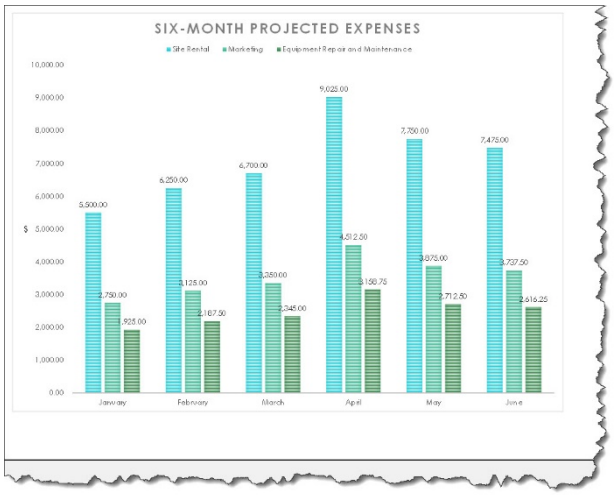
CHANGE THE CHART STYLE

When creating charts, it is not unusual to change your mind on what type of chart should be shown. These are quick instructions on how to change the chart style:

Step 20. With the chart selected, ***CLICK*** the ***DESIGN TAB*** (Chart Tools)

Step 21. In the Chart Styles group, ***SELECT*** the ***MORE*** option to expand the menu

Step 22. ***CLICK*** on the ***STYLE 3*** option to change the chart



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ORGANIZING THE WORKBOOK

Once the content of the workbook is complete, you can address the organization of the workbook. If the workbook has multiple worksheets, place the worksheet on top that you want the reader to see first. The default sheet names in Excel are not descriptive. Renaming the sheets with descriptive names helps the reader find information that he or she is looking for. Modifying the sheet tabs using color further distinguishes multiple sheets from each other.

Step 1. ***CHANGE*** the ***COLOR*** of the ***Expense Chart*** sheet tab to ***Green, Accent 4***

Step 2. ***DOUBLE-CLICK*** the sheet tab labeled ***SHEET 1***

- Type ***Six-Month Financial Projection*** as the new sheet tab name
- ***HIT*** the ***ENTER*** key to confirm your change.
- ***CHANGE*** the ***sheet tab color*** of the Six-Month Financial Projection sheet to ***Blue Accent 2***

Step 3. ***SELECT*** an ***empty cell*** in the worksheet to confirm your change

REORDER THE SHEET TABS AND CHECK SPELLING

Step 4. ***DRAG*** the ***Six-Month Financial Projection SHEET*** to the ***LEFT*** so that it precedes the Expense Chart sheet

Step 5. With the Six-Month Financial Project sheet active, press ***CTRL*** and ***TAP*** the ***HOME (CTRL+HOME)*** key on your keyboard. This will automatically take your mouse to cell A1 of the worksheet.

Step 6. ***HOLD DOWN*** the ***CTRL*** key then ***CLICK*** the ***EXPENSE CHART*** sheet. This groups the sheets and enables the edit features to work on multiple sheets at the same time.

Step 7. ***DISPLAY*** the ***REVIEW*** TAB

Step 8. ***CLICK*** the ***SPELLING*** option in the proofing group of the review ribbon band

Step 9. ***Correct any errors*** and ***CLICK*** on the ***OK*** option to confirm

PREVIEW THE WORKSHEET

Step 10. With the ***Six-Month Financial Projection*** sheet selected, ***CLICK*** on ***FILE*** to open the ***Backstage view***

Step 11. ***CLICK*** the ***PRINT TAB*** in the Backstage view to ***display the Print gallery***

Step 12. ***CLICK*** the ***PORTRAIT ORIENTATION*** button

Step 13. ***SELECT*** the ***LANDSCAPE ORIENTATION*** to confirm the new settings for both sheets

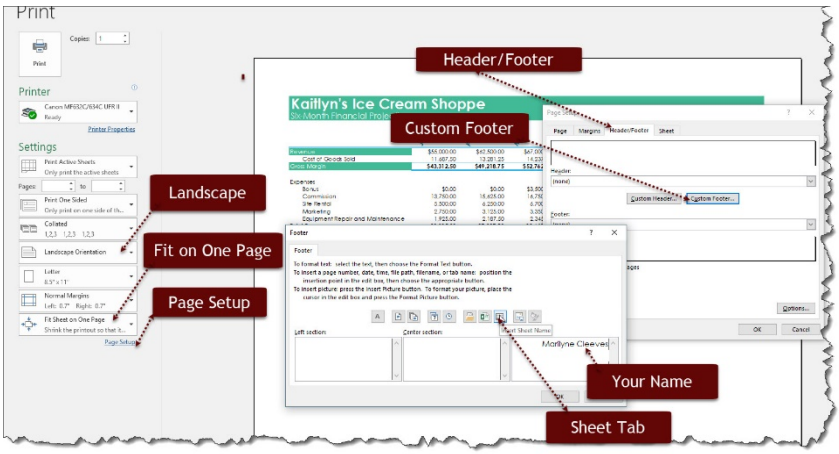
Step 14. ***CLICK*** the ***NO SCALING*** option in the settings area

Step 15. ***SELECT*** the ***FIT SHEET ON ONE PAGE*** option. This will cause the worksheet to print on one page.

Step 16. ***CLICK the PAGE SETUP option at the bottom of the preview screen***

Step 17. ***CLICK*** the tab labeled ***Header/Footer***

- ***CLICK*** on ***CUSTOM FOOTER*** . . .
- Type ***your name*** in the right panel
- Hit ***ENTER*** under your name to advance to the line under your name
- ***CLICK*** on the option for the code to display the ***SHEET TAB***
- ***CLICK*** on ***OK***

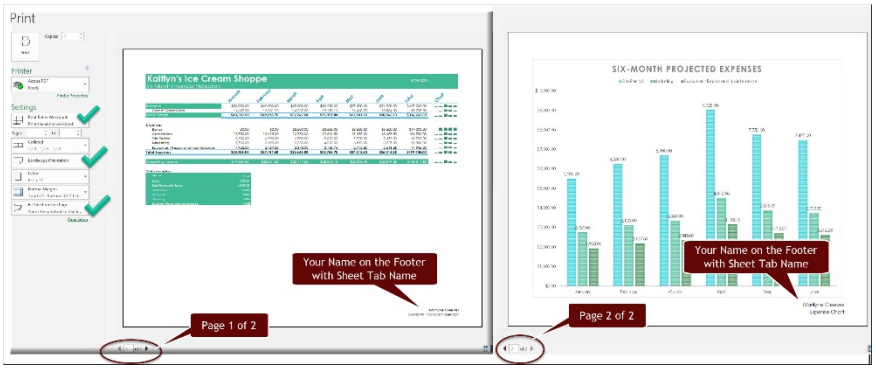


Step 18. Follow the instructions for entering the footer on the chart using the chart sheet tab

Step 19. ***CLICK*** the ***PRINT OPTION***

Step 20. ***CHECK*** your ***SETTINGS***

a. Print Entire Workbook
b. Landscape Orientation
c. Fit sheet on One Page



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ASSIGNMENT IS READY TO SUBMIT:
u11a1 Kaitlyn Financial Projection

ON YOUR OWN ACTIVITY

STARTING FROM SCRATCH

Step 1. Select cell A8 – Type **Modern Music Shops**
Step 2. Select cell A9—Type **Six-Month Financial Projection**
Step 3. Page layout > Theme > **Ion**
Step 4. File > Save as > **u11a2 Modern Music Shops**

ROTATE TEXT AND USE FILL HANDLE TO CREATE A SERIES

Step 5. Select cell B10 – Type **July**
Step 6. Select B10 **– Home Ribbon Band > Alignment > Orientation > 45 degrees > OK**
Step 7. Select B10 **– Use fill handle to drag across C10:G10.** This will automatically fill the months. Click Fill Series
Step 8. Select H10 – Type **Total**. Press right arrow to enter the column heading.
Step 9. Select I10 – Type **Chart**. Press right arrow to enter the column heading.

INCREASE COLUMN WIDTHS

Step 10. Move the mouse pointer to the boundary between column heading A and column heading B. The pointer should change to a split double arrow.
Step 11. Drag the mouse pointer to the right until the ScreenTip displays the desired column width for **column A**, Width: **36.88(300 pixels)**.
Step 12. Release the mouse button to change the width of the column
Step 13. **Select Columns B-G** – Move the mouse pointer to the boundary between column headings B and C. When the pointer changes to a split double arrow, resize the column to **14.71 (108 pixels)**
Step 14. **Select Columns H-I --** Move the mouse pointer to the boundary between column headings H and I. When the pointer changes to a split double arrow, resize the column to **16. (117 pixels)**

ENTER ROW TITLES

Step 15. Cell A11– Revenue
Step 16. Cell A12– Cost of Goods Sold
Step 17. Cell A13– Gross Margin
Step 18. Cell A15 – Expenses
Step 19. Cell A16 – Bonus
Step 20. Cell A17 – Commission
Step 21. Cell A18 – Marketing
Step 22. Cell A19 – Research and Development
Step 23. Cell A20– Support, General, and Administrative
Step 24. Cell A21– Total Expenses
Step 25. Cell A23 – Operating Income
Step 26. Cell A1 – What-If Assumptions

INDENT TITLES

Step 27. Cell A12 – Home Ribbon > Alignment > Increase Indent
Step 28. Cells A16:A20 – Home Ribbon > Alignment > Increase Indent

COPY RANGE OF CELLS TO A NONADJACENT DESTINATION AREA

Step 29. **Select A16:A20** – Home Ribbon > Clipboard > **Copy**
Step 30. **Select A2** – Home Ribbon > Clipboard > **Paste**
Step 31. Press **ESC** to remove the dancing ants

INSERT ROW

Step 32. **Right-click row heading 4** – Click Insert on the shortcut menu> Insert entire row>OK (your row will insert)
Step 33. Select **A4** – Type **Margin** for the new row title
Step 34. **Right-click row heading 7** – Click insert on the shortcut menu> Insert entire row>OK (your row will insert)
Step 35. Select **A7 –** Type **Sales Revenue for Bonus** for the new title

ENTER NUMBERS WITH FORMAT SYMBOLS

Step 36. CELL B2 -- $200,000.00
Step 37. CELL B3 – 5.75%
Step 38. CELL B4 – 57.50%
Step 39. CELL B5 – 15.00%
Step 40. CELL B6 – 7.50%
Step 41. CELL B7 -- $3,500,000.00
Step 42. CELL B8 – 18.75%

FREEZE COLUMN AND ROW TITLES

Step 43. Scroll the worksheet to ensure that Excel displays row 1 as the first row and column A on the screen
Step 44. Select Cell **B13** – View Ribbon > Window > Freeze Panes

ENTER THE PROJECTED MONTHLY SALES

Step 45. Cell B13 = 3113612.16
Step 46. Cell C13 = 7962235.53
Step 47. Cell D13 = 5112268.58
Step 48. Cell E13 = 2924627.87
Step 49. Cell F13 = 7630535.65
Step 50. Cell G13 = 3424270.23
Step 51. Cell H13 – Hit Sum Button

ENTER AND FORMAT THE SYSTEM DATE

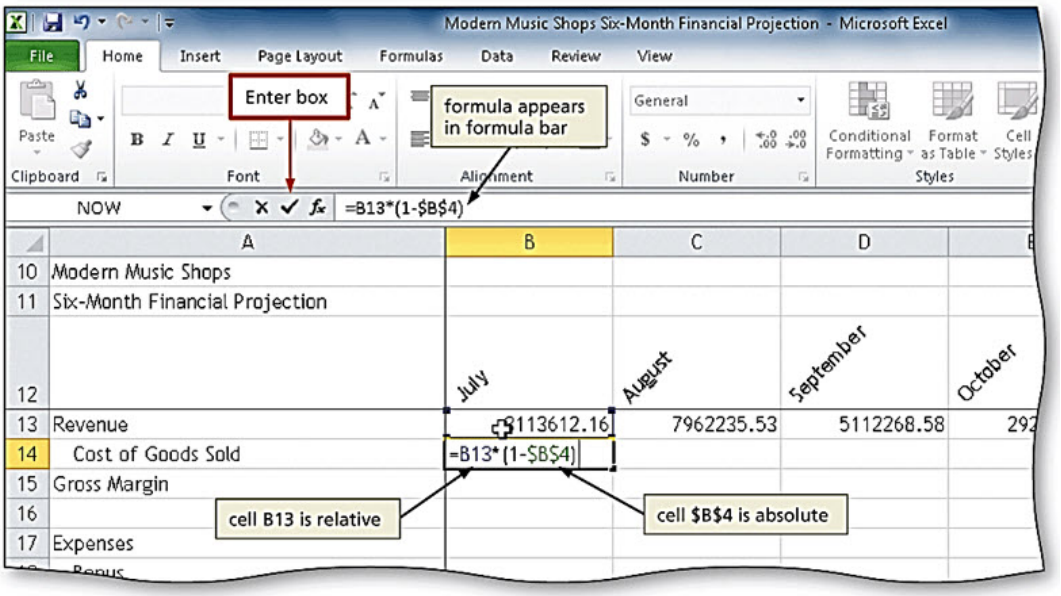
Step 52. Select I11 – Insert function
Step 53. Click the '**Or Select a category'** box and then select Date & Time in the list to populate the '**Select a function**' list with data and time functions.
Step 54. Scroll down in the '**Select a function list'** and then click **NOW >OK >OK**
Step 55. **Right-click I11** – Click Format Cells >Number > **Date** > choose **3/14/2012** format > **OK**

ABSOLUTE VERSES RELATIVE ADDRESSING

Step 56. **Absolute Cells** – Each time you place a formula that contains any one of the following cells:

- B2, B3, B4, B5, B6, B8

Step 57. **Absolute = F4 function key**



FORMULAS

The formulas DO NOT contain the cell references but the label that represents the cell. All these formulas should be ***ENTERED*** and ***REFERENCED*** by the values ***COLUMN B***. Because this is an On Your Own Activity, you should beware that the labels are not values only the blank columns that represent the values (the values to click on are in column B) are calculated:

- B14 (Cost of Goods Sold) = Revenue * (1 – Margin %)
- B15 (Gross Margin) = Revenue – Cost of Goods Sold
- B18 (Bonus) = IF (Revenue >=Sales Revenue for Bonus, Bonus, 0)
- B19 (Commission) = Revenue * Commission %
- B20 (Marketing) = Revenue * Marketing %
- B21 (Research and Development) = Revenue * Research and Development %
- B22 (Support, General, and Administrative) = Revenue * Support, General and Administrative %
- B23 (Total Expenses) = Sum of July Expenses
- B25 (Operating Income) = Gross Margin – Total Expenses

COPY FORMULAS WITH ABSOLUTE CELL REFERENCES

Step 58. Select Range B14:B25 – Point to Fill handle > Drag to C14:G25

DETERMINE ROW TOTALS IN NONADJACENT CELLS

Step 59. Select range H14:H15 > Hold down the control key

Step 60. Select range H18:H23 and H25

Step 61. Click the Sum button

UNFREEZE THE WORKSHEET TITLES AND SAVE

Step 62. Press CTRL+HOME
Step 63. Display the View ribbon > Window > Freeze Panes > Unfreeze Panes
Step 64. Display Home ribbon > Quick Access Toolbar > Save

SPARKLINE CHART

Step 65. Select Cell I13 – Insert ribbon > Sparklines > Line > B13:G13 > OK
Step 66. Select Cell I13 – Use fill handle to copy charts down to I25

ASSIGN FORMATS TO NONADJACENT RANGES

Step 67. Select B13:H13 > **Hold Down Control Key**

- Select B15:H15
- Select B18:H18
- Select B23:H23
- Select B25:H25 > **Release Control Key**

Step 68. **Home Ribbon > Number dialog box > Currency> Decimal 2 > Symbol $ > negative ($1,234.10) black > OK**
Step 69. Select B14:H14 > **Hold Down Control Key**

- Select B19:H22 > **Release Control Key**

Step 70. **Home Ribbon > Format > Number > Currency> Decimal 2 > Symbol none > negative (1,234.10) black > OK**

FORMAT WORKSHEET TITLES

Step 71. Select **Column A** – Home Ribbon > Font > **Bold**
Step 72. Select **A10** – Home Ribbon > Font > **36** points
Step 73. Select **A11** – Home Ribbon > Font > **18** points
Step 74. Select **A10:I11** – Home Ribbon > Font > Fill Color

- Choose Purple, Accent 6, Darker 25% (column 10, row 5)
- Home Ribbion > Font > Font Color > White, Background 1 (column 1, row1)

ASSIGN CELL STYLES TO NONADJACENT ROWS AND COLORS TO A CELL

Step 75. Select **A12:I12** – Home Ribbon > Styles > **Heading 3**
Step 76. Select **A15:I15** > **Hold down control key**

- Select **A23:I23**,
- Select **A25:I25** > **Release control key**
- FORMAT CELLS – **TOTAL STYLE**

Step 77. Select **A13**

- **FILL COLOR** - Purple, Accent 6, Darker 25% (column 10, row 5)
- **FONT COLOR** -White, Background 1 (column 1, row1)

COPY A CELL'S FORMAT USING FORMAT PAINTER

Step 78. Select **A13** – This will be your source cell for the format > **double-click the format painter** (Home Ribbon > Clipboard). By double-clicking the format painter, it allows the format painter to stay active until you turn it off.

Step 79. Click Cell **A17** – This applies the format from **A13**

Step 80. Drag through the range **A25:I25** > ESC – The **ESC** key turns the format painter off.

ADDING 3-D PIE CHART TO THE WORKBOOK

Step 81. Select **B25:G25** and non-adjacent cells (hold down your control key) **B12:G12**

Step 82. While the cells are selected, Click Insert Ribbon > Charts > Pie > 3-D Pie

Step 83. Move Chart (Chart must be selected) – **Chart Tools > Design > Location > Move Chart > New Sheet**

Step 84. Name the Chart Sheet **– Six-Month Projection**

INSERT A CHART TITLE AND DATA LABELS

Step 85. ***SELECT*** the text in the ***CHART TITLE***

- Type ***Six-Month Financial Projection***
- **CLICK** the **UNDERLINE** option to underline the text of the title

Step 86. In the Chart Elements, **SELECT** the **Legend** option

- **POSITION** the legend to the **Right** of the chart
- Check the option "**Show the legend without overlapping the chart**"

Step 87. In the Chart Elements, **SELECT** the **Data Labels** option

- **POSITION** Labels on the **Outside End**
- **CLICK** the **More Options** button to reveal the Format Data Labels options
- **CHECK** the **Percentage** option
- **UNCHECK** the **Value** option. You should have a percentage for each section of the chart.

Step 88. **MOVE** the Six-Month Projection **SHEET TAB** to the right of Sheet 1

Step 89. Rename Sheet 1 to ***Modern Music Shops***

CHANGE THE DESIGN

Step 90. Using the design ribbon band, scroll through the different chart options. To see how the chart changes and the different chart styles available. Choose **Style 8**

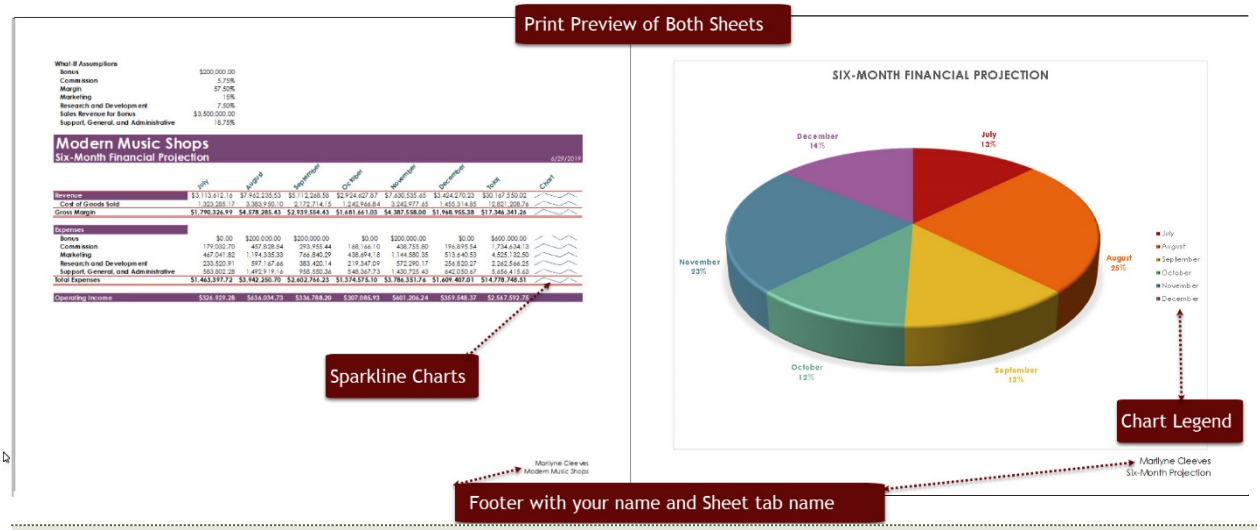
PRINT SETTINGS

Step 91. **ADD A FOOTER** – In the right panel of the footer, type **your name** and the **sheet tab code** (both sheets should have your name and sheet name in the print preview)

Step 92. The page setup settings should have the following settings:

- Orientation: **Landscape**

- Scaling: **Fit to 1**



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work

ASSIGNMENT IS READY TO SUBMIT:

u11a2 Modern Music Shops

UNIT 12 –GROUP AND INDIVIDUAL EXCEL CREATION

Now that your group has a product, service or idea, the next step is to develop spreadsheets, which substantiate your product, service or idea.

TASK FOR EACH GROUP MEMBER:

Create a spreadsheet that provides "financial" information for or about your company. Some **examples** of spreadsheets might include:

- **Cost for Service** - you might have varying rates for services. For example - Monday/Wednesday/Friday service as compared to Tuesday/Thursday service. Or a two-day adventure compared to a week adventure. The IF statement may incorporate a discount when two services are requested.
- **Inventory Summary** - This report shows you the total quantity and value of all in-stock items. Use the filters to view stock by warehouse, by category, by product type, or a combination of these. Each item would be listed once to provide the total quantity and value for that item whether they were purchased at the same price or not. The overall total displayed at the bottom of the report is for the items displayed on screen only. You may choose to incorporate an IF statement that notifies the warehouse when it is time to reorder the product.
- **Cost Benefit Analysis** – A cost benefit analysis (also known as a benefit cost analysis) is a process by which organizations can analyze decisions, systems or projects, or determine a value for intangibles. The model is built by identifying the benefits of an action as well as the associated costs, and subtracting the costs from benefits. When completed, a cost benefit analysis will yield concrete results that can be used to develop reasonable conclusions around the feasibility and/or advisability of a decision or situation.
- **Profit and Loss Statement --** A profit and loss statement, also called an income statement, shows a business's revenue, expenses, and net income over a specific period. It's usually assessed quarterly and at the end of a business's accounting year. Business owners use profit and loss statements to determine whether they should improve the bottom line by increasing revenues, cutting costs, or both.
- **Payroll Summary –** These reports can be generated for individual employees or for all employees from a specific range of dates. It can include gross pay, net pay, taxes, and other deductions.

The spreadsheet created must be different than the assignments completed in Units 9, 10 or 11.

u12a1 INDIVIDUAL PROJECT REQUIREMENTS

Once the team has decided the topic each member is going to complete for the company, the u12a1 assignment completion is up to the class member that committed to the specific report he or she plans to create. Each member will be completing two files and uploading them together in the u12a1 assignment area:

1. Excel Workbook
2. MS Word Block Style Letter

EXCEL WORKBOOK GUIDELINES

For 100% assignment credit, your workbook must contain the following components:

Worksheet: The data represented in your worksheet should represent your company and therefore have your company logo represented on the worksheet. There are specific components that your worksheet should contain. ***DO NOT use an online template or copy the activities from Units 9, 10 or 11***.

- **HEADER** – The header should contain your first and last name; at least one of the codes available (sheet tab, filename, date, page number).
- **FORMULA** – The spreadsheet should have a basic formula using relative cell references i.e. =B10*F15
- **ABOSOLUTE REFERENCE** – There should be at least 1 formula using an absolute cell reference i.e. =$C$2*F20. The reference used should also have a logical significance.
- **BASIC FUNCTION** – The user should create a spreadsheet with at least one of the basic functions created in the unit exercises i.e. =sum(E3:E20). You may choose to use Avg, Max, or Min they are all acceptable.
- **IF STATEMENT** – The if/then/else statement
  i.e. =if(c20<=A19,"Good Job","Need Help" OR =if(c20<=A19,B17*.05,B18*.20)
- Make sure numbers in the spreadsheet are formatted appropriately

Chart: A picture speaks a thousand words, thus in addition to the spreadsheets; each member of the group is to create at least one chart for the spreadsheet they created. Keep in mind that if your data is weak, your graph is weak, so make sure it makes sense. Make sure that the data you charted would be useful to your company.

