



جامعة نِزْوَى
University of Nizwa

DIGITAL LITERACY I

COMP-A



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FOUNDATION INSTITUTE

Unit 1: Recognizing Computers

Lesson 1: Computers All Around Us

Objectives

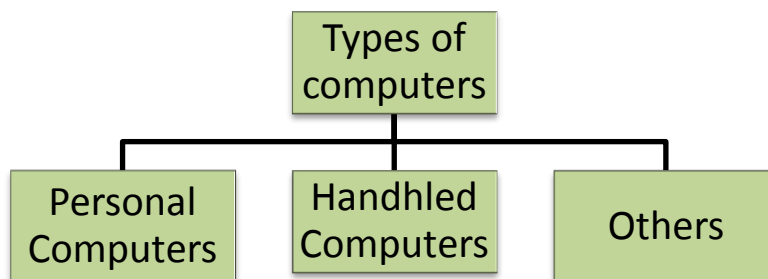
- What is a computer system.
- Classification of computers.
 - Personal Computers.
 - Handheld Computers.
 - Other Electronic Computing Devices.

What is a computer system?

Collection of electronic devices that called **hardware**, each doing special tasks. These devices cooperate with each other, by means of specified instructions that called **software**.

Computers are integrated in our work, home, and social environments and perform a multitude of tasks.

Classification of computers:



Personal Computers: are designed for one user at a time .They process and store smaller amounts of data and programs. For example:

- **Desktop Computers:** are called personal computers and sit on, beside, or under desk. These process data quickly and are

typically used in small businesses, schools, and homes. Generally two types (PC & Apple).



PC



Mac

- **Notebooks or Laptop Computers:** can be similar to desktop models in terms of speed, performance, and usage. The advantages of having a notebook are its **portability** and its **power sources**. All laptops use