- **TITLE** – Make sure to include a title (which includes your last name)
- **LEGEND** – The legend in your graph to provide clarity to the reader.
- **LOCATION** – Move the chart to a separate sheet from the worksheet.
- **SHEET TAB** – Make sure you name the chart sheet tab.

MS WORD LETTER GUIDELINES

Write a block style letter to a potential investor, client, customer, sales person, vendor etc., which reflects what your spreadsheet or chart is displaying. One of the nice features of Microsoft Office is the easy linking of one application into another application.

> **NOTE:** *The easiest way to link a chart or table from an Excel spreadsheet into your Word document is to use the* ***copy and paste*** *commands.*

Your letter should contain the following:

- **COMPANY LETTERHEAD** – Use the company letterhead your group created in Unit 5.
- **BLOCK STYLE** – Follow the tutorial guidelines from Unit 5 to format the correct block style letter format.
- **LINK EXCEL** – Link either the chart or spreadsheet to your letter below your written text. Pay close attention to the note above. ***The link is NOT a hyperlink.*** It is an illustration from your spreadsheet.
- **CLOSE** – Be sure to include a closing to your letter which includes your first and last name.

SUBMIT ASSIGNMENT FILES:

1. ***U12a1 Excel – Your Name***
2. ***U12a1 Letter – Your Name***

u12e2 GROUP EXTRA CREDIT ACTIVITY

Group Decision – As a group, you need to determine if you want to do the extra credit. If some of the members say no but others would like to participate, the participating members should follow the instructions below:

Group Members that Decide Yes

- **Combine Your Work –** Combine the worksheets each member created into one workbook.
- **Name Tabs --** Name each sheet tab with the name of the group member who designed the sheet**.**
- **Group Summary Sheet –** The summary sheet combines data from each of the worksheets in the workbook to illustrate a summary of information regarding the information.
- **Save your Workbook –** (*Group x – Excel Project Extra Credit*). Save your workbook using inserting the group number in the "x" area of the given file name. Once the group agrees all is complete, the group leader will submit the file to the Canvas area marked for the extra credit ***u12e2 Group Name*** (please use your group name as a replacement for the words Group Name). This is the file you will submit for the extra credit grade.

Group Submission

Step 1. **ONE GROUP MEMBER COMPILES THE WORK** -- The member that submits the activity will do the following:

a. **DOWNLOAD SPREADSHEETS** - Download each spreadsheet from the students involved.
b. **CREATE BLANK WORKBOOK** – Save the blank workbook as u12e2
c. **COPY INFORMATION** – Open each of the u12a1 files that you downloaded. Copy only the sheet that contains the data and formulas (***DO NOT copy the chart***). To copy the sheet, use these guidelines:
   - **RIGHT-CLICK** the ***sheet tab name***
   - **CLICK** on the **Move or Copy** option
   - **CLICK** on the **COPY** option. This will make a sheet tab with the same name as the original and a (2) after the name.
   - **DRAG** the **new sheet tab** over **to** the **u12e2 file** you are creating, and you now have a copy of the sheet.
d. **RENAME** the sheet with **the student's name**.

Step 2. **REPEAT** the process in **STEP 1** for the next student until you have all the group members that are participating in the activity.

Step 3. **CREATE** a **SUMMARY SHEET** – This is the sheet that you will combine your information in. This is the sheet I will be grading.

NOTE: *I am looking for Excel codes that link the data from each sheet to the summary sheet you have created. If you have any*

questions regarding this process, make sure you watch the video demonstration.

Step 4. **GROUP APPROVAL** – This is an important step before submission. Make sure you have shared the potential submission with the group. They may have something to add or revise. It always helps to have a second set of eyes.

SUBMIT FILE: ***u12e2 Group Name***

GRADING

You will be graded on originality (please do not duplicate textbook spreadsheets), clarity, accuracy and format of the spreadsheet and chart. Refer to the grading rubric on the following page for additional grading criteria. Refer to the rubric for the u12a1 Excel Project for a complete outline of the grading criteria.

WHAT HAPPENS IF A GROUP MEMBER DROPS THE CLASS?

As is true in the "working world", if you lose a team member the remaining members need to continue and complete the project. No new members will be added to your team.

UNIT 13 –MS ACCESS DATABASE MANAGEMENT SYSTEM

Microsoft Access is a database management system (DBMS) from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software-development tools. It is a member of the Microsoft Office suite of applications, included in the Professional and higher editions or sold separately.

Microsoft Access stores data in its own format based on the Access Jet Database Engine. It can also import or link directly to data stored in other applications and databases.

Software developers, data architects and power users can use Microsoft Access to develop application software. Like other Microsoft Office applications, Access is supported by Visual Basic for Applications (VBA), an object-based programming language that can reference a variety of objects including DAO (Data Access Objects), ActiveX Data Objects, and many other ActiveX components. Visual objects used in forms and reports expose their methods and properties in the VBA programming environment, and VBA code modules may declare and call Windows operating system operations.

Becoming familiar with the tables, forms, queries, and other objects in an Access database can make it easier to perform a wide variety of tasks, such as entering data into a form, adding or removing tables, finding and replacing data, and running queries.

CREATING A DATABASE

With the projects for the next chapter, you will be creating the database from scratch and adding to it in the next unit. The name of the company database you are creating is **PrattLast Associates**. Follow these directions to create your database in MS Access:

Step 1. Open MS Access (this program is not available on Mac computers)

Step 2. ***CLICK*** on the ***BLANK DATABASE*** window that appears on the Access screen.

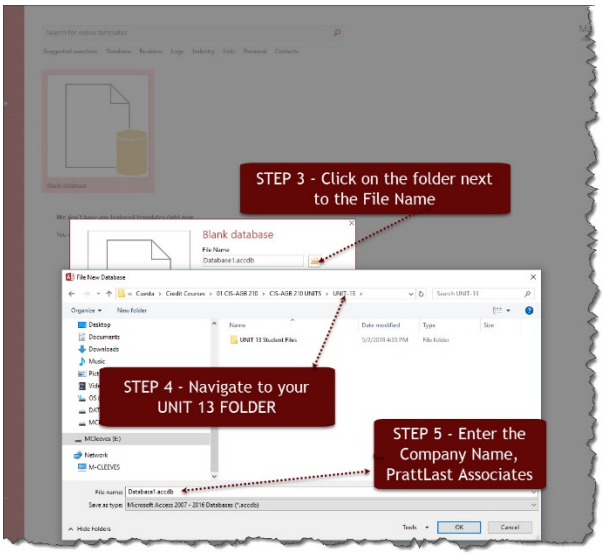
Step 3. ***CLICK*** on the folder next to the ***File Name option***

Step 4. ***NAVIGATE*** to your ***UNIT 13 FOLDER*** for this class

Step 5. In the dialog box, type ***PrattLast Associates***

Step 6. ***CLICK*** on the ***OK*** option to confirm the selection

Step 7. ***CLICK*** on the ***CREATE*** option for the blank database



DETERMINE DATA TYPES FOR THE FIELDS

Every table in Access is made up of fields. The properties of a field describe the characteristics and behavior of data added to that field. A field's data type is the most important property because it determines what kind of data the field can store. Data types can seem confusing for example, if a field's data type is Text, it can store data that consists of either text or numerical characters. But a field whose data type is Number can store only numerical data. So, you must know what properties are used with each data type.

After you create a field and set its data type, you can set additional field properties. The field's data type determines which other properties that you can set. For example, you can control the size of a Text field by setting its Field Size property.

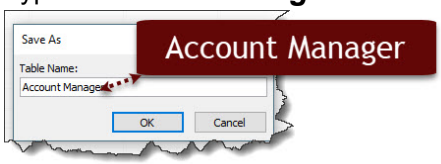
For Number and Currency fields, the Field Size property is especially important, because it determines the range of field values. For example, a one-bit Number field can store only integers ranging from 0 to 255.

The Field Size property also determines how much disk space each Number field value requires. Depending on the field size, the number can use exactly 1, 2, 4, 8, 12, or 16 bytes.

Step 1. In the blank database for PrattLast Associates, a table appeared to the left of the screen it is this table that we will be working with. The first step is to rename the table. ***RIGHT-CLICK*** on ***TABLE 1***

Step 2. ***CLICK*** on the ***DESIGN VIEW*** option. You will be prompted to name the table.

Step 3. Type ***Account Manager*** as the new name of the table



Step 4. ***CLICK*** on the ***OK*** option

Step 5. ***RIGHT-CLICK*** the ***ACCOUNT MANAGER*** table. A short-cut menu appears.

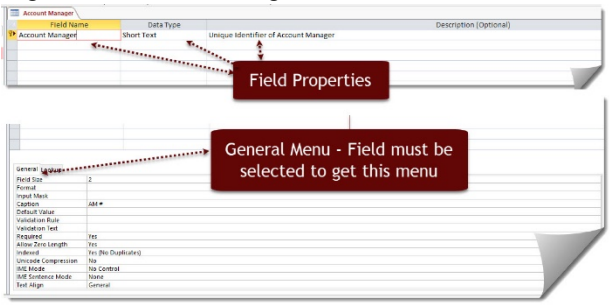
Step 6. ***CLICK*** on ***DESIGN VIEW***. In Design view you have many options for the table.

PRIMARY KEY

Primary Keys are used as a form of an ID. It's used to uniquely identify a record in a table. A social security number or referenced number can be used as a primary key. This is due to the uniqueness or difference in values and with primary keys, it makes it easier for table containing related record in a database to be linked together. This helps to the efficiency during retrieval and sorting out of record.

Step 7. The primary key for this database is Account Manager. Enter the information as follows:

- FIELD NAME: ***Account Manager***
- DATA TYPE: ***Short Text***
- DESCRIPTION: ***Unique Identifier of Account Manager***



- General Tab Field Size: ***2***
- General Tab Caption: ***AM #***

ADDITIONAL FIELDS TO ADD TO THE DATABASE

Step 8. Field #2
- Field Name: ***Last Name***
- Data Type: ***Short Text***
- General Tab Field Size: ***15***

Step 9. Field #3
- Field Name: ***First Name***
- Data Type: ***Short Text***
- General Tab Field Size: ***15***

Step 10. Field #4
- Field Name: ***Street***
- Data Type: ***Short Text***
- General Tab Field Size: ***20***

Step 11. Field #5
- Field Name: ***City***
- Data Type: ***Short Text***
- General Tab Field Size: ***20***

Step 12. Field #6
- Field Name: ***State***
- Data Type: ***Short Text***
- General Tab Field Size: ***2***

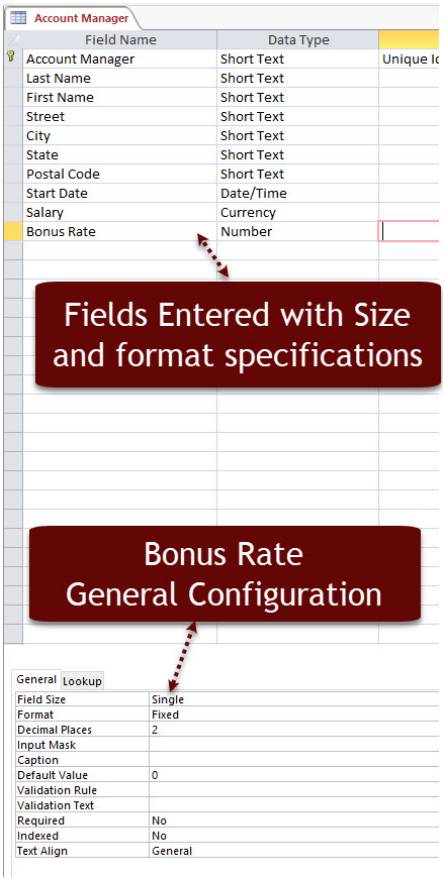
Step 13. Field #7
- Field Name: ***Postal Code***
- Data Type: ***Short Text***
- General Tab Field Size: ***5***

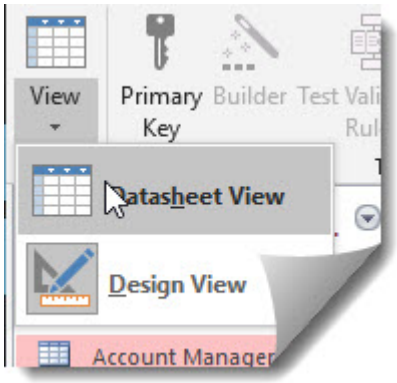
Step 14. Field #8
- Field Name: ***Start Date***
- Data Type: ***Date/Time***

Step 15. Field #9
- Field Name: ***Salary***
- Data Type: ***Currency***

Step 16. Field #10
- Field Name: ***Bonus Rate***
- Data Type: ***Number***
- General Tab Field Size: ***Single***
- General Format: ***Fixed***
- Decimal Places: ***2***

Step 17. In the ***DESIGN*** ribbon, ***CLICK*** on ***VIEW*** in the views group





Step 18. ***CLICK*** on ***DATASHEET VIEW***

Step 19. You will be prompted to save the table. ***CLICK*** on ***YES*** to save the design of the table just created.

ENTER RECORDS INTO THE TABLE

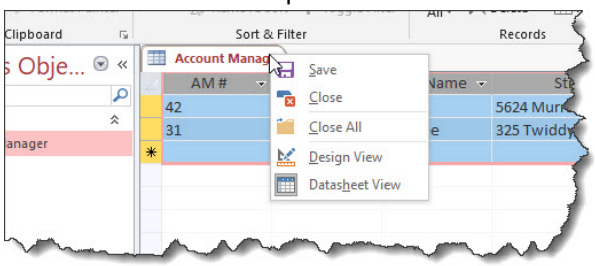
Step 1. Once you have the field names in place, you do not need to type the field names again. With your Account Manager table in Datasheet View, ***Add the following Records***:

Account Manager									
AM #	**Last Name**	**First Name**	**Street**	**City**	**State**	**Postal Code**	**Start Date**	**Salary**	**Bonus Rate**
42	Lu	Peter	5624 Murray Ave	Davidson	IN	46007	8/3/2015	$36,750.00	0.09
31	Rivera	Haydee	325 Twiddy St.	Avondale	IL	60311	6/3/2013	$48,750.00	0.15

NOTE: Access is designed to enter large amounts of data into a table. If you hit enter or tab after each entry, it will automatically advance you to the next field to enter the next bit of information.

Step 2. ***RIGHT-CLICK*** the ***TABLE*** TAB

Step 3. ***CLICK*** the ***CLOSE*** option to close the table



Step 4. The program will ask if you want to save. ***CLICK*** on the ***YES*** option to confirm the save.

Step 5. ***CLICK*** the ***FILE*** option

Step 6. ***CLICK*** the ***CLOSE*** option to close ***MS Access.*** Your document is automatically saved when you close the file. The data you created was saved into the table. It is important to realize that Access is not like many other programs. Make sure you do not leave your Access files open. Close the file whenever you are finished with the session on your computer.

ADD RECORDS TO AN EXISTING TABLE

Step 7. ***Open MS Access***. Notice that on the left-hand panel you may see your recent file.

Step 8. On the bottom left corner, ***CLICK*** on ***OPEN OTHER FILES***

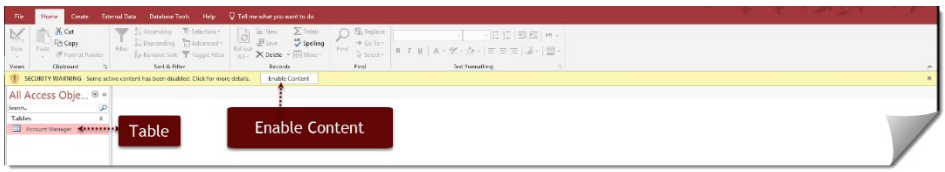
Step 9. ***CLICK*** on the ***BROWSE*** option

Step 10. ***NAVIGATE*** to your ***UNIT 13*** folder for this class

Step 11. ***CLICK*** on the ***PrattLast Associates*** file

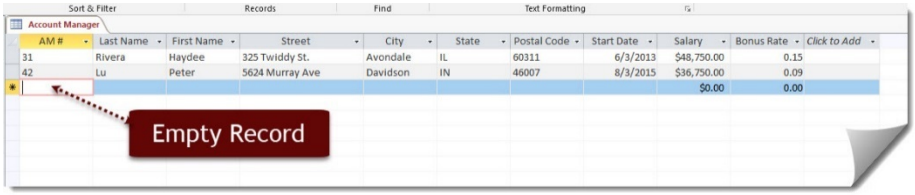
Step 12. ***CLICK OPEN***

Step 13. When opening a new database, your computer may give a security warning. If the database is one that you created or one that comes from a trusted source, you can open it. ***CLICK*** on the ***ENABLE CONTENT*** button



Step 14. ***DOUBLE-CLICK*** the ***ACCOUNT MANAGER TABLE***. Notice that the table opens into view and the two records you already entered are showing.

Step 15. ***CLICK*** your ***MOUSE*** into the ***EMPTY RECORD***



Step 16. Add the following new records to your table:

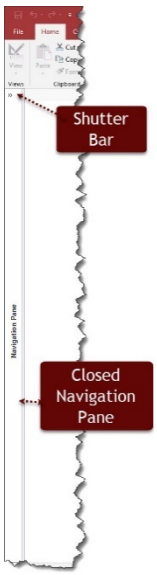
Account Manager									
AM #	**Last Name**	**First Name**	**Street**	**City**	**State**	**Postal Code**	**Start Date**	**Salary**	**Bonus Rate**
58	Murowski	Karen	168 Trusdale Dr.	Carlton	IL	60313	11/9/2016	$24,000.00	0.08
35	Simson	Mark	1467 Hartwell St.	Walker	IN	46004	5/19/2014	$40,500.00	0.12

Step 17. ***RIGHT-CLICK*** the ***TABLE TAB***

Step 18. ***CLICK CLOSE*** to close the table but keep the database file open.

PREVIEW AND PRINTING THE CONTENTS OF A TABLE

By previewing the contents of the table in Print preview, you can make any necessary adjustment to the orientation or to the margins before printing the contents.



Step 1. If the Navigation Pane is closed, ***OPEN*** the ***NAVIGATION PANE***

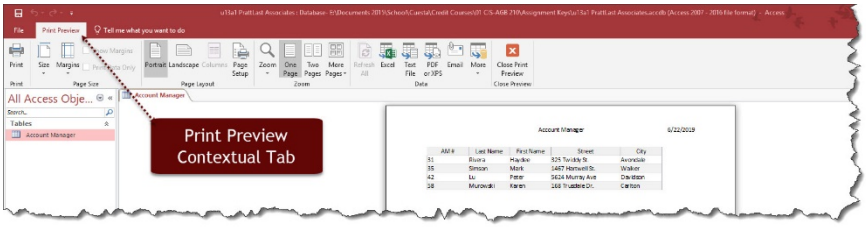
Step 2. ***CLICK*** the ***SHUTTER BAR*** to open

Step 3. ***SELECT*** the ***ACCOUNT MANAGER*** table

Step 4. ***CLICK*** on the ***FILE*** tab to access the Backstage View

Step 5. ***CLICK*** on the ***PRINT*** option

Step 6. The next menu has three options to choose from. ***CLICK*** on the ***PRINT PREVIEW*** option

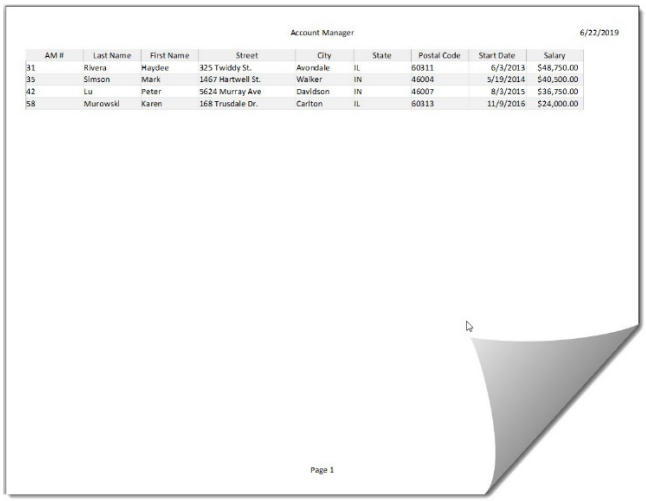


Step 7. The Print Preview contextual tab will open. In the page layout group, ***CLICK LANDSCAPE***

Step 8. In the Page Size group, ***CLICK*** on ***MARGINS***

Step 9. ***CLICK*** on ***NORMAL***

Step 10. You may practice printing from this menu if you prefer; however, at this time you do not need to print for the exercise. If you are satisfied with the print settings, ***CLICK*** on ***CLOSE PRINT PREVIEW*** to close the view and return to the table.



Account Manager 6/22/2019

AM #	Last Name	First Name	Street	City	State	Postal Code	Start Date	Salary
31	Rivera	Haydee	325 Twiddy St.	Avondale	IL	60311	6/3/2013	$48,750.00
35	Simson	Mark	1467 Hartwell St.	Walker	IN	46004	5/19/2014	$40,500.00
42	Lu	Peter	5624 Murray Ave	Davidson	IN	46007	8/3/2015	$36,750.00
58	Murowski	Karen	168 Trusdale Dr.	Carlton	IL	60313	11/9/2016	$24,000.00

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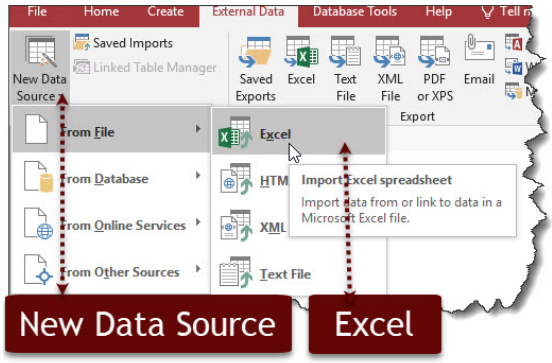
IMPORTING AND LINKING DATA

Prior to importing from Excel it is necessary to eliminate all of the formatting in the file. This includes, but is not limited to, centering, bold, underlining, etc. Also, ensure that there are no spaces in front of the column headings. By eliminating the spaces, you prevent importing errors and column heading issues, so Access can recognize the headings. These are some important guidelines to consider before trying an import from Excel to Access:

- ✓ Make sure the data is in the form of a list: a collection of rows and columns in which all the entries in a column represent the same type of data
- ✓ Be sure there are no blank rows within the list. If there are, remove them prior to importing or linking.
- ✓ Be sure there are no blank columns within the list. If there are, remove them prior to importing or linking.
- ✓ Determine whether the first row contains column headings that will make appropriate file names in the resulting table. If not, you should consider adding such a row. In general, the process is simpler if the first row in the worksheet contains appropriate column headings.

You import a spreadsheet by using the import spreadsheet wizard. In the process, you will indicate that the first row in the worksheet contains the column headings. In addition, you will indicate the primary key for the table. If appropriate, you can choose not to include all the fields from the worksheet in the resulting table.



Step 1. ***CLICK*** on the ***EXTERNAL DATA TAB*** to display the External Data Ribbon

Step 2. In the Import and Link group, ***CLICK*** the ***NEW DATA SOURCE*** button

Step 3. ***CLICK*** the ***FROM FILE***

Step 4. CLICK on EXCEL

Step 5. ***BROWSE*** to your ***UNIT 13 Student Files*** folder

Step 6. ***CLICK*** the ***ACCOUNT*** file

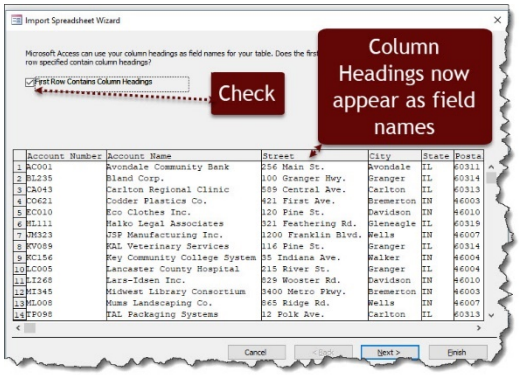
Step 7. ***CLICK*** on ***OPEN***

Step 8. ***CLICK*** on ***Import the source data into a new table in the current database***

Step 9. ***CLICK*** on ***OK***

FIRST ROW CONTAINS COLUMN HEADINGS

Step 10. In the next dialog box, it is import that you ***CHECK*** the option for ***First Row Contains Column Headings***



Step 11. ***CLICK*** the ***NEXT*** button to view more available options.

Step 12. ***CLICK*** the ***NEXT*** button again. There is currently no need to specify additional information regarding field options.

Step 13. ***CLICK*** on ***CHOOSE MY OWN PRIMARY KEY***

Step 14. Since the ***Account Number*** is the first available field, it immediately comes into view.

Step 15. ***CLICK*** on the ***NEXT*** button

Step 16. IMPORT TO TABLE: Type ***Account***

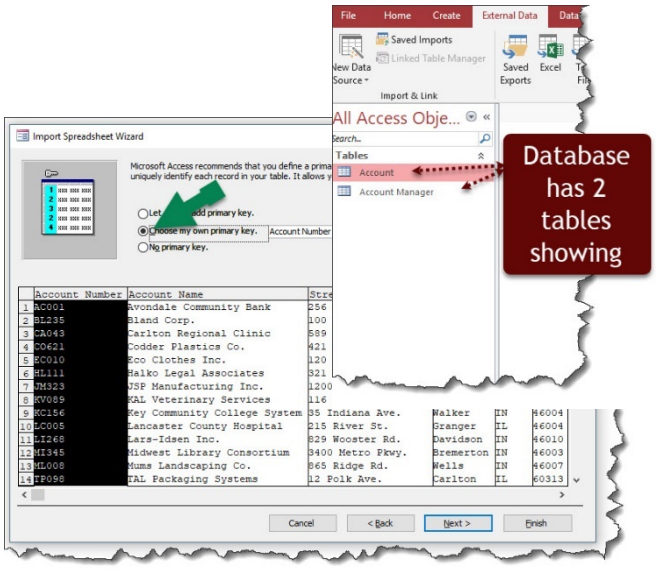
Step 17. ***CLICK*** on ***FINISH***

Step 18. ***CLICK*** on ***SAVE IMPORT STEPS***

SAVE AS: IMPORT-ACCOUNT

Step 1. DESCRIPTION: ***Import data from Account workbook into Account Table***

Step 2. ***CLICK*** on ***SAVE IMPORT***



MODIFY THE TABLE

It is usually necessary to modify a table created during the import process. The same principles applied to the original document (in this case Excel) are not transferred during the import. Take the following steps to modify the new table:

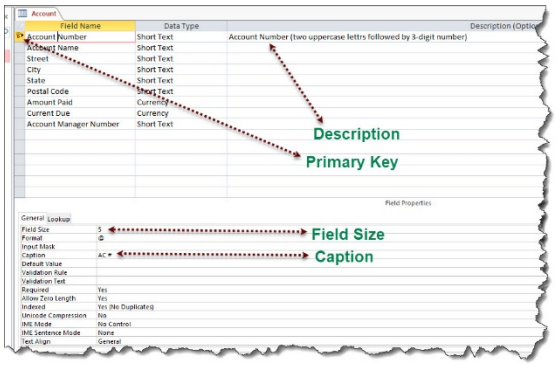
Step 1. ***RIGHT-CLICK*** the ***ACCOUNT TABLE***

Step 2. ***CLICK*** on ***DESIGN VIEW***

Step 3. ***SCROLL*** through ***EACH FIELD*** for the following settings:

FIELD NAME: ***Account Number*** (Primary Key)

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***5***
- NOTES: ***Account Number (two uppercase letters followed by 3-digit number)***
- CAPTION: ***AC #***



FIELD NAME: ***Account Name***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***30***

FIELD NAME: ***Street***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***20***

FIELD NAME: ***City***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***20***

FIELD NAME: ***State***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***2***

FIELD NAME: ***Postal Code***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***5***

FIELD NAME: ***Amount Paid***

- DATA TYPE: ***Currency***

FIELD NAME: ***Current Due***

- DATA TYPE: ***Currency***

FIELD NAME: ***Account Manager Number***

- DATA TYPE: ***Short Text***
- FIELD SIZE: ***2***
- NOTES: ***Account Manager Number (number of account manager for account)***
- CAPTION: ***AM #***

Step 4. ***RIGHT-CLICK*** the ***ACCOUNT TAB***

Step 5. ***CLICK*** on ***CLOSE***

Step 6. ***CLICK*** on ***YES*** to save your changes

Step 7. ***CLICK*** on ***YES*** again to confirm the change

CREATE A QUERY

In a well-designed database, the data that you want to present through a form or report is usually located in multiple tables. A query can pull the information from various tables and assemble it for display in the form or report. A query can either be a request for data results from your database or for action on the data, or for both. A query can give you an answer to a simple question, perform calculations, combine data from different tables, add, change, or delete data from a database. Since queries are so versatile, there are many types of queries and you would create a type of query based on the task.

SIMPLE QUERY WIZARD

For this activity, we will use the *Simple Query Wizard.* The Simple Query Wizard is the quickest and easiest way to create a query.

Step 1. If the Navigation Pane is closed, click the Shutter Bar Open/Close to ***OPEN*** the ***Navigation Pane***

Step 2. ***SELECT*** the ***ACCOUNT TABLE***

Step 3. ***CLICK*** on the ***CREATE TAB*** to display the Create ribbon band

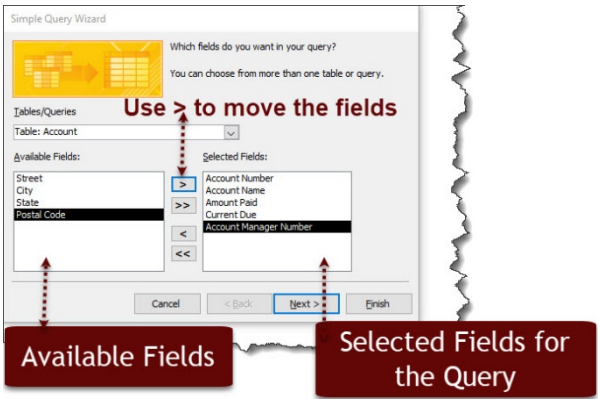
Step 4. In the Queries group, ***CLICK*** the ***QUERY WIZARD***

Step 5. ***SELECT*** the ***SIMPLE QUERY WIZARD***

Step 6. ***CLICK*** on the ***OK*** button

Step 7. On the left pane (Available Fields) you have all the fields in the table. Our goal is to populate the right pane with the desired fields for this query. This is done by clicking on each of the desired fields and clicking on the > to copy the field to the Selected Fields pane. ***CLICK*** on each of the ***FOLLOWING FIELDS*** and ***CONFIRM*** the transfer with the **>**

- ✓ ***Account Number***
- ✓ ***Account Name***
- ✓ ***Amount Paid***
- ✓ ***Current Due***
- ✓ ***Account Manager Number***



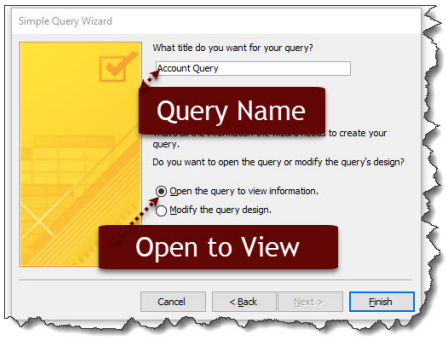
Step 8. ***CLICK*** the ***NEXT*** option

Step 9. ***CLICK*** the ***DETAIL*** option. The Detail shows all the records and fields. Summary only shows computations (for example, the total amount paid).

Step 10. ***CLICK*** the ***NEXT*** option

Step 11. ***NAME*** the ***QUERY Account Query***

Step 12. ***CLICK*** on ***FINISH*** and ***OPEN*** the query to view information



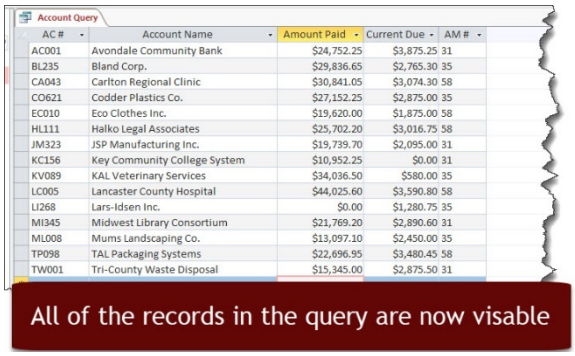
ADJUST THE VIEW

When you query comes into view, you may not be able to see all the data. You can easily expand the columns by following these directions:

Step 1. ***CLICK*** the ***MARKER*** between the ***FIELD NAMES***. Your mouse turns into a horizontal arrow with a cross

Step 2. ***DRAG*** your ***MOUSE*** to the ***RIGHT*** until you reach the desired location

Step 3. ***RELEASE*** your ***MOUSE***



AC #	Account Name	Amount Paid	Current Due	AM #
AC001	Avondale Community Bank	$24,752.25	$3,875.25	31
BL235	Bland Corp.	$29,836.65	$2,765.30	35
CA043	Carlton Regional Clinic	$30,841.05	$3,074.30	58
CO621	Codder Plastics Co.	$27,152.25	$2,875.00	35
EC010	Eco Clothes Inc.	$19,620.00	$1,875.00	58
HL111	Halko Legal Associates	$25,702.20	$3,016.75	58
JM323	JSP Manufacturing Inc.	$19,739.70	$2,095.00	31
KC156	Key Community College System	$10,952.25	$0.00	31
KV089	KAL Veterinary Services	$34,036.50	$580.00	35
LC005	Lancaster County Hospital	$44,025.60	$3,590.80	58
LI268	Lars-Idsen Inc.	$0.00	$1,280.75	35
MI345	Midwest Library Consortium	$21,769.20	$2,890.60	31
ML008	Mums Landscaping Co.	$13,097.10	$2,450.00	35
TP098	TAL Packaging Systems	$22,696.95	$3,480.45	58
TW001	Tri-County Waste Disposal	$15,345.00	$2,875.50	31

Step 4. ***RIGHT-CLICK*** the ***ACCOUNT QUERY TAB***

Step 5. ***CLICK*** the ***CLOSE*** option

Step 6. When prompted to save ***CLICK*** the ***YES*** option

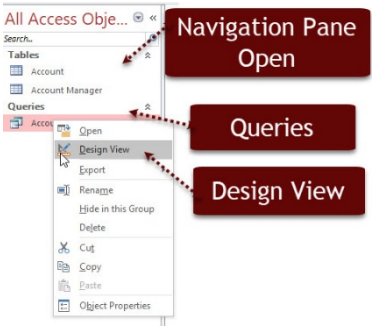
USE A CRITERION IN A QUERY

Query criteria help you zero in on specific items in an Access database. If an item matches all the criteria you enter, it appears in the query results.

To add criteria to an Access query, open the query in Design view and identify the fields (columns) you want to specify criteria for. If the field is not in the design grid, double-click the field to add it to the design grid and then enter the criterion in the Criteria row for that field. If you're not sure how to make this happen, see Introduction to queries.

A query criterion is an expression that Access compares to query field values to determine whether to include the record that contains each value. For example, = "Chicago" is an expression that Access can compare to values in a text field in a query. If the value for that field in a given record is "Chicago", Access includes the record in the query results.

For this exercise, we are going to build a criterion in the Account Query that includes only those accounts managed by account manager 35. Follow these steps:

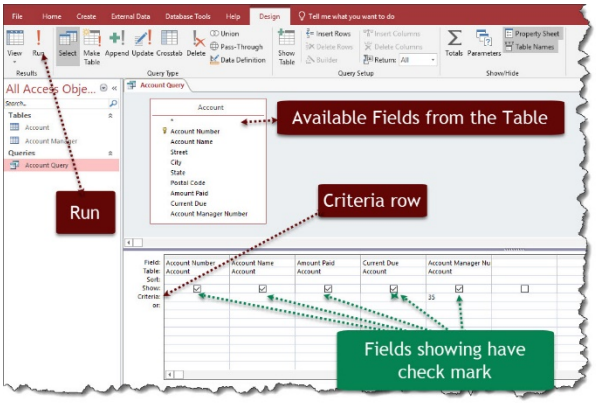


Step 1. ***RIGHT-CLICK*** the ***ACCOUNT QUERY***

Step 2. ***CLICK*** on the ***DESIGN VIEW*** option to open the query in design view

Step 3. ***CLICK*** the ***CRITERIA ROW*** in the Account Manager Number column

Step 4. Type ***35*** as the criteria for the Account Manager Number



Step 5. The design tab should be in view. In the results group, ***CLICK*** on the ***RUN*** option

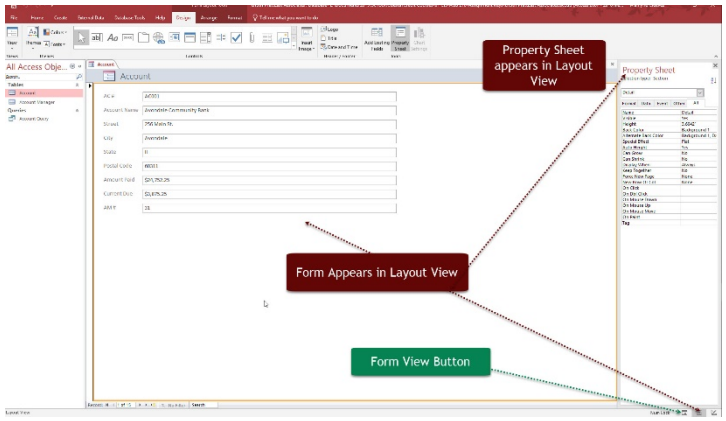
Step 6. ***RIGHT-CLICK*** the ***ACCOUNT QUERY*** TAB

Step 7. ***CLICK*** on the ***CLOSE*** option to save and close the query

Step 8. ***CLICK*** on the ***YES*** option

CREATE A FORM

A form in Access is a database object that you can use to create a user interface for a database application. A "bound" form is one that is directly connected to a data source such as a table or query, and can be used to enter, edit, or display data from that data source. Alternatively, you can create an "unbound" form that does not link directly to a data source, but which still contains command buttons, labels, or other controls that you need to operate your application. For this exercise we are going to make a form bound to the Account Table in the PrattLast Associates Database:



Step 1. With the database open, ***CLICK*** the ***ACCOUNT TABLE***

Step 2. ***CLICK*** the ***CREATE TAB*** to open the Create Ribbon

Step 3. In the Queries group, ***CLICK*** the ***FORM*** button

Step 4. The form opens in Layout View. If you ***CLICK*** on the ***FORM VIEW*** button, you should notice that the Property Sheet is disabled. The Property sheet is for form designer to organize and adjust the form appearance but is not usually used when data is input into the form.

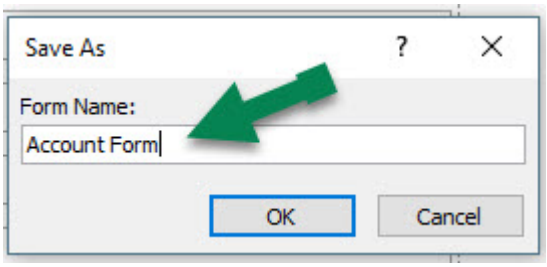
Step 5. ***RIGHT-CLICK*** the ***FORM TAB*** for ***ACCOUNT***

Step 6. ***CLICK*** on ***CLOSE***

Step 7. ***CLICK*** on ***YES*** to save changes

Step 8. In the ***SAVE AS*** box that appears, type ***Account Form*** as the Form name

Step 9. ***CLICK*** on ***OK***



After you have saved a form, you can use it at any time by right-clicking the form on the Navigation Pane and then clicking Open on the shortcut menu. In addition to viewing data in the form, you can also use it to enter or update data, a process that is very similar to updating data using a datasheet. If you plan to use the form to enter or revise data, you must ensure you are viewing the form in Form view.

CREATE A REPORT

Reports offer a way to view, format, and summarize the information in your Microsoft Access database. For example, you can create a simple report of phone numbers for all your contacts, or a summary report on the total sales across different regions and time periods.

The design of a report is divided into sections that you can view in the Design view. Understanding how each section works can helps you create better reports. For example, the section in which you choose to place a calculated control determines how Access calculates the results. The following list is a summary of the section types and their uses:

- ✓ ***Report Header*** – Use the report header for information that might normally appear on a cover page, such as a logo, a title, or a date. When you place a calculated control that uses the Sum aggregate function in the report header, the sum calculated is for the entire report. The report header is printed before the page header.
- ✓ ***Page Header*** – Use a page header to repeat the report title on every page.
- ✓ ***Group Header*** – Use the group header to print the group name. For example, in a report that is grouped by product, use the group header to print the product name. When you place a calculated control that uses the Sum aggregate function in the group header, the sum is for the current group. You can have multiple group header sections on a report, depending on how many grouping levels you have added. For more information about creating group headers and footers, see the section Add grouping, sorting, or totals.
- ✓ ***Detail*** – This is where you place the controls that make up the main body of the report.
- ✓ ***Group Footer*** – Use a group footer to print summary information for a group. You can have multiple group footer sections on a report, depending on how many grouping levels you have added.
- ✓ ***Page Footer*** – Use a page footer to print page numbers or per-page information.
- ✓ ***Report Footer*** – Use the report footer to print report totals or other summary information for the entire report.

You will find that it is much easier to create meaningful reports when your database has well-designed table structure and relationships (Microsoft Office, 2019).

Step 1. In the PrattLast Associates database, ***SELECT*** the ***ACCOUNT*** table

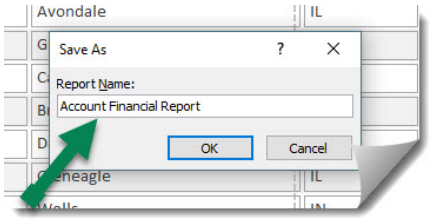
Step 2. ***CLICK*** the ***CREATE TAB*** to activate the Create Ribbon

Step 3. In the reports group, ***CLICK*** the ***REPORT*** button

Step 4. ***CLICK*** the ***SAVE*** button on the Quick Access tool bar or ***CTRL + S***

Step 5. ***SAVE AS Account Financial Report***

Step 6. ***CLICK*** the ***OK*** button



MODIFY THE REPORT

Access has four different ways to view reports:

- ✓ ***Report View*** – Shows the report on the screen
- ✓ ***Print Preview*** – Shows the report as it will appear when printed
- ✓ ***Layout View*** – Similar to report view but it also allows you to make changes to the report.
- ✓ ***Design View*** – Allows you to make changes but does not show the actual report.

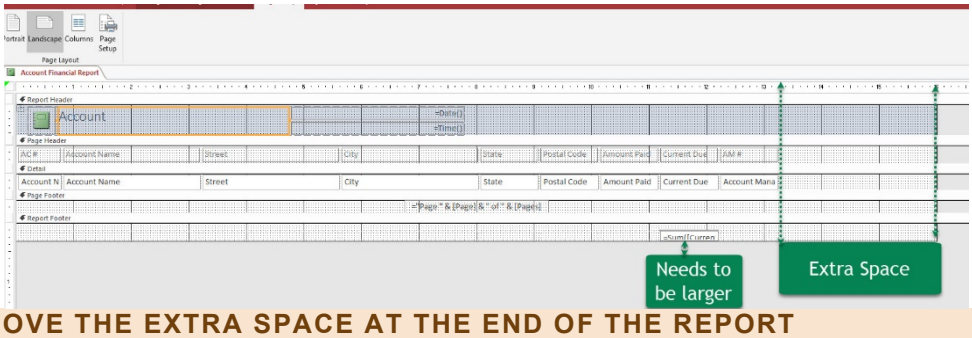
The following steps use Layout view to make the modifications to the report. Working in Layout view gives you all the tools you need to make the desired modifications.

Step 7. ***RIGHT-CLICK*** the Account Financial Report in the Navigation Pane

Step 8. ***CLICK*** on ***DESIGN VIEW*** on the shortcut menu

Step 9. ***CLICK*** on the ***PAGE SETUP*** to display the Page Setup ribbon

Step 10. In the Page Layout group, ***CLICK*** on ***LANDSCAPE***

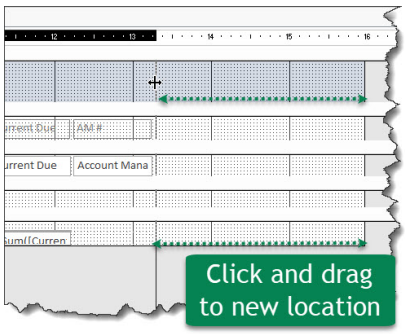


REMOVE THE EXTRA SPACE AT THE END OF THE REPORT

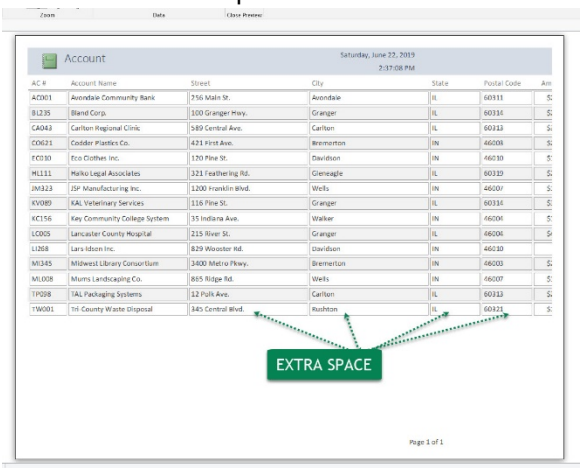
Step 11. ***CLICK*** on the ***LAST LINE*** in the report to select the border. Your mouse turns into a horizontal arrow with a cross

Step 12. ***DRAG*** the ***CROSS*** toward the ***LAST VISABLE FIELD*** on the report

Step 13. ***RIGHT-CLICK*** the ***REPORT*** to view the short-cut menu



Step 14. ***CLICK*** the ***PRINT PREVIEW*** option. The report is currently taking up 2 pages. Some of the columns have extra space that can be removed. This can be fixed.



Step 15. ***RIGHT-CLICK*** the Account Financial Report in the Navigation Pane

Step 16. ***CLICK*** on ***DESIGN VIEW*** on the shortcut menu

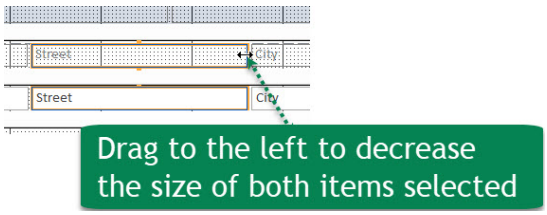
Step 17. ***CLICK*** on the ***STREET*** field represented in the Page header

Step 18. ***HOLD*** down your ***SHIFT*** key

Step 19. ***CLICK*** on the ***STREET*** field represented in the Detail

Step 20. With both fields selected, hover your mouse to get a two-pronged arrow***.*** ***CLICK*** and ***DRAG*** to the left to reduce the size of the field.

Step 21. ***STOP*** when the ***FIELD SIZE LINES UP*** with the number ***5*** on the ruler bar



Step 22. ***CLICK*** on the ***CITY*** field represented in the Page header

Step 23. ***HOLD*** down your ***SHIFT*** key

Step 24. ***CLICK*** on the ***CITY*** field represented in the Detail

Step 25. With both fields selected, hover your mouse to get a two-pronged arrow***.*** ***CLICK*** and ***DRAG*** to the left to reduce the size of the field.

Step 26. ***STOP*** when the ***FIELD SIZE LINES UP*** with the number ***6.5*** on the ruler bar

Step 27. ***CLICK*** on the ***STATE*** field represented in the Page header

Step 28. ***HOLD*** down your ***SHIFT*** key

Step 29. ***CLICK*** on the ***STATE*** field represented in the Detail

Step 30. With both fields selected, hover your mouse to get a two-pronged arrow***.*** ***CLICK*** and ***DRAG*** to the left to reduce the size of the field.

Step 31. ***STOP*** when the ***FIELD SIZE LINES UP*** with the number ***7*** on the ruler bar

Step 32. ***CLICK*** on the ***AM #*** field represented in the Page header

Step 33. ***HOLD*** down your ***SHIFT*** key

Step 34. ***CLICK*** on the ***AM #*** field represented in the Detail

Step 35. With both fields selected, hover your mouse to get a two-pronged arrow. ***CLICK*** and ***DRAG*** to the left to reduce the size of the field.

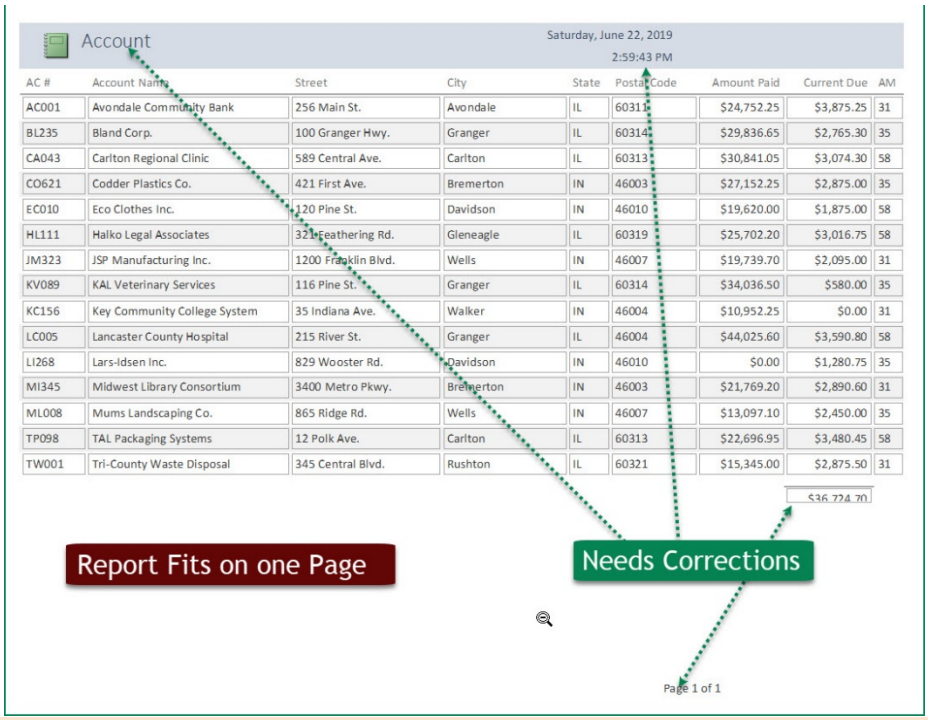
Step 36. ***STOP*** when the ***FIELD SIZE LINES UP*** with the number ***10.5*** on the ruler bar

Step 37. ***CLICK*** on the ***LAST LINE*** in the report to select the border. Your mouse turns into a horizontal arrow with a cross

Step 38. ***DRAG*** the ***CROSS*** toward the ***LAST VISIBLE FIELD*** on the report. In this case, your report should end at ***10.5***

Step 39. ***RIGHT-CLICK*** the ***Account Financial Report***

Step 40. ***CLICK*** on the ***PRINT PREVIEW*** option to check your result. Notice that the full report fits on one page; however, the page numbers need and date to be moved to a better location and the total amount is slightly cutoff.



AC #	Account Name	Street	City	State	Postal Code	Amount Paid	Current Due	AM
AC001	Avondale Community Bank	256 Main St.	Avondale	IL	60311	$24,752.25	$3,875.25	31
BL235	Bland Corp.	100 Granger Hwy.	Granger	IL	60314	$29,836.65	$2,765.30	35
CA043	Carlton Regional Clinic	589 Central Ave.	Carlton	IL	60313	$30,841.05	$3,074.30	58
CO621	Codder Plastics Co.	421 First Ave.	Bremerton	IN	46003	$27,152.25	$2,875.00	35
EC010	Eco Clothes Inc.	120 Pine St.	Davidson	IN	46010	$19,620.00	$1,875.00	58
HL111	Halko Legal Associates	321 Feathering Rd.	Gleneagle	IL	60319	$25,702.20	$3,016.75	58
JM323	JSP Manufacturing Inc.	1200 Franklin Blvd.	Wells	IN	46007	$19,739.70	$2,095.00	31
KV089	KAL Veterinary Services	116 Pine St.	Granger	IL	60314	$34,036.50	$580.00	35
KC156	Key Community College System	35 Indiana Ave.	Walker	IN	46004	$10,952.25	$0.00	31
LC005	Lancaster County Hospital	215 River St.	Granger	IL	46004	$44,025.60	$3,590.80	58
LI268	Lars-Idsen Inc.	829 Wooster Rd.	Davidson	IN	46010	$0.00	$1,280.75	35
MI345	Midwest Library Consortium	3400 Metro Pkwy.	Bremerton	IN	46003	$21,769.20	$2,890.60	31
ML008	Mums Landscaping Co.	865 Ridge Rd.	Wells	IN	46007	$13,097.10	$2,450.00	35
TP098	TAL Packaging Systems	12 Polk Ave.	Carlton	IL	60313	$22,696.95	$3,480.45	58
TW001	Tri-County Waste Disposal	345 Central Blvd.	Rushton	IL	60321	$15,345.00	$2,875.50	31
							$36,724.70	

MOVING FIELDS TO A BETTER LOCATION

Step 41. ***RIGHT-CLICK*** the Account Financial Report in the Navigation Pane

Step 42. ***CLICK*** on ***DESIGN VIEW*** on the shortcut menu

Step 43. In the report footer, ***CLICK*** on the ***SUM AMOUNT FIELD***

Step 44. Hover your mouse over the top center of the field. Your mouse will turn into a double arrow. ***CLICK*** and ***DRAG*** the arrow ***UP*** to enlarge the field

Step 45. In the page footer section, select the codes for the page numbers and number of pages. Once the fields are selected, you and ***NUDGE*** the ***PAGE NUMBERS*** to the ***RIGHT*** using your ***RIGHT ARROW*** on your keyboard.

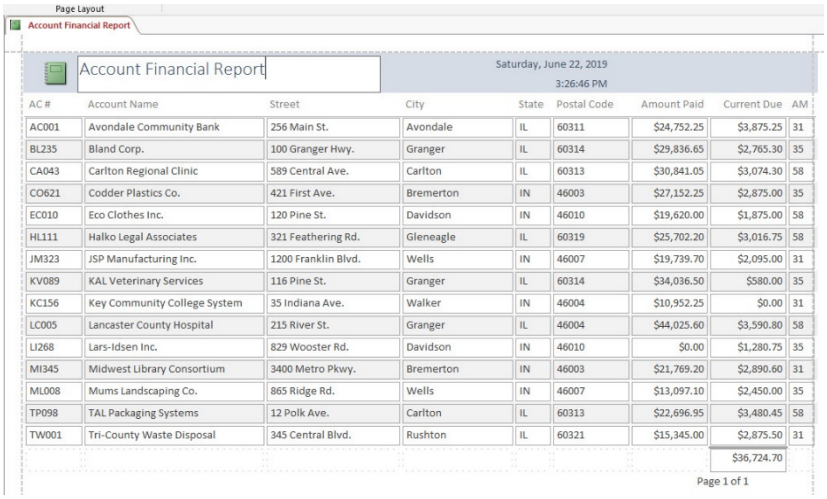
Step 46. ***REPEAT HITTING*** the ***RIGHT ARROW*** until the page numbers line up with the ***10.5***-inch marker on the ruler bar

Step 47. ***RIGHT-CLICK*** the Account Financial Report in the Navigation Pane

Step 48. ***CLICK*** on ***LAYOUT VIEW*** on the shortcut menu

Step 49. ***CLICK*** in the ***HEADER*** to change the wording for the header

Step 50. Type ***Account Financial Report***



Page Layout

Account Financial Report

Account Financial Report

Saturday, June 22, 2019
3:26:46 PM

AC #	Account Name	Street	City	State	Postal Code	Amount Paid	Current Due	AM
AC001	Avondale Community Bank	256 Main St.	Avondale	IL	60311	$24,752.25	$3,875.25	31
BL235	Bland Corp.	100 Granger Hwy.	Granger	IL	60314	$29,836.65	$2,765.30	35
CA043	Carlton Regional Clinic	589 Central Ave.	Carlton	IL	60313	$30,841.05	$3,074.30	58
CO621	Codder Plastics Co.	421 First Ave.	Bremerton	IN	46003	$27,152.25	$2,875.00	35
EC010	Eco Clothes Inc.	120 Pine St.	Davidson	IN	46010	$19,620.00	$1,875.00	58
HL111	Halko Legal Associates	321 Feathering Rd.	Gleneagle	IL	60319	$25,702.20	$3,016.75	58
JM323	JSP Manufacturing Inc.	1200 Franklin Blvd.	Wells	IN	46007	$19,739.70	$2,095.00	31
KV089	KAL Veterinary Services	116 Pine St.	Granger	IL	60314	$34,036.50	$580.00	35
KC156	Key Community College System	35 Indiana Ave.	Walker	IN	46004	$10,952.25	$0.00	31
LC005	Lancaster County Hospital	215 River St.	Granger	IL	46004	$44,025.60	$3,590.80	58
LI268	Lars-Idsen Inc.	829 Wooster Rd.	Davidson	IN	46010	$0.00	$1,280.75	35
MI345	Midwest Library Consortium	3400 Metro Pkwy.	Bremerton	IN	46003	$21,769.20	$2,890.60	31
ML008	Mums Landscaping Co.	865 Ridge Rd.	Wells	IN	46007	$13,097.10	$2,450.00	35
TP098	TAL Packaging Systems	12 Polk Ave.	Carlton	IL	60313	$22,696.95	$3,480.45	58
TW001	Tri-County Waste Disposal	345 Central Blvd.	Rushton	IL	60321	$15,345.00	$2,875.50	31
							$36,724.70	

Page 1 of 1

Step 51. ***RIGHT-CLICK*** the Account Financial Report tab to activate the short-cut menu

Step 52. ***CLICK*** the ***CLOSE*** option

Step 53. ***CLICK*** the ***YES*** option to save the report

Step 54. ***CLOSE*** the ***ACCESS PROGRAM***. It is important that your Access database is closed before you try to submit the assignment. Close Access completely down.

SUBMIT YOUR ASSIGNMENT IN THE u13a1 ASSIGNMENT AREA:

PrattLast Associates

ON YOUR OWN ACTIVITY

Step 1. ***CREATE*** a ***NEW DATABASE***

Step 2. ***BROWSE*** to ***UNIT 13*** (Make sure you are Saving to your Unit 13 folder on your computer)

Step 3. ***SAVE AS Museum Gift Shop***

IMPORT VENDOR TABLE

Step 4. ***GET EXTERNAL DATA*** the new source is an ***EXCEL FILE*** called ***Lab 1-2 Vendor Data*** (located in your UNIT 13 Student Files)

- First Row – ***Column Headings***
- Primary Key – ***Vendor Code***
- Table Name – ***Vendor*** (there is no need to save these import steps)

Step 5. ***OPEN*** the ***DESIGN VIEW*** of the ***VENDOR TABLE***

VENDOR: Field Settings

- **Vendor Code -** SIZE: ***2*** CAPTION: ***VC***
- **Vendor Name -** SIZE: ***25***
- **Telephone Number -** SIZE: ***12***

Step 6. **SAVE** and **CLOSE** the **TABLE**

IMPORT ITEM TABLE

Step 7. ***GET EXTERNAL DATA*** the new source is an ***EXCEL FILE*** called ***Lab 1-2 Item Data*** (located in your UNIT 13 Student Files)

- First Row – ***Column Headings***
- Primary Key – ***Item Number***
- Table Name – ***Item*** (there is no need to save these import steps)

Step 8. ***OPEN*** the ***DESIGN VIEW*** of the ***ITEM TABLE***

ITEM: Field Settings

- **Item Number -** SIZE: ***4***
- **Description -** SIZE: ***28***
- **On Hand –** FIELD SIZE: ***Integer***
- **Wholesale Cost -** CAPTION: ***Wholesale***
- **Retail Price -** CAPTION: ***Retail***
- **Vendor Code -** SIZE: ***2*** CAPTION: ***VC*** (notice these settings are the same in both the vendor and item tables. ***This is a very important step for future activities.***)

Step 9. ***SAVE*** and ***CLOSE*** the ***TABLE***

Step 10. ***OPEN*** the ***ITEM TABLE*** in ***DATASHEET VIEW***

- ***ADJUST*** the ***COLUMNS*** to fit the data.

Step 11. ***SAVE*** and ***CLOSE*** the ***TABLE***

CREATE A QUERY

Step 12. ***CREATE*** a ***SIMPLE QUERY*** for the ***ITEM TABLE***

- FIELDS – ***Item Number, Description, Wholesale Cost, Retail Price, Vendor Code***
- NAME – ***Item Query***

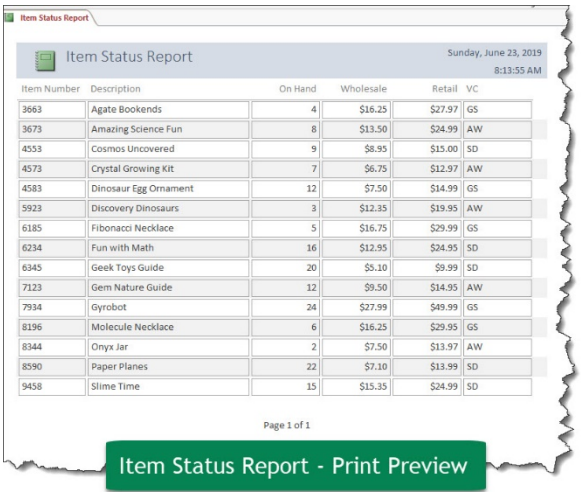
FORM AND REPORT

Step 13. ***CREATE*** a ***SIMPLE FORM*** for the ***ITEM TABLE***

- FORM NAME – ***Item***

Step 14. ***CREATE*** a ***REPORT*** for the ***ITEM TABLE***

- Adjust the form settings to fit portrait on one page.
- HEADING TITLE – ***Item Status Report***
- REPORT FOOTER – ***DELETE*** the ***TOTALS***
- SAVE AS – ***Item Status Report***



Item Status Report

Sunday, June 23, 2019
8:13:55 AM

Item Number	Description	On Hand	Wholesale	Retail	VC
3663	Agate Bookends	4	$16.25	$27.97	GS
3673	Amazing Science Fun	8	$13.50	$24.99	AW
4553	Cosmos Uncovered	9	$8.95	$15.00	SD
4573	Crystal Growing Kit	7	$6.75	$12.97	AW
4583	Dinosaur Egg Ornament	12	$7.50	$14.99	GS
5923	Discovery Dinosaurs	3	$12.35	$19.95	AW
6185	Fibonacci Necklace	5	$16.75	$29.99	GS
6234	Fun with Math	16	$12.95	$24.95	SD
6345	Geek Toys Guide	20	$5.10	$9.99	SD
7123	Gem Nature Guide	12	$9.50	$14.95	AW
7934	Gyrobot	24	$27.99	$49.99	GS
8196	Molecule Necklace	6	$16.25	$29.95	GS
8344	Onyx Jar	2	$7.50	$13.97	AW
8590	Paper Planes	22	$7.10	$13.99	SD
9458	Slime Time	15	$15.35	$24.99	SD

Page 1 of 1

Item Status Report - Print Preview

Step 15. ***CLOSE*** the ***ACCESS PROGRAM***. It is important that your Access database is closed before you try to submit the assignment. Close Access completely down.

SUBMIT YOUR ASSIGNMENT IN THE u13a2 ASSIGNMENT AREA:

Museum Gift Shop

UNIT 14 –QUERING A DATABASE

One of the primary benefits of using a database management system such as Access is having the ability to find answers to questions related to data stored in the tables of the database. When you pose a question to Access, or any other database management system, the question is called a query A query is a request for data or information from a database table or combination of tables. The query database feature is equal in necessity to data storage capability. Many query languages have been developed for different database engines and purposes, but the SQL language used by MS Access is by far the most ubiquitous and well-known.

Prior to SQL Server 2017, if you wanted to run SQL Server on your Mac, you first had to create a virtual machine (using VirtualBox, Parallels Desktop, VMware Fusion, or Bootcamp), then install Windows onto that VM, then finally SQL Server. This is still a valid option depending on your requirements. ***To run Access on a Mac Computer you will need one of the applications listed for a virtual machine.***

For this exercise, we will be using the PrattLast database file from Unit 13. Follow these directions to proceed:

Step 1. ***OPEN MS Access***

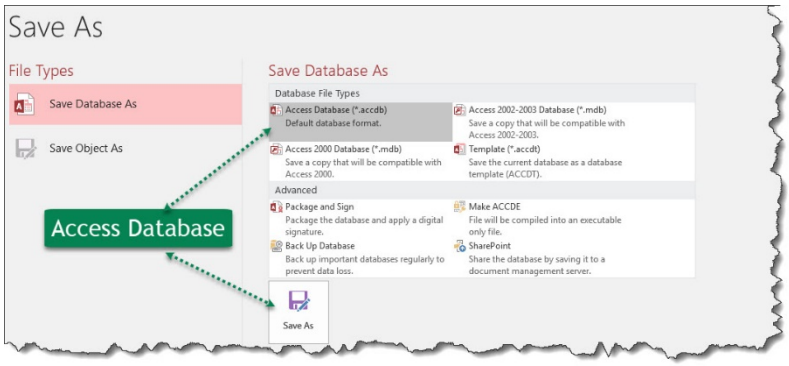
Step 2. ***BROWSE*** to ***UNIT 13***

Step 3. ***CLICK*** on ***PrattLast Associates***

Step 4. If you are prompted to enable content, ***CLICK*** the ***ENABLE*** option.

Step 5. ***CLICK*** on the ***FILE TAB*** to display the Backstage View

Step 6. ***CLICK*** on the ***SAVE AS*** option



Step 7. An option to Save Database As pops up ***CLICK*** on the ***Access Database*** option

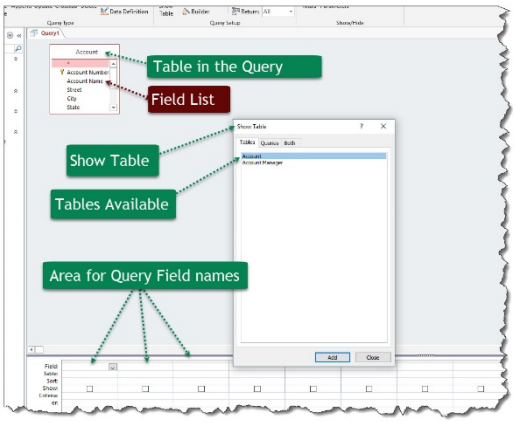
Step 8. ***CLICK*** on ***SAVE AS*** again. This is giving you the opportunity to save this file in a new location.

Step 9. ***NAVIGATE*** to your ***UNIT 14*** folder.

Step 10. ***CLICK*** on ***SAVE***. Because the database is now in a new folder, you will not loose your original company files created in UNIT 13. Access saves as you go along. If you plan to modify the structure of the database, saving various stages of the process is a good practice.

Step 11. ***CLICK*** on ***ENABLE*** content. You are ready to begin the UNIT 14 activities.

CREATE A QUERY IN DESIGN VIEW



Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

ADD FIELDS TO THE DESIGN OF THE QUERY

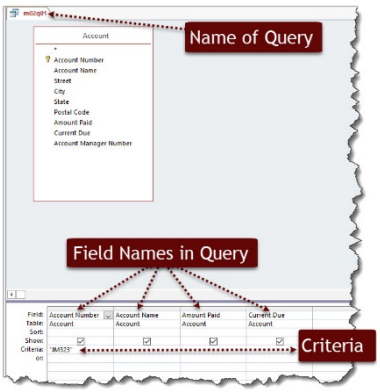
Step 6. ***DOUBLE-CLICK*** the ***ACCOUNT NUMBER*** field in the field list to add the field to the query.

Step 7. ***DOUBLE-CLICK*** the ***ACCOUNT NAME*** field in the field list to add the field to the query. You may need to scroll down the table to see the additional fields.

Step 8. ***DOUBLE-CLICK*** the ***AMOUNT PAID*** field in the field list to add the field to the query.

Step 9. ***DOUBLE-CLICK*** the ***CURRENT DUE*** field in the field list to add the field to the query.

ADD A CRITERIA



Step 10. ***CLICK*** the ***CRITERIA*** option for the ***ACCOUNT NUMBER*** field

Step 11. Type ***JM323***

Step 12. ***CLICK*** on the ***RUN*** option in the Results group of the Design Ribbon. You should have one record showing.

Step 13. ***RIGHT-CLICK*** the ***QUERY TAB***

Step 14. ***CLICK*** on ***CLOSE***. You will be prompted to save

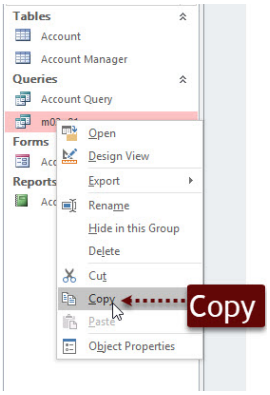
Step 15. ***CLICK*** on ***YES*** to save

Step 16. In the Query Name box, type ***m02q01***. You are using this name because we will be creating multiple queries using this format. Each query is numbered. This is the first of many.

Step 17. ***CLICK*** on ***OK***

USING SAVED QUERIES

For the next query, we are going to try saving some steps to the creation process by coping the query you already created for the Account table. Follow these steps:



Step 1. ***RIGHT-CLICK*** the ***m02q01*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***COPY***

Step 3. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 4. ***CLICK PASTE***

Step 5. Type the new Query Name: ***m02q02***

Step 6. ***CLICK OK***

EDIT THE QUERY WITH A WILDCARD

Wildcards are special characters that can stand in for unknown characters in a text value and are handy for locating multiple items with similar, but not identical data. Wildcards can also help with getting databased on a specified pattern match.

Access supports two sets of wildcard characters because it supports two standards for Structured Query Language (ANSI-89, ANSI-92). When running queries and find-and-replace operations against Access databases, ANSI-89 is used. The following table illustrates the process and the wildcards that can be

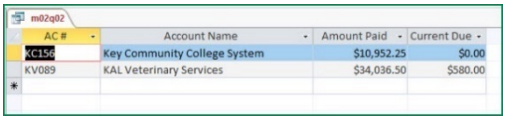
Character	Description	Example
*	Matches any number of characters. You can use the asterisk (*) anywhere in a character string.	**wh*** finds what, white, and why, but not awhile or watch.
?	Matches any single alphabetic character.	**B?ll** finds ball, bell, and bill.
[ ]	Matches any single character within the brackets.	**B[ae]ll** finds ball and bell, but not bill.
!	Matches any character not in the brackets.	**b[!ae]ll** finds bill and bull, but not ball or bell.
-	Matches any one of a range of characters. You must specify the range in ascending order (A to Z, not Z to A).	**b[a-c]d** finds bad, bbd, and bcd.
#	Matches any single numeric character.	**1#3S** finds 103, 113, and 123.

used:

Step 7. ***RIGHT-CLICK*** the ***m02q02***

Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. Under the ***Account Number*** field, ***REMOVE*** the ***CRITERIA***



Step 10. In the ***Account Name*** field, Type ***K**** for the new criteria

Step 11. In the results group, ***CLICK*** on the ***RUN*** option

Step 12. ***RIGHT-CLICK*** the ***m02q02 QUERY TAB***

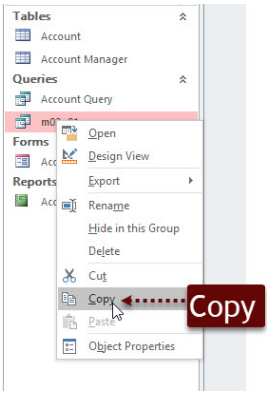
Step 13. ***CLICK*** on the ***DESIGN VIEW*** option. Notice that Access changed the K* to Like "K*" this is essentially the same criteria. There is no need to type the word Like in the statement. Access confirms the correct code for the wildcard item you typed.

Step 14. ***RIGHT-CLICK the m02q02 QUERY TAB***

Step 15. ***CLICK*** on ***CLOSE*** to ***SAVE*** and close the Query

ADD A FIELD TO A QUERY

For the next query, we are going to try saving some steps to the creation process by coping the query you already created for the Account table. Follow these steps:



Step 1. ***RIGHT-CLICK*** the ***m02q02*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***COPY***

Step 3. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 4. ***CLICK PASTE***

Step 5. Type the new Query Name: ***m02q03***

Step 6. ***CLICK OK***

Step 7. ***RIGHT-CLICK*** the ***m02q03***

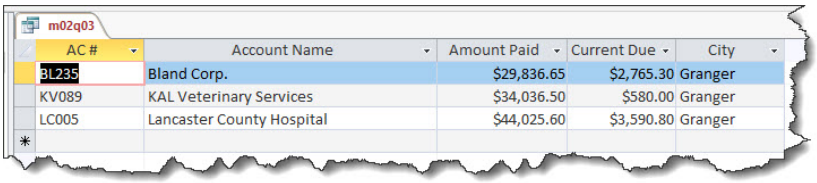
Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. Under the ***Account Name*** field, ***REMOVE*** the ***CRITERIA***

Step 10. In the table, ***DOUBLE-CLICK*** the ***CITY FIELD***

Step 11. In the ***City*** field, Type ***Granger*** for the new criteria

Step 12. In the results group, ***CLICK*** on the ***RUN*** option



m02q03

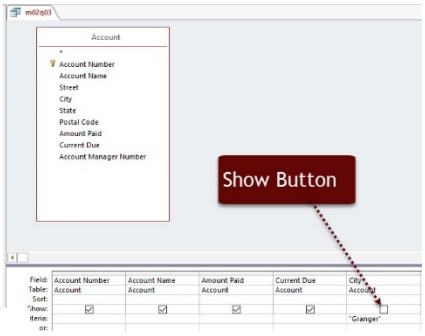
AC #	Account Name	Amount Paid	Current Due	City
BL235	Bland Corp.	$29,836.65	$2,765.30	Granger
KV089	KAL Veterinary Services	$34,036.50	$580.00	Granger
LC005	Lancaster County Hospital	$44,025.60	$3,590.80	Granger

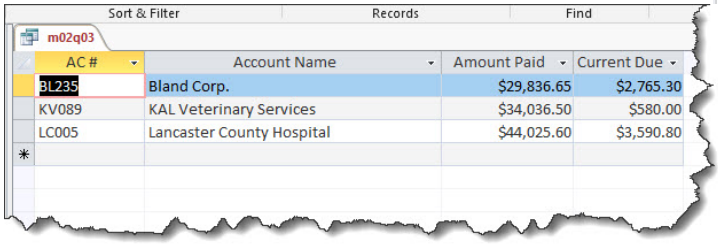
Step 13. The next plan is to set the query so that the city field does not show but is still in the criteria of the query. ***RIGHT-CLICK*** the ***m02q03 Query***

Step 14. ***CLICK*** on the ***DESIGN VIEW***

Step 15. ***UNCHECK*** the ***SHOW*** button for the ***CITY FIELD***

Step 16. In the results group, ***CLICK*** on the ***RUN*** option. Note that the result for the query is the same; however, the





Sort & Filter | Records | Find

m02q03

AC #	Account Name	Amount Paid	Current Due
BL235	Bland Corp.	$29,836.65	$2,765.30
KV089	KAL Veterinary Services	$34,036.50	$580.00
LC005	Lancaster County Hospital	$44,025.60	$3,590.80

City group is not showing. This technique is often used for compiling reports and other data from a table.

Step 17. ***RIGHT-CLICK the m02q03 QUERY TAB***

Step 18. ***CLICK*** on ***CLOSE*** to ***SAVE*** and close the Query

CREATE A PARAMETER QUERY

A parameter is a piece of information you supply to a query right as you run it. Parameters can be used by themselves or as part of a larger expression to form a criterion in the query. You can add parameters to any of the following types of queries:

- ✓ Select
- ✓ Crosstab
- ✓ Append
- ✓ Make-table
- ✓ Update

Creating a parameter is like adding a normal criterion to a query. Follow these steps to setup the query:

Step 1. ***RIGHT-CLICK*** the ***m02q03*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***COPY***

Step 3. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 4. ***CLICK PASTE***

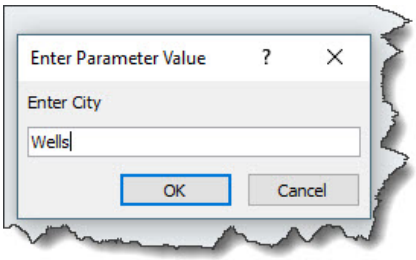
Step 5. Type the new Query Name: ***Account-City***

Step 6. ***CLICK OK***

Step 7. ***RIGHT-CLICK*** the ***Account-City QUERY***

Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. ***CHANGE*** the ***CRITERIA*** for the ***CITY*** field to ***[Enter City]***. The square brackets indicate that the text entered is not text that the value in the column must match. Without the brackets, Access would search for records in which the city is *Enter City*



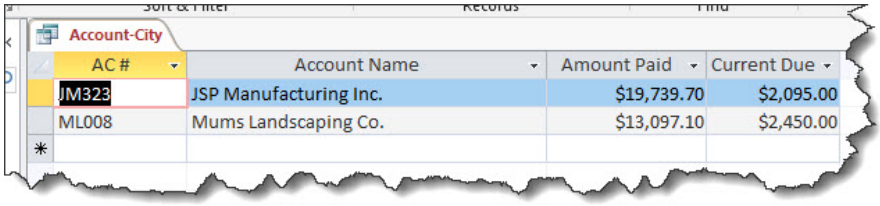
Step 10. In the results group, ***CLICK*** on the ***RUN*** option.

Step 11. When prompted to enter the City, ***ENTER Wells*** for the City name

Step 12. ***CLICK*** on ***OK*** to confirm your choice

Step 13. ***RIGHT-CLICK*** the ***Account-City QUERY TAB***

Step 14. ***CLICK*** on ***CLOSE*** to ***SAVE*** and close the Query



COMPARISON OPERATORS AND NUMBERS

USE A NUMBER IN A QUERY

Step 1. ***RIGHT-CLICK*** the ***m02q03*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***DESIGN VIEW***

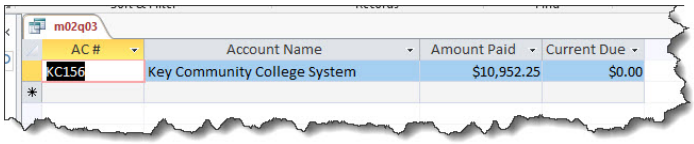
Step 3. ***DELETE*** the ***CRITERIA*** under the ***CITY FIELD***

Step 4. ***ADD*** the number ***0*** (zero) to the ***CURRENT DUE CRITERIA***

Step 5. In the results group, ***CLICK*** on the ***RUN*** option.

Step 6. ***RIGHT-CLICK*** the ***m02q03*** query to reveal the short-cut menu

Step 7. ***CLICK on the CLOSE*** option



Step 8. If prompted, ***CLICK YES*** to ***SAVE*** the ***m02q03 QUERY***

Step 9. ***RIGHT-CLICK*** the ***m02q03*** query to reveal the short-cut menu

Step 10. ***CLICK*** on ***DESIGN VIEW.*** Notice that when you open the query again, the Current Due is still zero and the City field is no longer on the list. The number 0 (zero) does not have any quotes around it. This is because the criteria reference is a number rather than a text.

Step 11. ***CLOSE*** and ***SAVE*** the ***m02q03 QUERY***

USE A COMPARISON OPERATOR

Unless you specify otherwise, Access assumes that the criteria you enter involve equality (exact matches). In the last query, for example, you were requesting those accounts whose current due amount is equal to 0 (zero). In other situations, you might want to find a range of results; for example, you could request accounts whose current due is greater than $2,000.00. If you want a query to return something other than an exact match, you must enter the appropriate comparison operator.

Comparison Operators

Operator	Description
>	Greater than operator
>=	Greater than or equal to operator
<	Less than operator
<=	Less than or equal to operator
=	'Equal to' operator
<>	'Not equal to' operator

The following steps use the greater than operator in a query to demonstrate the process:

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

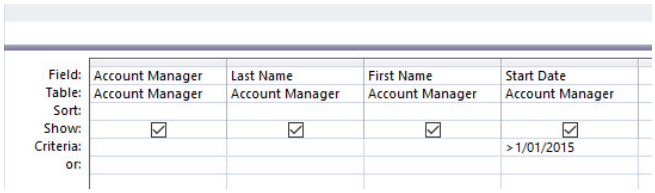
Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT Manager.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

- ***DOUBLE-CLICK*** the ***Account Manager*** field in the field list to add the field to the query.
- ***DOUBLE-CLICK*** the ***Last Name*** field in the field list to add the field to the query. You may need to scroll down the table to see the additional fields.
- ***DOUBLE-CLICK*** the ***First Name*** field in the field list to add the field to the query.
- ***DOUBLE-CLICK*** the ***Start Date*** field in the field list to add the field to the query.

Step 6. START DATE CRITERIA: Type ***>1/01/2015***



Field:	Account Manager	Last Name	First Name	Start Date
Table:	Account Manager	Account Manager	Account Manager	Account Manager
Sort:				
Show:	☑	☑	☑	☑
Criteria:				>1/01/2015
or:				

Step 7. ***CLICK*** on the ***RUN*** option in the Results group of the Design Ribbon. You should have one record showing.

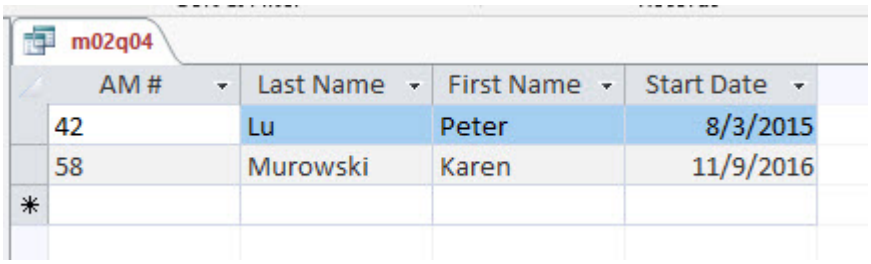
Step 8. ***RIGHT-CLICK*** the ***QUERY TAB***

Step 9. ***CLICK*** on ***CLOSE***. You will be prompted to save

Step 10. ***CLICK*** on ***YES*** to save

Step 11. In the Query Name box, type ***m02q04***. You are using this name because we will be creating multiple queries using this format. Each query is numbered. This is the first of many.

Step 12. ***CLICK*** on ***OK***



m02q04

AM #	Last Name	First Name	Start Date
42	Lu	Peter	8/3/2015
58	Murowski	Karen	11/9/2016
*			

USING COMPOUND CRITERIA

Step 1. ***RIGHT-CLICK*** the ***m02q03*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***COPY***

Step 3. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 4. ***CLICK PASTE***

Step 5. Type the new Query Name: ***m02q05***

Step 6. ***CLICK OK***

Step 7. ***RIGHT-CLICK*** the ***m02q05 QUERY***

Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. ***REPLACE*** the ***CRITERIA*** under the ***Current Due field***

Step 10. Type the new criteria as ***>2500***

Step 11. In the results group, ***CLICK*** on the ***RUN*** option. The result shows only those orders over $2,500.

Query with >2,500 in the Current Due

m02q05

AC #	Account Name	Amount Paid	Current Due
AC001	Avondale Community Bank	$24,752.25	$3,875.25
BL235	Bland Corp.	$29,836.65	$2,765.30
CA043	Carlton Regional Clinic	$30,841.05	$3,074.30
CO621	Codder Plastics Co.	$27,152.25	$2,875.00
HL111	Halko Legal Associates	$25,702.20	$3,016.75
LC005	Lancaster County Hospital	$44,025.60	$3,590.80
MI345	Midwest Library Consortium	$21,769.20	$2,890.60
TP098	TAL Packaging Systems	$22,696.95	$3,480.45
TW001	Tri-County Waste Disposal	$15,345.00	$2,875.50

Step 12. ***RIGHT-CLICK*** the ***m02q05 QUERY TAB***

Step 13. ***CLICK*** on the ***CLOSE ALL*** option

Step 14. When prompted to Save, ***CLICK YES***. This closes any open queries, so you can proceed to the next step.

QUERIES – AND VS OR

When writing queries in Access, it is important to know where to place the criteria for the queries, as placing the criteria in the wrong place can drastically change the outcome. Although there are many ways to write criteria in Access queries, our focus will be on the '*AND'* and '*OR'* expressions, and where to place these expressions in queries to get the proper outcomes.

- ***AND*** – When using *AND*, it is important to understand that the outcome of the query will give fewer answers. This is because *AND* requires that all criteria are true, to be displayed.
- ***OR*** – When using *OR*, more answers will populate, as *OR* only requires that any one of the criteria statements is true, to be displayed.

QUERY 1: BUILD AN AND CRITERIA IN AN EXISTING THE QUERY

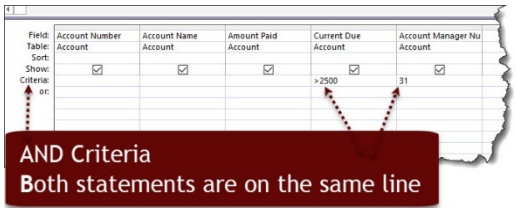
For this exercise, we are going to revise the m02q05 to include an AND criteria:

Step 15. ***RIGHT-CLICK*** the ***m02q05 QUERY***

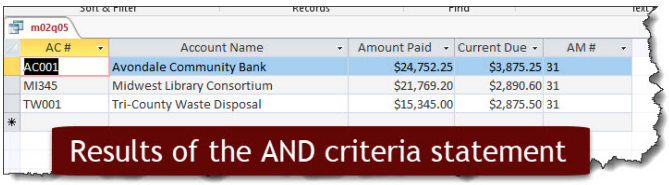
Step 16. ***CLICK*** on the ***DESIGN VIEW*** option

Step 17. ***DOUBLE-CLICK*** the ***ACCOUNT MANAGER NUMBER*** field to include it in the query

- ***In*** the ***CRITERIA ROW*** under ***Account Manager Number,*** Type ***31***



- In the results group, ***CLICK*** on the ***RUN*** option.



Step 18. ***CLICK*** on the ***CLOSE ALL*** option

Step 19. When prompted to Save, ***CLICK YES***. This closes any open queries, so you can proceed to the next step.

QUERY 2: BUILD AN OR CRITERIA IN A NEW QUERY

For this exercise, we are going to copy the m02q05 query to m02q06 then build an OR criterion:

Step 20. ***RIGHT-CLICK*** the ***m02q05*** query to reveal the short-cut menu

Step 21. ***CLICK*** on ***COPY***

Step 22. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 23. ***CLICK PASTE***

Step 24. Type the new Query Name: ***m02q06***

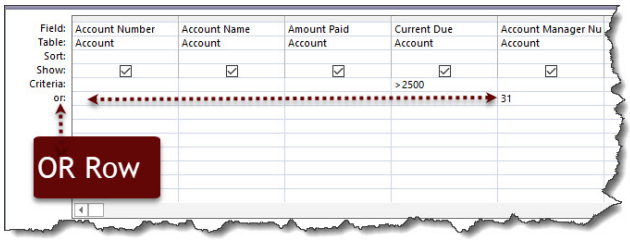
Step 25. ***CLICK OK***

Step 26. ***RIGHT-CLICK*** the new ***m02q06 Query*** to view the shortcut menu options

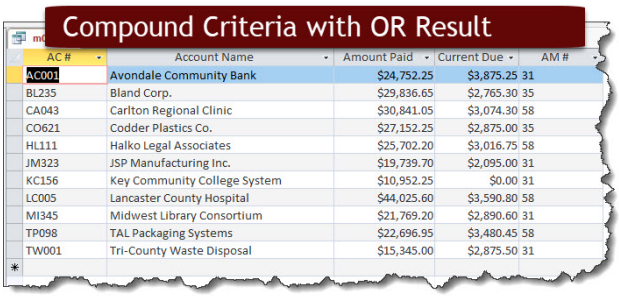
Step 27. ***CLICK*** on ***DESIGN VIEW***

Step 28. ***DELETE*** the ***31*** in the ***Account Manager Number*** criteria row

- Note there is a row below the criteria row labeled ***or:*** This is where you want to type the OR criteria. ***CLICK*** on the ***OR ROW*** below the ***ACCOUNT MANAGER NUMBER***
- Type ***31***



- In the results group, ***CLICK*** on the ***RUN*** option.



Step 29. ***CLICK*** on the ***CLOSE ALL*** option

Step 30. When prompted to Save, ***CLICK YES***. This closes any open queries, so you can proceed to the next step.

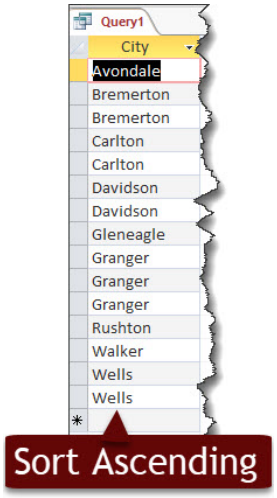
SORT ENTRIES AND OMIT DUPLICATES

When sorting in a query, the tables in which the query is based on is not actually sorted or rearranged. The Database Management System determines the most efficient method of simply displaying the records in the requested order. The sort in the query is generally used to view specific records in a unique form. It does not alter or adjust the data table in any way.

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*



Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

Step 6. ***ADD*** the ***CITY*** field to the query

Step 7. ***CLICK*** the ***SORT ROW*** to display a menu of possible sort orders

Step 8. ***CLICK*** the ***ASCENDING*** option to select the row order

Step 9. In the results group, ***CLICK*** on the ***RUN*** option.

Step 10. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the shortcut menu

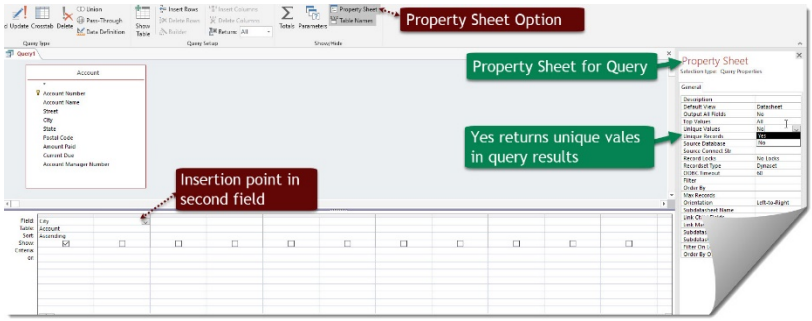
Step 11. ***CLICK*** the ***DESIGN VIEW*** option

Step 12. ***CLICK*** the ***SECOND FIELD*** (empty field to the right of City) to produce an insertion point

Step 13. In the show/hide group of the Design Ribbon, ***CLICK*** on the ***PROPERTY SHEET*** option

Step 14. By default, the Unique Values is set to No. ***CLICK*** the option next to ***UNIQUE VALUES***

Step 15. ***CLICK*** the ***YES*** option to define the property for unique values



Step 16. In the results group, ***CLICK*** on the ***RUN*** option. Notice that all the duplicate entries for the City field have been removed and the sort is in ascending order.

Step 17. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

Step 18. ***CLICK*** on the ***CLOSE ALL*** option

Step 19. When asked to save, ***CLICK*** on the ***YES*** option

Step 20. Type ***m02q07*** as the ***QUERY NAME***

Step 21. ***CLICK*** on the ***OK*** option

SORT USING MULTIPLE KEYS

When you sort the data in an Access table, query, form, or report, you can save the sort order with the object. If you sort the data in one of these objects and then save the object, the sort order that is in effect when you save the object is automatically saved with the object. You can specify whether the saved sort order will be in effect when the object is next opened.

For queries and reports, you can also define a default sort order. The default sort order is applied to the data in the query or report when no other sort order is specified.

There are two kinds of saved sort orders:

- **Last-applied** A last-applied sort order is the sort order that was in effect when the object was last saved. Tables, queries, forms, and reports can all have last-applied sort orders.
- **Default** A default sort order is built into the design of a query or a report. A default sort order is applied when no other sort order is specified.

When sorting two or more fields of a query, the field in the first position is referred to as the major key because it is key that will be sorted first. In the following exercise, you will set the Account Manager Number to be the major key in the query:

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

Step 6. ***ADD*** the ***Account Number*** field to the query (HINT: The fields can be added with a click and drag from the table into the field list)

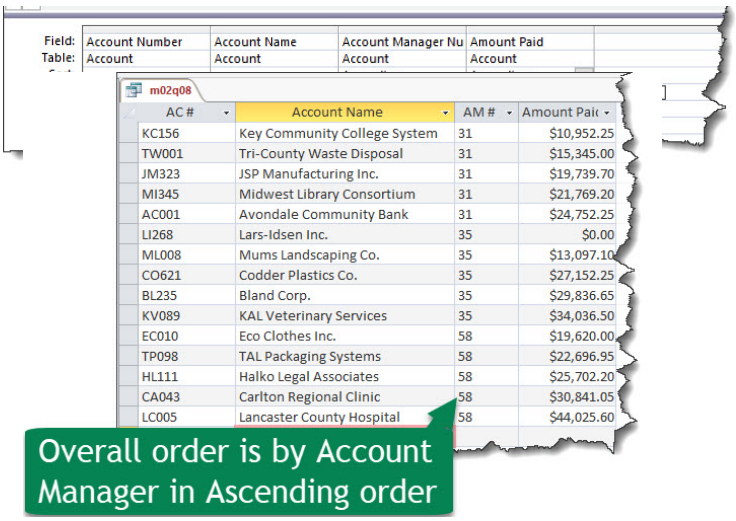
Step 7. ***ADD*** the ***Account Name*** field to the query

Step 8. ***ADD*** the ***Account Manager Number*** field to the query

- ***SORT: Ascending***

Step 9. ***ADD*** the ***Amount Paid*** field to the query

- ***SORT: Ascending***



AC #	Account Name	AM #	Amount Paid
KC156	Key Community College System	31	$10,952.25
TW001	Tri-County Waste Disposal	31	$15,345.00
JM323	JSP Manufacturing Inc.	31	$19,739.70
MI345	Midwest Library Consortium	31	$21,769.20
AC001	Avondale Community Bank	31	$24,752.25
LI268	Lars-Idsen Inc.	35	$0.00
ML008	Mums Landscaping Co.	35	$13,097.10
CO621	Codder Plastics Co.	35	$27,152.25
BL235	Bland Corp.	35	$29,836.65
KV089	KAL Veterinary Services	35	$34,036.50
EC010	Eco Clothes Inc.	58	$19,620.00
TP098	TAL Packaging Systems	58	$22,696.95
HL111	Halko Legal Associates	58	$25,702.20
CA043	Carlton Regional Clinic	58	$30,841.05
LC005	Lancaster County Hospital	58	$44,025.60

Step 10. In the results group, ***CLICK*** on the ***RUN*** option. Notice that all the duplicate entries for the City field have been removed and the sort is in ascending order.

Step 11. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

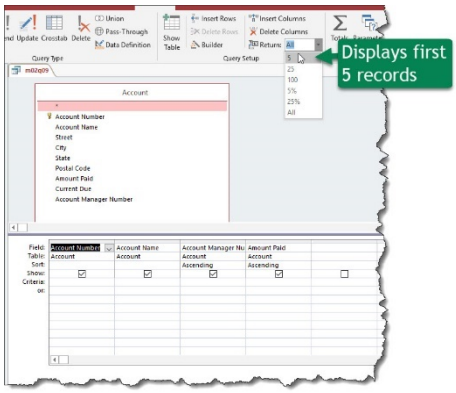
Step 12. ***CLICK*** on the ***CLOSE ALL*** option

Step 13. When asked to save, ***CLICK*** on the ***YES*** option

Step 14. Type ***m02q08*** as the ***QUERY NAME***

Step 15. ***CLICK*** on the ***OK*** option

CREATE A TOP-VALUE QUERY



Step 1. ***RIGHT-CLICK*** the ***m02q08*** query to reveal the short-cut menu

Step 2. ***CLICK*** on ***COPY***

Step 3. ***RIGHT-CLICK*** inside the ***Navigation Pane***

Step 4. ***CLICK PASTE***

Step 5. Type the new Query Name: ***m02q09***

Step 6. ***CLICK OK***

Step 7. ***RIGHT-CLICK*** the ***m02q09***

Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. In the Query Setup group, ***CLICK*** the ***RETURN*** drop-down menu

Step 10. ***SELECT*** the number ***5***. The results should show the first 5 rows of data in the query.

Step 11. ***CLICK*** on the ***RUN*** option

m02q09

AC #	Account Name	AM #	Amount Paic
KC156	Key Community College System	31	$10,952.25
TW001	Tri-County Waste Disposal	31	$15,345.00
JM323	JSP Manufacturing Inc.	31	$19,739.70
MI345	Midwest Library Consortium	31	$21,769.20
AC001	Avondale Community Bank	31	$24,752.25

Step 12. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

Step 13. ***CLICK*** on the ***CLOSE ALL*** option

Step 14. When asked to save, ***CLICK*** on the ***YES*** option

JOINING TABLES

A database is a collection of tables of data that allow logical relationships to each other. You use relationships to connect tables by fields that they have in common. A table can be part of any number of relationships, but each relationship always has exactly two tables. In a query, a relationship is represented by a **Join**.

WHAT IS JOIN

A join specifies how to combine records from two or more tables in a database. Conceptually, a join is very similar to a table relationship. In fact, joins are to queries what relationships are to tables.

The following are the two basic types of joins

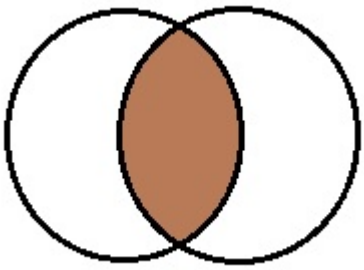
- The inner join
- The outer join

Both of which can easily be created from a **queries design view**.

INNER JOIN

Let us now understand **Inner Join** −

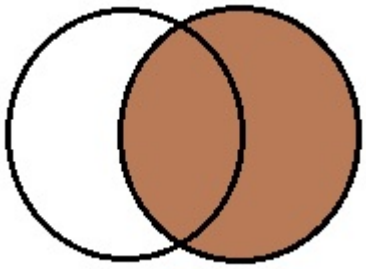
- The most common type of join is an inner join which is also the default join type in Microsoft Access.
- Inner Join will display only the rows or records where the joined fields from both tables are equal.
- This join type looks at those common fields and the data contained within. It only displays the matches.



OUTER JOIN

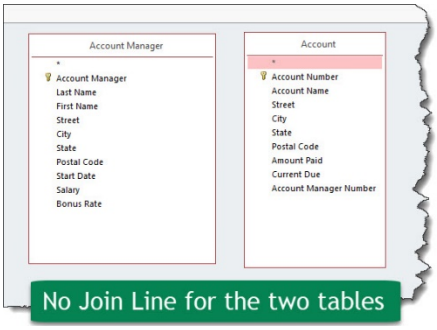
Let us now understand what an **Outer Join** is −

- An outer join displays all rows from one table and only those rows or records from the other table where the joined fields are equal.
- In other words, an outer join shows all rows from one table and only the corresponding rows from the other table.



JOIN THE TABLES

When a query contains two tables with the same field name (in this case Account Manager Number), Access will automatically assume the tables are to be joined in the query. The type of join is determined by the step taken in the creation process. Follow these instructions to proceed:



Step 1. ***CLICK*** the ***CREATE TAB*** to display the Create Ribbon

Step 2. ***CLICK*** the ***QUERY DESIGN*** button in the queries group

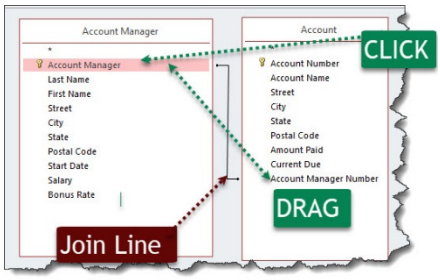
Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** the ***ACCOUNT MANAGER*** table.

Step 6. ***CLICK*** on the ***ADD*** option. Both tables should be in view.

The names of the fields in the two tables differ; therefore, Access did not automatically insert the line from the Account Manager field to the Account Manager Number field. Follow these instructions to insert the line:



Step 7. ***CLICK*** the ***ACCOUNT MANAGER FIELD*** name in the ***ACCOUNT MANAGER TABLE***

Step 8. ***DRAG*** to the ***ACCOUNT MANAGER NUMBER FIELD*** in the ***ACCOUNT TABLE***

Step 9. ***RELEASE*** your ***MOUSE***. The two fields are now joined.

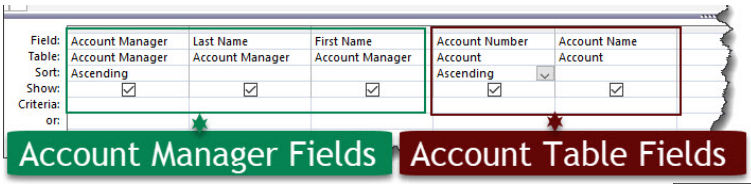
To include fields from both tables, it is necessary to click on the field name from the appropriate table and drag it into the design grid. Follow these steps:

Step 10. From the ***ACCOUNT MANAGER*** table, include the following fields:

- ***Account Manager***
  - SORT: ***Ascending***
- ***Last Name***
- ***First Name***

Step 11. From the ***ACCOUNT*** table, include these fields:

- ***Account Number***
  - SORT: ***Ascending***
- ***Account Name***



Step 12. ***CLICK*** on the ***RUN*** option

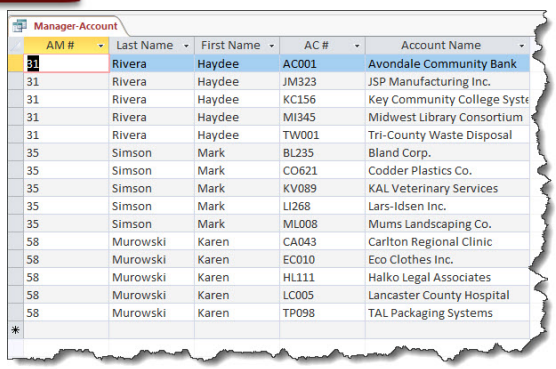
Step 13. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

Step 14. ***CLICK*** on the ***CLOSE ALL*** option

Step 15. When asked to save, ***CLICK*** on the ***YES*** option

Step 16. Type ***Manager-Account*** for the Query Name

Step 17. ***CLICK*** on ***OK***

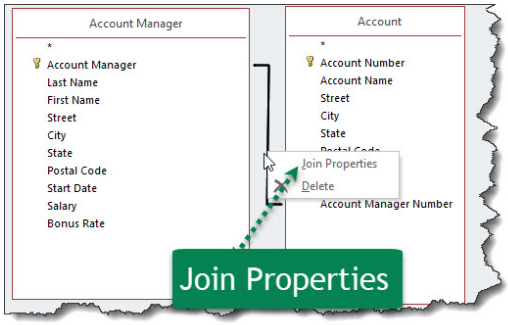


Manager-Account

AM #	Last Name	First Name	AC #	Account Name
31	Rivera	Haydee	AC001	Avondale Community Bank
31	Rivera	Haydee	JM323	JSP Manufacturing Inc.
31	Rivera	Haydee	KC156	Key Community College Syste
31	Rivera	Haydee	MI345	Midwest Library Consortium
31	Rivera	Haydee	TW001	Tri-County Waste Disposal
35	Simson	Mark	BL235	Bland Corp.
35	Simson	Mark	CO621	Codder Plastics Co.
35	Simson	Mark	KV089	KAL Veterinary Services
35	Simson	Mark	LI268	Lars-Idsen Inc.
35	Simson	Mark	ML008	Mums Landscaping Co.
58	Murowski	Karen	CA043	Carlton Regional Clinic
58	Murowski	Karen	EC010	Eco Clothes Inc.
58	Murowski	Karen	HL111	Halko Legal Associates
58	Murowski	Karen	LC005	Lancaster County Hospital
58	Murowski	Karen	TP098	TAL Packaging Systems

CHANGE THE JOIN PROPERTIES

The join we just created was an Inner Join. Only the rows or records where both fields from both tables were equal were showing. Therefore, the account manager, Peter Lu, did not appear in the results. He currently does not have any accounts. In the next steps we will change the join to an Outer join.



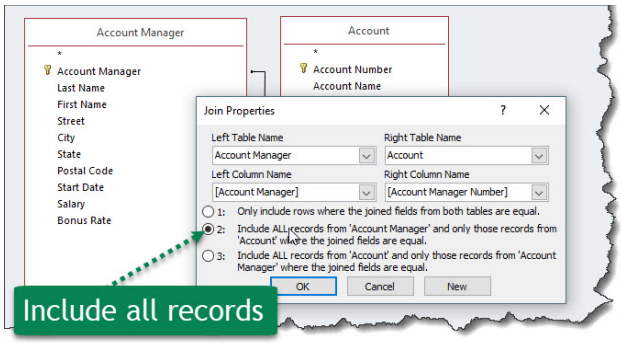
Step 1. With the PrattLast Associates database open, ***RIGHT-CLICK*** the ***Manager-Account*** query to display the shortcut menu.

Step 2. ***CLICK*** on the ***DESIGN VIEW*** option

Step 3. ***RIGHT-CLICK*** the ***JOIN LINE*** for the two tables

Step 4. ***CLICK*** the ***OPTION 2*** button to include all records

Step 5. ***CLICK*** the ***OK*** button

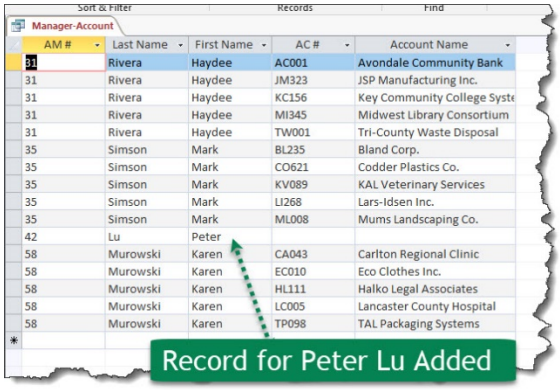


Step 6. ***CLICK*** on the ***RUN*** option

Step 7. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

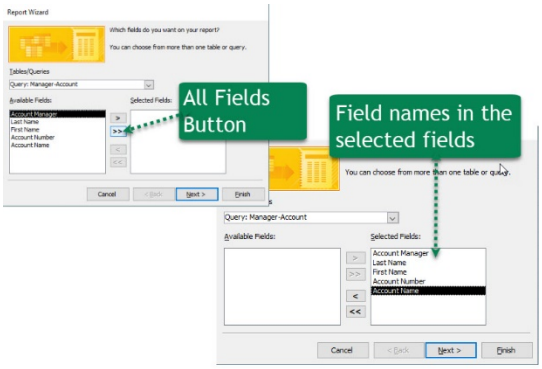
Step 8. ***CLICK*** on the ***CLOSE ALL*** option

Step 9. When asked to save, ***CLICK*** on the ***YES*** option



CREATE A REPORT FROM A QUERY

You can use queries to create reports. In this exercise we will use the Manager-Account query in the PrattLast Associates database to generate a report.



Step 1. With the PrattLast Associates database open, ***CLICK*** the ***MANAGER-ACCOUNT QUERY*** to select it.

Step 2. ***CLICK*** the ***CREATE TAB*** to view the Create Ribbon band

Step 3. In the reports group, ***CLICK*** the ***REPORT WIZARD*** button

Step 4. If prompted to save, ***CLICK*** on ***YES***

Step 5. ***CLICK*** the ***ADD ALL FIELDS*** button to add all of the available fields to the selected fields box.

Step 6. ***CLICK the NEXT button***

Step 7. ***CLICK*** the ***NEXT*** button to confirm there is no grouping

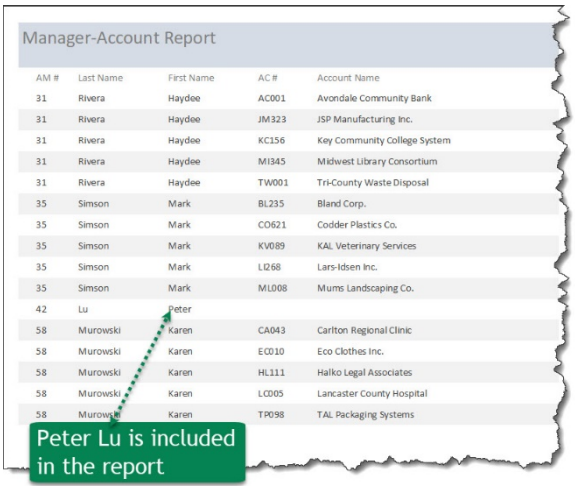
Step 8. Because your query already sorts the data, you can ***CLICK NEXT*** for the sorting option.

Step 9. ***CLICK*** the ***TABULAR*** option for the layout of the report

Step 10. ***CLICK*** the ***PORTRAIT*** option for the orientation.

Step 11. ***CLICK*** the ***NEXT*** option

Step 12. Name the report ***Manager-Account Report***



Manager-Account Report

AM #	Last Name	First Name	AC #	Account Name
31	Rivera	Haydee	AC001	Avondale Community Bank
31	Rivera	Haydee	JM323	JSP Manufacturing Inc.
31	Rivera	Haydee	KC156	Key Community College System
31	Rivera	Haydee	MI345	Midwest Library Consortium
31	Rivera	Haydee	TW001	Tri-County Waste Disposal
35	Simson	Mark	BL235	Bland Corp.
35	Simson	Mark	CO621	Codder Plastics Co.
35	Simson	Mark	KV089	KAL Veterinary Services
35	Simson	Mark	LI268	Lars-Idsen Inc.
35	Simson	Mark	ML008	Mums Landscaping Co.
42	Lu	Peter		
58	Murowski	Karen	CA043	Carlton Regional Clinic
58	Murowski	Karen	EC010	Eco Clothes Inc.
58	Murowski	Karen	HL111	Halko Legal Associates
58	Murowski	Karen	LC005	Lancaster County Hospital
58	Murowski	Karen	TP098	TAL Packaging Systems

Step 13. ***CLICK*** the ***FINISH*** option to preview the report

Step 14. ***RIGHT-CLICK*** the ***REPORT TAB*** to view the short-cut menu

Step 15. ***CLICK*** on the ***CLOSE ALL*** option

Step 16. When asked to save, ***CLICK*** on the ***YES*** option

CREATE A FORM FOR A QUERY

You can use a query to supply data to a form or report in Access. You can use a query when you create the form or report, or you can change an existing form or report by setting its Record Source property. When you set the Record Source property, you can either specify an existing query, or you can create a new query to use.

If you use a query as the record source, you might not be able to edit the data. Before you use a query as your record source, you should consider whether you need to edit data.

The following steps create a form, then save the form. This enables the form to be available for future use.

Step 1. With the PrattLast Associates database open, ***CLICK*** the ***MANAGER-ACCOUNT QUERY*** to select it.

Step 2. ***CLICK*** the ***CREATE TAB*** to view the Create Ribbon band

Step 3. In the forms group, ***CLICK*** the ***FORM*** button

Step 4. ***RIGHT-CLICK*** the ***FORM TAB*** to view the short-cut menu

Step 5. ***CLICK*** on the ***CLOSE ALL*** option

Step 6. When asked to save, ***CLICK*** on the ***YES*** option

Step 7. At the Save As dialog box type ***Manager-Account Form***

Step 8. ***CLICK*** on the ***OK*** button

After you have saved a form, you can use it at any time by right-clicking the form in the Navigation Pane and then clicking Open on the shortcut menu. If you plan to use the form to enter data, you must ensure you are viewing the form in Form view.

EXPORT DATA FROM ACCESS TO OTHER APPLICATIONS

Access provides several ways to copy an object such as a table or form from one database to another. Copying and pasting an object is easiest, but exporting an object offers you more options. For example, you can export the table definition and the data in the table, or export just the table definition (a blank copy of the table). You can also save the details of the operation as an export specification for future use.

You can export a table, query, form, report, macro, or module from one Access database to another. When you export an object, Access creates a copy of the object in the destination database.

You export database objects when you need to do any of the following tasks:

- Copy the structure of a table to another database as a shortcut to creating a new table.
- Copy the design and layout of a form or report to another database as a quick way to create a new form or report.
- Copy the latest version of a table or form to another database at regular intervals. To do this, you can create an export specification the first time you export the object, and then use the specification to repeat the operation later.

Note that exporting an object to another database differs very little from opening a second database and then importing the object from the first. The two main differences between importing and exporting objects between Access databases are:

- You can import multiple objects in a single operation, but you cannot export multiple objects in a single operation. If you want to export multiple objects to another database, it is easier to open the destination database and then perform an import operation from within that database.
- In addition to database objects, you can import relationships between tables, plus any import and export specifications, and menu bars and toolbars. You can also import a query as a table. Exporting does not offer you these options.

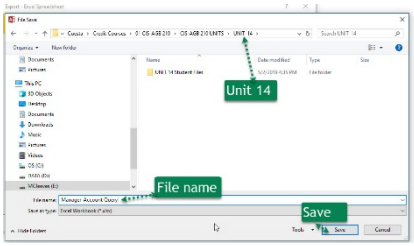
The following steps export the Manager-Account Query to an Excel File:

Step 1. With the PrattLast Associates database open, ***CLICK*** the ***MANAGER-ACCOUNT QUERY*** to select it.

Step 2. ***CLICK*** the ***EXTERNAL DATA TAB*** to display the External Data Ribbon

Step 3. In the export group, ***CLICK*** the ***EXCEL*** option

Step 4. ***CLICK*** the ***BROWSE*** button and then ***NAVIGATE*** to the ***UNIT 14*** folder on your computer.



Step 5. ***CONFIRM*** the file format is an ***EXCEL WORKBOOK***

- FILE NAME: ***Manager-Account Query***
- ***CLICK*** the ***SAVE*** option
- ***CLICK*** the ***OK*** button to export the information
- ***CLICK*** the ***SAVE EXPORT STEPS***
- SAVE AS: ***Export-Manager-Account Query***
- DESCRIPTION: ***Export Manager Account Query without formatting***
- ***CLICK*** the ***SAVE EXPORT*** option

RESTRICT RECORDS IN A JOIN

Sometimes you will want to join tables, but you will not want to include all possible records. For example, you would like to create a repot showing only those accounts whose amount paid is greater than $20,000.00. In this case you would relate the tables and include fields just as you did before. You will also include criteria. To include only those accounts whose amount paid is more than $20,000, you will include >20000 as a criterion for the Amount Paid Field

Step 1. With the PrattLast Associates database open, ***CLICK*** the ***MANAGER-ACCOUNT QUERY*** to select it.

Step 2. ***CLICK*** the ***DESIGN VIEW***

Step 1. ***ADD*** the ***AMOUNT PAID*** FIELD to the query

Step 2. Type ***>20000*** as the criterion for the Amount Paid Field

Field:	Account Manager	Last Name	First Name	Account Number	Account Name	Amount Paid
Table:	Account Manager	Account Manager	Account Manager	Account	Account	Account
Sort:	Ascending			Ascending		
Show:	☑	☑	☑	☑	☑	☑
Criteria:						>20000
or:						

Step 3. ***CLICK*** on the ***RUN*** option

Step 4. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

Step 5. ***CLICK*** on the ***CLOSE ALL*** option

Step 6. If asked to save, ***CLICK*** on the ***YES*** option

Query Result

Manager-Account

AM #	Last Name	First Name	AC #	Account Name	Amount Pai
31	Rivera	Haydee	AC001	Avondale Community Bank	$24,752.25
31	Rivera	Haydee	MI345	Midwest Library Consortium	$21,769.20
35	Simson	Mark	BL235	Bland Corp.	$29,836.65
35	Simson	Mark	CO621	Codder Plastics Co.	$27,152.25
35	Simson	Mark	KV089	KAL Veterinary Services	$34,036.50
58	Murowski	Karen	CA043	Carlton Regional Clinic	$30,841.05
58	Murowski	Karen	HL111	Halko Legal Associates	$25,702.20
58	Murowski	Karen	LC005	Lancaster County Hospital	$44,025.60
58	Murowski	Karen	TP098	TAL Packaging Systems	$22,696.95

CALCULATIONS

In a query Access allows you to create mathematical calculations based on numeric fields. If a special calculation is required for a query, you need to determine whether the calculation is an individual record calculation (for example, adding the values in two fields for one record) or a group calculation (for example, finding the total of the values in a field on all the records).

You can use these mathematical operators: + Addition; – Subtraction; * Multiplication; / Division. You create calculations on numeric, $ and date fields.

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

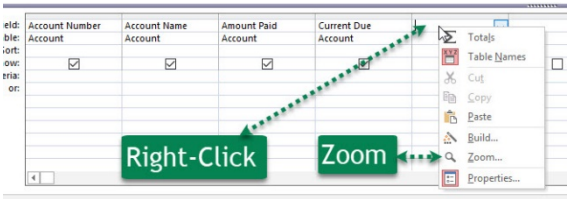
Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

Step 6. ***ADD*** the ***FOLLOWING FIELDS*** to the query:

- ***Account Number***
- ***Account Name***
- ***Amount Paid***
- ***Current Due***



Step 7. ***RIGHT-CLICK*** the ***FIRST OPEN FIELD*** row in the open column to display a shortcut menu

Step 8. ***CLICK*** the ***ZOOM*** option on the menu

Step 9. Type ***Total Amount:[Amount Paid]+[Current Due]*** in the Zoom dialog box

Step 10. ***CLICK*** the ***OK*** option

Step 11. ***CLICK*** on the ***RUN*** option

Step 12. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

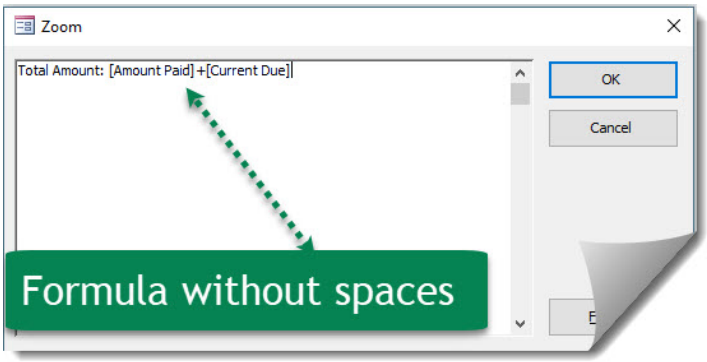
Step 13. ***CLICK*** on the ***CLOSE ALL*** option

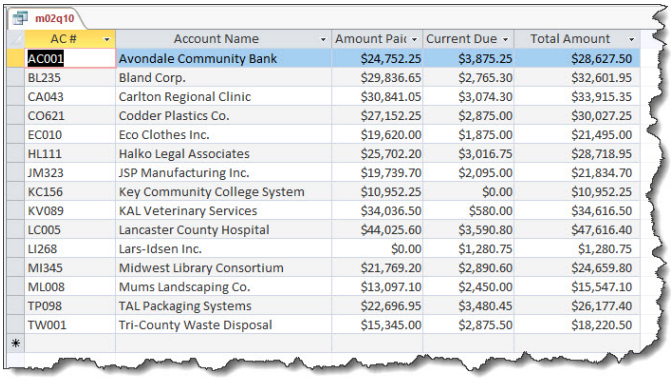
Step 14. ***CLICK*** on the ***YES*** to save

Step 15. ***CLICK YES*** to name the query

Step 16. Query Name: ***m02q10***

Step 17. ***CLICK*** the ***OK*** option





m02q10

AC #	Account Name	Amount Paid	Current Due	Total Amount
AC001	Avondale Community Bank	$24,752.25	$3,875.25	$28,627.50
BL235	Bland Corp.	$29,836.65	$2,765.30	$32,601.95
CA043	Carlton Regional Clinic	$30,841.05	$3,074.30	$33,915.35
CO621	Codder Plastics Co.	$27,152.25	$2,875.00	$30,027.25
EC010	Eco Clothes Inc.	$19,620.00	$1,875.00	$21,495.00
HL111	Halko Legal Associates	$25,702.20	$3,016.75	$28,718.95
JM323	JSP Manufacturing Inc.	$19,739.70	$2,095.00	$21,834.70
KC156	Key Community College System	$10,952.25	$0.00	$10,952.25
KV089	KAL Veterinary Services	$34,036.50	$580.00	$34,616.50
LC005	Lancaster County Hospital	$44,025.60	$3,590.80	$47,616.40
LI268	Lars-Idsen Inc.	$0.00	$1,280.75	$1,280.75
MI345	Midwest Library Consortium	$21,769.20	$2,890.60	$24,659.80
ML008	Mums Landscaping Co.	$13,097.10	$2,450.00	$15,547.10
TP098	TAL Packaging Systems	$22,696.95	$3,480.45	$26,177.40
TW001	Tri-County Waste Disposal	$15,345.00	$2,875.50	$18,220.50

CHANGE A CAPTION

Step 18. ***RIGHT-CLICK*** the ***m02q10*** query

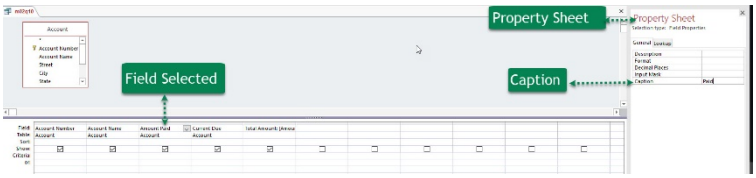
Step 19. ***CLICK*** on ***DESIGN VIEW***

Step 20. In the design grid, ***CLICK*** the ***AMOUNT PAID*** field

Step 21. ***DISPLAY*** the ***PROPERTY SHEET*** (Design tab, show/hide group)

Step 22. In the General Tab, ***CLICK*** on ***CAPTION***

Step 23. Type ***Paid*** as the caption



Step 24. ***CLICK*** the ***CURRENT DUE*** field

Step 25. In the Property Sheet, ***CLICK*** the ***CAPTION*** box

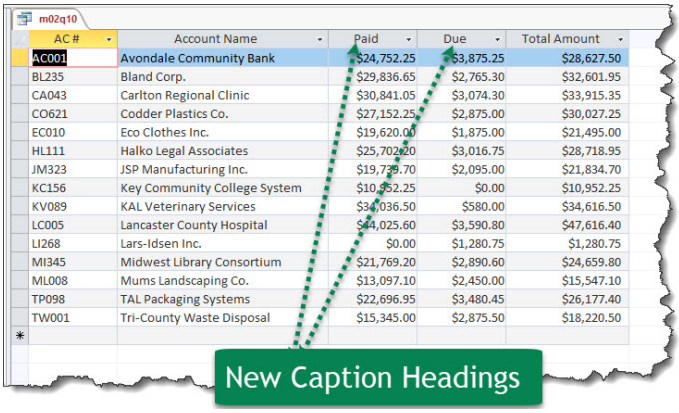
Step 26. Type ***Due*** as the caption

Step 27. ***CLICK*** on the ***RUN*** option

Step 28. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

Step 29. ***CLICK*** on the ***CLOSE ALL*** option

Step 30. ***CLICK*** on the ***YES*** to save



m02q10

AC #	Account Name	Paid	Due	Total Amount
AC001	Avondale Community Bank	$24,752.25	$3,875.25	$28,627.50
BL235	Bland Corp.	$29,836.65	$2,765.30	$32,601.95
CA043	Carlton Regional Clinic	$30,841.05	$3,074.30	$33,915.35
CO621	Codder Plastics Co.	$27,152.25	$2,875.00	$30,027.25
EC010	Eco Clothes Inc.	$19,620.00	$1,875.00	$21,495.00
HL111	Halko Legal Associates	$25,702.20	$3,016.75	$28,718.95
JM323	JSP Manufacturing Inc.	$19,739.70	$2,095.00	$21,834.70
KC156	Key Community College System	$10,952.25	$0.00	$10,952.25
KV089	KAL Veterinary Services	$34,036.50	$580.00	$34,616.50
LC005	Lancaster County Hospital	$44,025.60	$3,590.80	$47,616.40
LI268	Lars-Idsen Inc.	$0.00	$1,280.75	$1,280.75
MI345	Midwest Library Consortium	$21,769.20	$2,890.60	$24,659.80
ML008	Mums Landscaping Co.	$13,097.10	$2,450.00	$15,547.10
TP098	TAL Packaging Systems	$22,696.95	$3,480.45	$26,177.40
TW001	Tri-County Waste Disposal	$15,345.00	$2,875.50	$18,220.50

CALCULATE STATISTICS

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

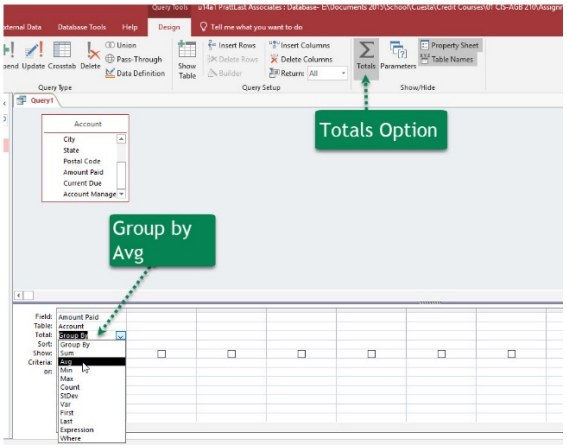
Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*

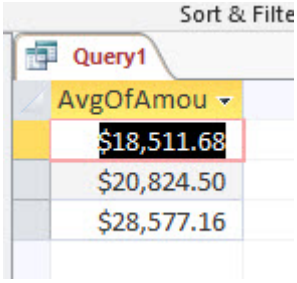
Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

Step 6. ***ADD*** the ***Amount Paid*** field to the query

- In the show/hide group, ***CLICK*** on ***TOTALS.*** The total row will appear in the design grid



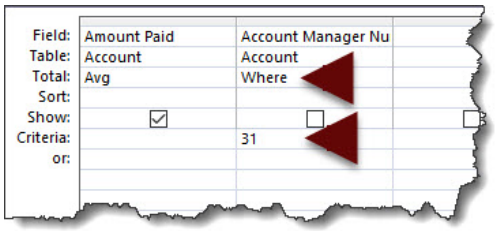


- In the total row, ***CLICK*** the ***GROUP BY*** option to view the drop-down menu
- ***CLICK*** on ***AVG***
- ***CLICK*** on the ***DESIGN TAB CLICK*** on the ***RUN*** option

Step 7. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

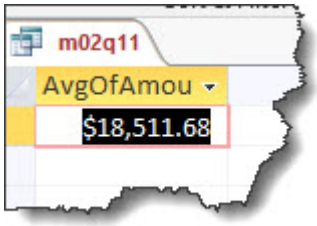
Step 8. ***CLICK*** on ***DESIGN VIEW***

Step 9. ***ADD*** the ***Account Manager Number*** field to the query



- In the total row, ***CLICK*** the ***GROUP BY*** option to view the drop-down menu
- ***CLICK*** on ***WHERE***
- In the ***CRITERIA*** row, ***ENTER 31***
- ***UNCHECK*** the ***SHOW*** option
- ***CLICK*** on the ***DESIGN TAB***
- ***CLICK*** on the ***RUN*** option

Step 10. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu



Step 11. ***CLICK*** on the ***CLOSE ALL*** option

Step 12. ***CLICK*** on the ***YES*** to save

Step 13. ***CLICK YES*** to name the query

Step 14. Query Name: ***m02q11***

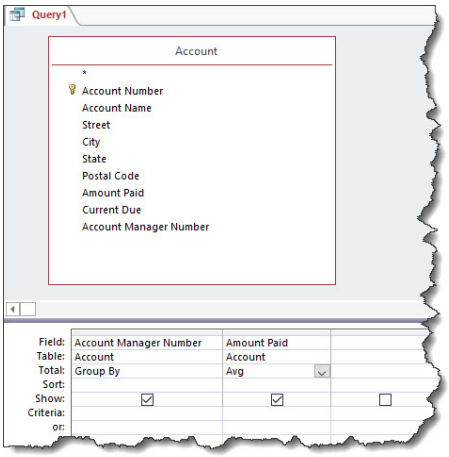
Step 15. ***CLICK*** the ***OK*** option

USE GROUPING

Step 1. With the Unit 14 ***PrattLast Associates company file open***, ***CLICK*** on the ***CREATE TAB*** to display the Create Ribbon

Step 2. In the Queries group, ***CLICK*** the ***QUERY DESIGN*** button

Step 3. The ***SHOW TABLE*** option should automatically pop up, ***CLICK*** on ***ACCOUNT.*** *If the Show Table option is not showing, you may need to bring it to view. In the Show/Hide group, CLICK on Table Names. This will open the Show Table option*



Step 4. ***CLICK*** on the ***ADD*** option. This adds the table to the blank query.

Step 5. ***CLICK*** on the ***CLOSE*** option in the Show Table dialog box. This will remove the dialog box from the screen.

Step 6. In the show/hide group, ***CLICK*** on ***TOTALS.*** The total row will appear in the design grid

- ***ADD*** the ***Account Manager Number*** field to the query
  - Total: ***Group By***
- ***ADD*** the ***Amount Paid*** field to the query
  - Total: ***Avg***

Step 16. ***CLICK*** on the ***DESIGN TAB***

Step 17. ***CLICK*** on the ***RUN*** option

Step 18. ***RIGHT-CLICK*** the ***QUERY TAB*** to view the short-cut menu

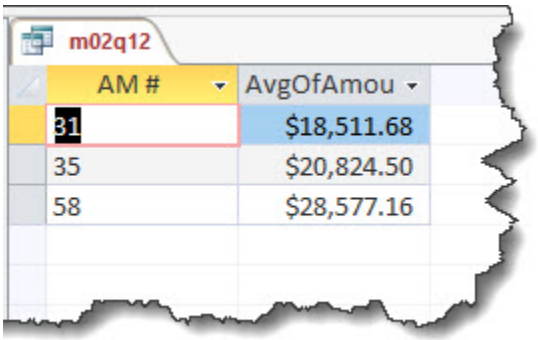
Step 19. ***CLICK*** on the ***CLOSE ALL*** option

Step 20. ***CLICK*** on the ***YES*** to save

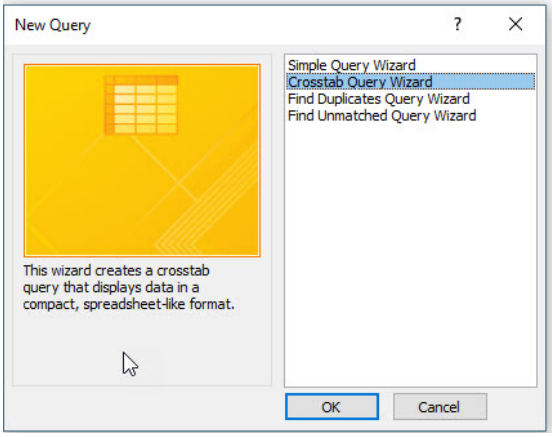
Step 21. ***CLICK YES*** to name the query

Step 22. Query Name: ***m02q12***

Step 23. ***CLICK*** the ***OK*** option



CREATE A CROSSTAB QUERY



Crosstab queries in Microsoft Access allow you to do what normal SELECT queries do not: aggregate data across columns as well as rows.

Crosstab queries are data retrieval queries used primarily for reporting purposes. They differ from typical SELECT queries in Microsoft Access in that they can pivot aggregated row data into a columnar format. The one prerequisite to this query is that the data must be aggregated in some fashion. The results from these queries are somewhat like spreadsheets in their format. However, the meaningful data is represented in columns, rather than rows.

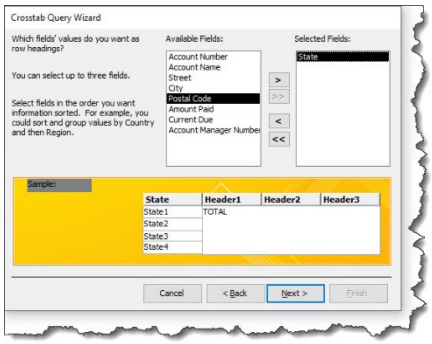
Step 1. ***CLICK*** the ***CREATE TAB*** to view the Create Ribbon band

Step 2. ***CLICK*** the ***QUERY WIZARD*** button in the Queries group

Step 3. In the New Query dialog box, ***CLICK*** the ***CROSSTAB QUERY WIZARD***

Step 4. ***CLICK*** the ***ACCOUNT TABLE***

Step 5. ***CLICK*** the ***NEXT*** option



Step 6. With the table option button open, ***ADD*** the ***STATE*** field for the row headings

Step 7. ***CLICK*** on the ***NEXT*** option. This will display the information for the column headings screen.

Step 8. ***CLICK*** the ***ACCOUNT MANAGER NUMBER*** field

Step 9. ***CLICK*** the ***NEXT*** option

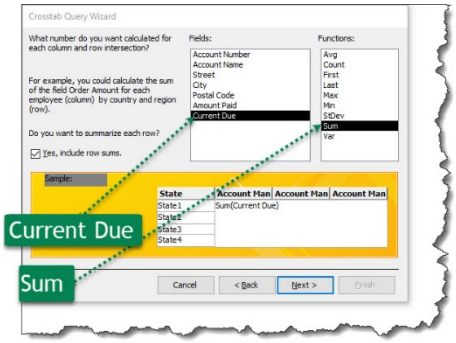
Step 10. ***CLICK*** the ***CURRENT DUE*** in the fields option

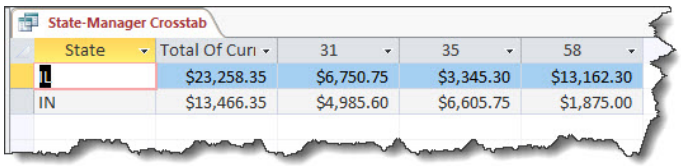
Step 11. ***CLICK*** the ***SUM*** in the function options

Step 12. ***CLICK*** the ***NEXT*** option

Step 13. Type ***State-Manager Crosstab*** as the name of the query

Step 14. ***CLICK*** on the ***FINISH*** option





State	Total Of Curr	31	35	58
1	$23,258.35	$6,750.75	$3,345.30	$13,162.30
IN	$13,466.35	$4,985.60	$6,605.75	$1,875.00

Step 15. ***CLOSE*** the PrattLast Associates database. Remember Access has been saving your information as you complete each query, report or form; however, ***you cannot upload the database unless the program is completely closed.***

Step 16. ***Navigate*** to your ***UNIT 14*** folder for the class.

SUBMIT YOUR ASSIGNMENT TO u14a1 ASSIGNMENT AREA

PrattLast Associates

ON YOUR OWN ACTIVITY

Step 1. ***OPEN MS Access***

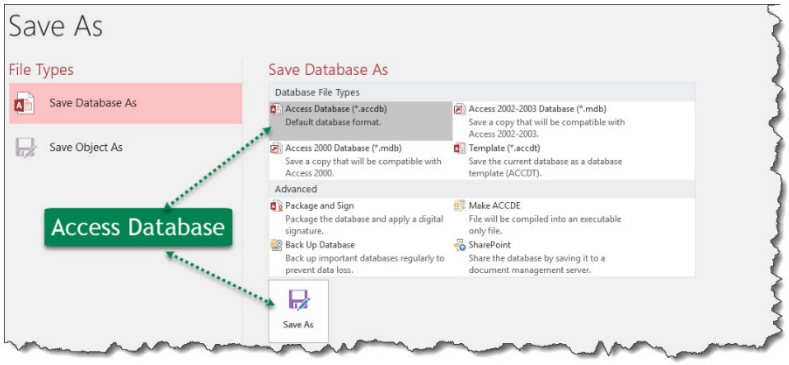
Step 2. ***BROWSE*** to ***UNIT 13***

Step 3. ***CLICK*** on ***Museum Gift Shop***

Step 4. If you are prompted to enable content, ***CLICK*** the ***ENABLE*** option.

Step 5. ***CLICK*** on the ***FILE TAB*** to display the Backstage View

Step 6. ***CLICK*** on the ***SAVE AS*** option



Step 7. An option to Save Database As pops up ***CLICK*** on the ***Access Database*** option

Step 8. ***CLICK*** on ***SAVE AS*** again. This is giving you the opportunity to save this file in a new location.

Step 9. ***NAVIGATE*** to your ***UNIT 14*** folder.

Step 10. ***CLICK*** on ***SAVE***. Because the database is now in a new folder, you will not lose your original company files created in UNIT 13. Access saves as you go along. If you plan to modify the structure of the database, saving various stages of the process is a good practice.

Step 11. ***CLICK*** on ***ENABLE*** content. You are ready to begin the UNIT 14 on your own activity.

Step 12. Create a query for the Item table that includes all fields and all records in the Item table. Save the query as ***Step 1 Query***

Step 13. Create a query for the Item table that includes the Item Number, Description, Wholesale Cost, and Vendor Code fields for all records where the vendor code is AW. Save the query as ***Step 2 Query***

Step 14. Create a query for the Item table that includes the Item Number and Description fields for all items where the description starts with G. Save the query as ***Step 3 Query***

Step 15. Create a query for the Item table that includes the Item Number and Description for all items with a Wholesale Cost greater than $15.00. Save the query as ***Step 4 Query***

Step 16. Create a query for the Item table that includes the Item Number, Description, and Wholesale cost fields for all items with a Wholesale Cost between $5.00 and $10.00. Save the query as ***Step 5 Query***

Step 17. Create a query for the Item table that includes the Item Number, Description, On Hand, and Wholesale Cost fields for all items where the number on hand is less than 5 and the wholesale cost is less than $15.00. Save the query as ***Step 6 Query***

Step 18. Create a query for the Item table that includes the Item Number, Description, Wholesale Cost, and Vendor Code for all items that have a Wholesale Cost greater than $20.00 or a Supplier Code of SD. Save the query as ***Step 7 Query***

Step 19. Create a query that join the Vendor and the Item tables. Include the vendor Code and the Vendor Name from the Vendor table and the Item Number, Description, wholesale Cost, and Retail Price fields from the item table. Sort the query in ascending order by Description within Vendor Code. Save the query as ***Vendor-Item Query***

Step 20. Create a form for the Vendor-Item Query. Save the form as ***Vendor-Item Form***

Step 21. Create a report using the Vendor-Item Query. Save the report as ***Vendor-Item Report***

Step 22. Create a query for the Item table that includes the Item Number, Description, Wholesale Cost, and Retail Price. Calculate the difference between Retail Price and Wholesale Cost (Retail Price – Wholesale Cost). Assign the alias Mark Up to the calculated field. Save the query as ***Step 12 Query***

Step 23. Create a query for the Item table that displays the average Wholesale Cost and the average Retail Price of all items. Save the query as ***Step 13 Query***

Step 24. Create a query for the Item table that displays the Item Number, Description, On Hand and Retail Price for the 5 items with the lowest retail price. Save the query as ***Step 14 Query***

Step 25. ***CLOSE*** the Museum Gift Shop database. Remember Access has been saving your information as you complete each query, report or form; however, ***you cannot upload the database unless the program is completely closed.***

Step 26. ***Navigate*** to your ***UNIT 14*** folder for the class.

SUBMIT YOUR ASSIGNMENT TO u14a2 ASSIGNMENT AREA

Museum Gift Shop

UNIT 15 – ACCESS MAIL MERGE ACTIVITY

Suppose you have an Access Database containing the names and addresses of your customers. Every now and again you may want or need to send a standard letter to each customer who has opted in to such mailings. However, you are aware that these letters are going to look so much better, and work so much more effectively, if they are personalized to each recipient. A basic example of this is to print the name and address of the customer at the top of the letter, and to include the customers title and surname in the greeting line. We can go much further than this, of course, and include information about the customer's account and even their previous orders (if appropriate).

There are two ways of doing this. We could create an access report which is fine and good. After all, the data is stored in Access, so why not create the letter by means of such a report? It is certainly possible to do so. However, there may well be an advantage in merging your customer data stored in an Access table or query into an MS Word word-processing document. It is arguably much easier to sit down and compose a well-presented standard letter using MS Word (than it is to create the same document in an Access report). It might be said that Word is a better tool for this job.

SETUP THE LINK FROM ACCESS TO WORD

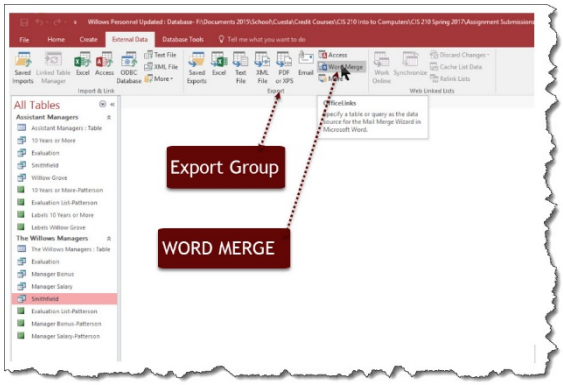
The process whereby data from a table is integrated into a word processing document is known as mail merge. The following exercise create for Unit 15 uses and existing database to generate a form letter in MS Word that will merge all the records from the database.

Step 1. ***OPEN*** the ***Willows Personnel Updated.accdb*** database located in your ***UNIT 15 Student Files***

Step 2. ***CLICK*** on the ***EXTERNAL DATA*** tab to view the External Data Ribbon

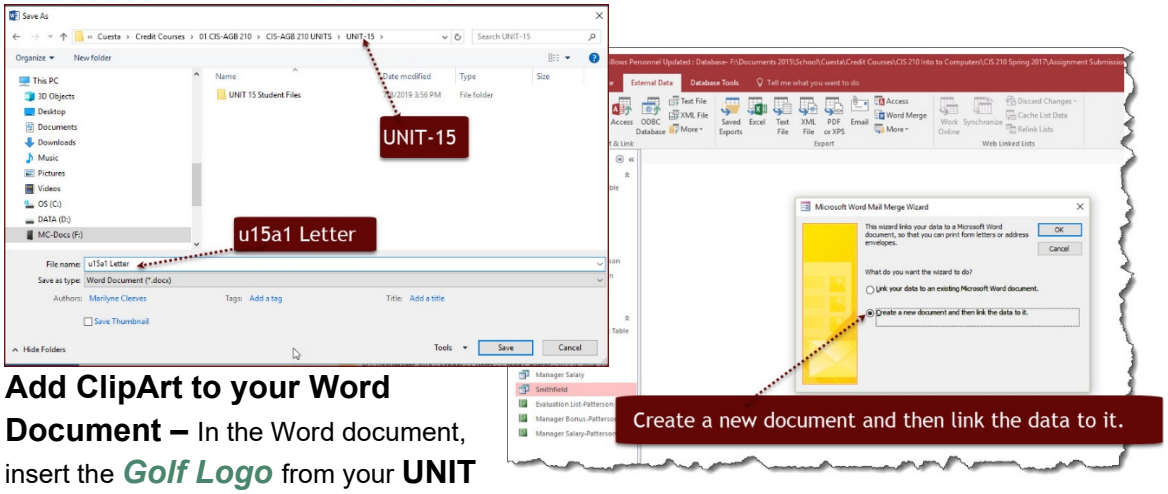
Step 3. ***SELECT*** the ***Smithfield*** query

Step 4. In the Export group, ***CLICK*** the ***WORD MERGE*** option



Step 5. When asked "What do you want the wizard to do?" You have two choices, either to link your data to an existing Microsoft Word document or to create a new document. At this point you can ***create a new document***. It will take the computer a few seconds to open a new Word file and bring it to the front of your screen.

Step 6. **SAVE** your Word Document**.** Make sure that you have chosen your **UNIT 15 folder** as the saving area. Save your file as ***u15a1 Letter***.



Step 7. **Add ClipArt to your Word Document –** In the Word document, insert the ***Golf Logo*** from your **UNIT 15 student files**.

Step 8. ***RESIZE*** the ***Golf logo*** and enter a **Word Art** with the company name **The Willows.**

Step 9. ***PLACE*** the ***WordArt*** next to the Golf Logo (you are creating a letterhead).

Step 10. ***CUT*** the grouped ***LETTERHEAD*** and place it in the ***HEADER*** of the page.

NOTE: You can change the shape, color and font of your Word Art any way you want. In my example, I added a shape outline to the Word Art and then sized it, so it was the same size as the golf logo. My next step would be to group the two and create a top/bottom wrap.

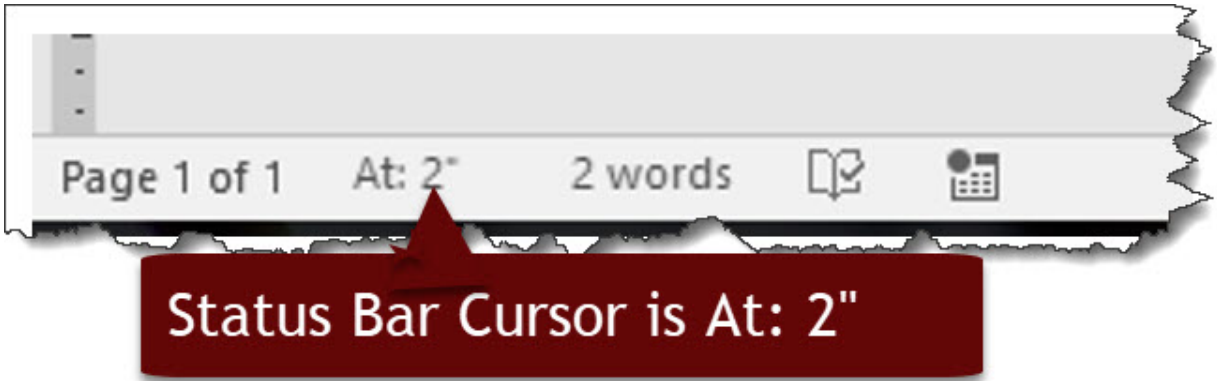
SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

CREATE THE FORM IN WORD

Step 1. **Set** your ***MARGINS*** to ***NORMAL***.

Step 2. ***HIT ENTER*** until your curser is ***2 inches*** from the top of the page. You can check your position through the Word status bar.



Step 3. ***CLICK*** the ***INSERT*** tab to display the Insert Ribbon

Step 4. In the text group, ***CLICK*** on the ***DATE*** option

Step 5. ***SELECT*** the ***THIRD OPTION*** (Month day, year)

Step 6. ***HIT*** your ***ENTER*** key ***TWICE*** after the date is inserted.

Step 7. ***CLICK*** the ***MAILING*** tab to display the mailings ribbon.

Step 8. In the Write & Insert Fields group, ***CLICK*** on the ***INSERT MERGE FIELD*** icon. Notice that all the fields available are now displayed.

Step 9. ***CLICK*** on the field ***First Name*** and then press the ***space_bar*** (this

will generate a space between the first and last name).

Step 10. ***CLICK*** the ***Insert Merge Field*** icon

Step 11. ***CLICK*** to highlight the field **Assistant_ManagerLast_Name**

Step 12. ***HIT*** the ***ENTER*** key.

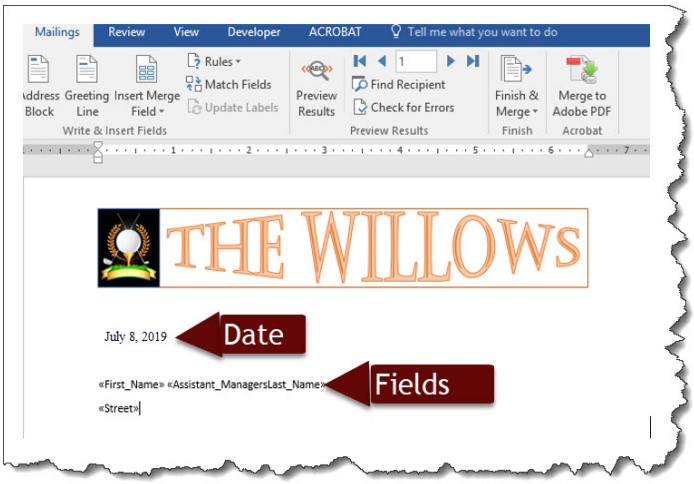
Step 13. ***CLICK*** the ***Insert Merge Field*** icon

Step 14. ***CLICK*** to highlight the field ***Street***

Step 15. ***HIT*** the ***ENTER*** key

Step 16. ***CLICK*** the ***Insert Merge Field*** icon

Step 17. ***CLICK*** to highlight the field ***City*** hit your ***comma***



Step 18. ***HIT*** your ***SPACE BAR***

Step 19. ***CLICK*** the ***Insert Merge Field*** icon

Step 20. ***CLICK*** to highlight the ***State*** field

Step 21. ***HIT*** your ***SPACE BAR***

Step 22. ***CLICK*** the ***Insert Merge Field*** icon

Step 23. ***CLICK*** to highlight the field ***Zip***

Step 24. ***HIT*** the ***ENTER*** key.

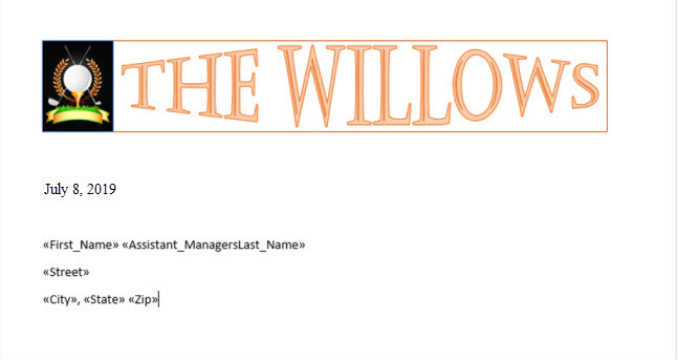
Step 25. ***ENTER*** the greeting ***Dear***

Step 26. ***HIT*** your ***SPACE BAR***

Step 27. ***CLICK*** the ***Insert Merge Field*** icon

Step 28. ***CLICK*** to highlight the ***First_Name*** Field.

Step 29. ***HIT*** the ***ENTER*** key



Step 30. You will now create a letter to the assistant managers letting them know of the new ride sharing program which the Willows is offering. When you enter the sample text remember to press **Insert Merge Field** icon and select the appropriate field.

SAMPLE TEXT:

The Willows will be participating in a new ride share program. The company has decided that we will try the program out with individuals who live in Smithfield. Your manager, «The_Willows_ManagersLast_Name» said you might have interest in the new program. Please contact the Personnel Office as soon as possible so we can establish our van pool.

Step 31. ***HIT*** the ***ENTER*** key

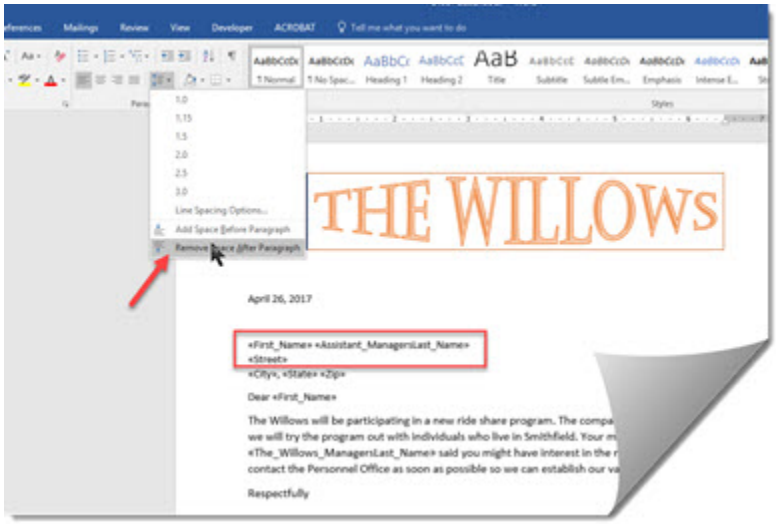
Step 32. Type the complementary close – ***Respectfully***

Step 33. ***HIT*** the ***ENTER*** key ***TWICE***

Step 34. Type ***Your Name***

Step 35. Now remove the extra space in the inside address area. **Select the name and street**. On the **Home Ribbon** Band Paragraph Section >Choose

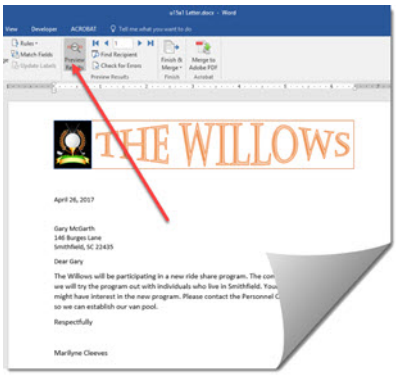
paragraph and line spacing> **remove space after**. Save your file.



SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

PREVIEW THE LETTERS



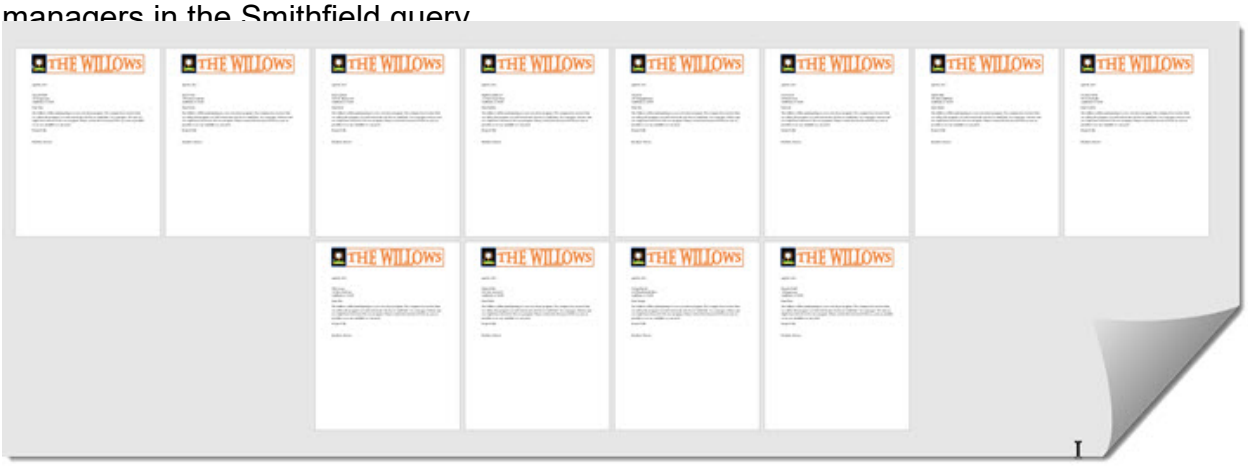
Step 1. Once the letter is complete, select the **Mailings Ribbon and Preview Results** icon and you should see the contents of the first record of information fill the form letter.

Step 2. Select the **Finish and Merge** icon and select **Edit Individual Documents** and then select **All**. Word will produce a separate letter for each customer in the query. Save your file as ***u15a1 Letters Complete***.

Step 3. Save your result and upload it to Canvas under **u15a1. You will be uploading both files**

1. ***u15a1 Letter.docx*** - Make sure your field names are in view before you upload the file. I need to see the fields you used to give you full credit. The trick here is to turn off the preview option. Save the letter and upload it with the field names showing.
2. ***u15a1 Letters Complete.docx***

Your **u15a1 Letters Complete.docx** will contain 12 letters to the individual assistant managers in the Smithfield query



EXTRA CREDIT ACTIVITY

To complete this activity, you need to add the salary field to your letter. Follow these instructions to add the field:

Step 1. From your Unit 15 folder, ***OPEN*** the ***u15a1 Letter*** you have already saved and uploaded to Canvas.

Step 2. HIT the ENTER key after the paragraph ending in van pool.

SAMPLE TEXT TO INSERT

Our current records indicate that you may qualify for a special transportation allowance. Please verify the current salary information we have on file:

- **EMPLOYEE:** Insert the correct fields (make sure your space between the ***First_name*** and ***Assistant_ManagerLast_Name***)
- **SALARY:** Insert the ***Salary*** Field
- **HIRE DATE:** Insert the ***Date_Employed*** field

SAVE YOUR CHANGES

Save the file as ***u15e1 Letter Extra***

FIX THE SALARY FORMAT

Step 3. Once the letter is complete, select the **Mailings Ribbon** and **Preview Results** icon and you should see the contents of the first record of information fill the form letter.

When you preview the document, you will find the salary field is not formatted for currency. Numbers don't always automatically display with the correct formatting (currency, decimals, etc.) To fix that, follow these instructions:

Step 4. On your original source document (before completing the merge), right-click on the field and select "**Toggle Field Codes**."

Step 5. It will look something like this (where "Price" is your particular field name): {MERGEFIELD "Price"}

Step 6. Place your cursor before the closing bracket and type: **\# $,#.00** (There is a space between the first # and the $.)

Step 7. It should look something like this: {MERGEFIELD "Price" **\# $,#.00**}

Step 8. Right-click on the field name once again and select "Toggle Field Codes" to return to the original view. Your prices should now display appropriately.

WHAT DO THE SYMBOLS MEAN?

\# Begins the "switch" which tells the document to apply formatting to the number.

$ The character to display at the beginning of the number (in this case, a dollar sign).

, Indicated that you want commas to designate thousands.

The number of number signs (#) typed after the comma indicates the number of digits that should be forced to display.

.00 Indicated that you want to include a decimal point to two places with each number. Anytime a number to be merged doesn't include decimals, it will display with zeros.

SAVE YOUR UPDATES

Since the file is already saved you can now save your updates by simply holding down the ***CRTL*** key and taping the ***S*** key. This is a good habit and keeps you from losing your work.

u15e1 FILES TO SUBMIT:

1. **u15e1 Letter Extra.docx -** Make sure your field names are in view before you upload the file. I need to see the fields you used to give you full credit. The trick here is to turn off the preview option. Save the letter and upload it with the field names showing.
2. **u15e1 Letter Extra Complete.docx**

Now that you have a product, service or idea which you are going to market and spreadsheets which substantiate your product, service or idea, the final stage of the project is to incorporate a database which goes along with your current project.

TASK FOR EACH GROUP MEMBER:

Your task for this activity is to find some creative graphics that information you have compiled in all of the activities. You can adjust your current information; however, if you should do so you will need to update the information in your group booklet. For your review, these are some of the guidelines you have already established:

1. Roles and Responsibilities of each Group Member
2. Marketing Flyer
3. Letter explaining the ethical considerations for your company
4. Graph showing your company progress
5. Reports that represents your company goals and/or projections.

U16A1 PROJECT GUIDELINES

Creating the PowerPoint Demonstration

- **Introduction**: This is the part of the demonstration that should introduce your team members (active members only). Give a brief description of what each member has contributed to your project and how they have fulfilled their responsibility to the group.
- **Marketing Flyer:** Use the marketing flyer you created in your PowerPoint to market your company and the products or business you are promoting. You are not required to use the entire flyer. It is just a reference, but you can certainly do so if you prefer.
- **Ethical Considerations:** I do not what a long explanation here. What you should do is highlight the major points using bullets or some sort of creative display that emphasizes the ethical considerations of your company and the direction you will be implementing throughout the lifecycle of the business.
- **Graph:** Be creative! Use the best graph from your group that shows and interesting projection or detail regarding your company. Make an introduction to this slide and include it into your presentation.
- **Multi-Media Link:** Your presentation should have at least one multi-media link added to the PowerPoint. This can be in the form of an embedded video or an existing video.

WHAT TO TURN IN

- **Group Leader Upload to Canvas** – In the group submission area the group PowerPoint should be submitted to **Final Project** assignment area. Group leaders make sure you include all the names of the members that participated in the final submission.

GRADING

The PowerPoint presentation will be graded using the grading criteria below. Make sure you review this totally. I am looking for originality, slide transitions, proper theme layout.

- **Company Name and Logo -** Company name and logo are incorporated into the PowerPoint. Color of PowerPoint blends with company logo
- **Ethical Considerations** - The company major ethical considerations have been highlighted using bullets or some sort of creative display that emphasizes the ethical considerations of your company
- **Graph** - Be creative! Use the best graph from your group that shows and interesting projection or detail regarding your company. Make an introduction to this slide and include it into your presentation.
- **Multi-Media Link** - Your presentation should have at least one multi-media link added to the PowerPoint. This can be in the form of an embedded video or an existing video.
- **Overall Presentation and Images** - Amount of text and images are a good balance/contrast; text is easy to read; company name, location, and an image of where the company can be located are presented. Project Objective and Group Introduced.

INCORPORATING MULTI-MEDIA INTO A POWERPOINT PRESENTATION

Studies have shown that multimedia presentations, using Microsoft PowerPoint, are an effective tool for encouraging retention of information. Educators often make use of presentations to teach students new concepts. In the business environment, presentations are often used as a sales tool. However, it is essential that multimedia technology is used appropriately to ensure successful outcomes.

ADDING VIDEO FROM YOUR HARD DRIVE

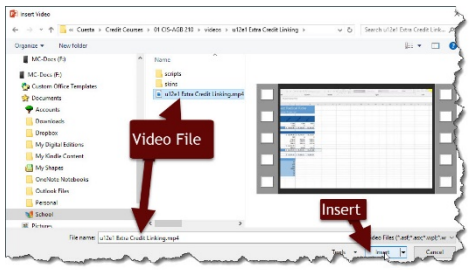
Step 1. While on the slide that you'd like to add the video to, go to the ***INSERT*** tab to view the Insert Ribbon

Step 2. In the media group, ***CLICK*** the ***VIDEO*** option

Step 3. ***CLICK*** on ***VIDEO ON MY PC***

Step 4. Navigate to the video file you would like to insert into the slide. ***CLICK*** on the name of the ***VIDEO***

Step 5. ***CLICK*** on the ***INSERT***. This will insert the video into your PowerPoint demonstration.



EMBEDDING A VIDEO FROM YOUTUBE

Step 6. Find your desired YouTube video. If you see a share option at the bottom right of the screen, the video is available to embed into your PowerPoint presentation. ***CLICK*** on ***SHARE***

Step 7. In this screen, you will find several options. ***CLICK*** on ***EMBED***

Step 8. This will open the code you need to embed the video into PowerPoint. ***COPY*** the

CODE

Step 9. ***CLICK*** the ***SLIDE*** you want to add the video to

Step 10. ***CLICK*** the ***INSERT*** tab to display the Insert Ribbon

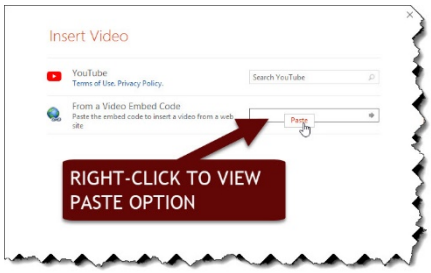
Step 11. In the media group, ***CLICK*** on the ***VIDEO*** option

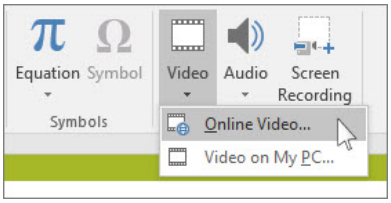
Step 12. ***CLICK*** on the ***ONLINE VIDEO*** option

Step 13. ***CLICK*** on the box for ***"From a Video Embed Code"***

Step 14. ***RIGHT-CLICK*** the ***BOX*** for the code

Step 15. ***CLICK*** the ***PASTE*** option. The code is now ready to





insert into your demonstration

Step 16. ***CLICK*** on the ***RIGHT ARROW*** that appears next to the box. This will insert the code into the slide.

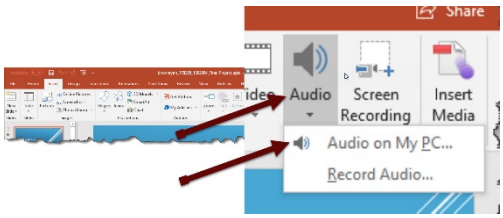
Step 17. The video may originally appear as a black box; however, once you show the slide it will have the option to play. ***TEST*** your ***SLIDE***.

ADDING MUSIC TO SLIDES

If you want to spice up your PowerPoint presentation, a good soundtrack can make it much more compelling. PowerPoint allows you to use any WAV or MP3 file to play in the background. If you want to play multiple songs back-to-back, you'll get the best results by combining the songs into a single file first.

Step 1. **Open the slide you want to start the music on.** If you want the music to play from the beginning of the presentation, select the first slide.

Step 2. ***CLICK*** the ***INSERT*** tab to view the Insert Ribbon. If you want to use a song from iTunes, you'll need to convert it to MP3 first by right-clicking on the song in iTunes and selecting "Create MP3 Version". WAV files can be quite large and can make the PowerPoint presentation difficult to share. Consider converting the WAV file to MP3. You can do this by importing the WAV into iTunes, or by using a free online converter.

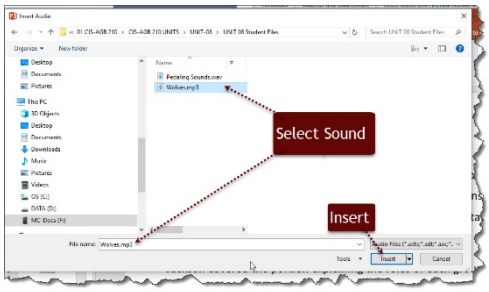


Step 3. In the Media group, ***CLICK*** the ***AUDIO*** option

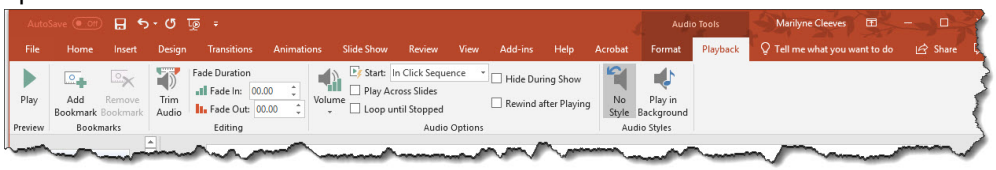
Step 4. ***SELECT*** the "***Audio from My PC***" option from the list.

Step 5. ***BROWSE*** for the ***music file you want to play***. You can select any WAV or MP3 file that's stored on your computer or on any network drives.

Step 6. ***CLICK*** the ***INSERT*** option from the dialog box



Step 7. **Decide if you want the music to start automatically or play when you click.** There are two basic options for setting when your music starts. You can either have the song play when you click the button, or you can have the song play automatically in the background. There are two presets which allow you to quickly select one of these options:



If you want the song to start automatically and play in the background across all your slides, select the "Play in Background" option in the Playback tab. This will set the song to start automatically, continue playing when slides are changed, loop when finished, and hide the sound button. The song will start playing immediately when that slide is opened.

If you prefer to click the button to start the sound instead, select "No Style" from the Playback tab. The song will play when you click the audio button. You can change the look of the button using the Format tab. This will let you design a button or import a picture to use instead.

Step 8. **Make basic edits to the audio file.** PowerPoint includes some basic audio editing tools that allow you to change where the song starts playing from, Adjust the volume, fade in and out, and more. Select the audio object to open the Playback tab if it isn't already.

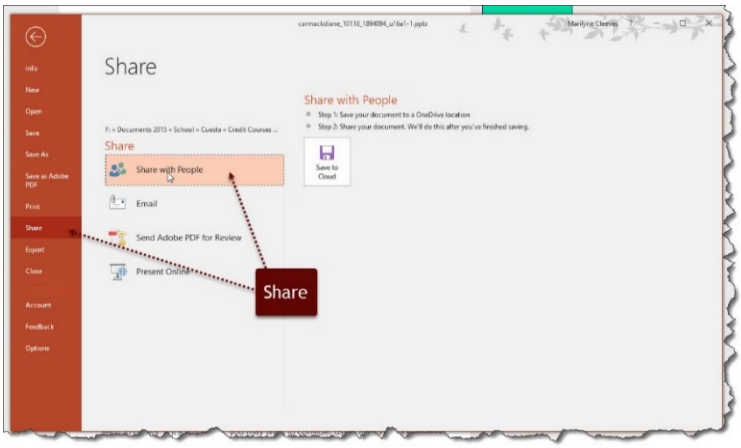
Add bookmarks to the track. When you hover over the audio object, you'll see a track time slider. Select a spot on the track and click the "Add Bookmark" button to create a clickable bookmark at that point in the track. This will allow you to quickly jump to specific spots.

Click the "Trim Audio" button to cut out unnecessary parts of the song. Useful for songs that are too long, or that you only need a piece of. Use the sliders in the Trim Audio window to select the new starting and ending point for the song.

Use the Fade Duration options to set the fade in and fade out times. The longer the duration, the more gradual the fade will be.

Use the Volume button to adjust the master volume for the song. Make sure to test the song before the presentation and adjust the volume accordingly so that you don't startle the audience.

Step 9. **PowerPoint 2019 will embed the MP3 file into your presentation file.** This will allow you to share the file with others without having to worry about sending the music file along with it. Keep in mind that the size of the presentation will increase based on the



size of the MP3 file.

OPEN EDUCATIONAL (OER) AUDIO AND VIDEO SOURCES

ccMister – ccMixter is a community music remixing site created by Creative Commons, which features music samples and complete remixes for public use. Each track is licensed under a Creative Commons license; however, the licenses may vary from item to item.

Free Music Archive – The Free Music Archive is a library of free, legal audio downloads directed by the WFMU - a freeform radio station. Inspired by the open source movement and Creative Commons, the songs provided are openly licensed under terms set by the individual artists.

Free Sound – FreeSound is a collaborative database of audio snippets, samples, sound recordings, and sound effects that have been released under open licenses to allow others to make use of them. Pay attention to the licenses of the individual items.

Jamendo – Jamendo is an open music site that first was created as part of the open source/free culture movements. It provides free music in a variety of genres, available for download under Creative Commons licenses. Pay attention to the licenses granted for the individual songs.

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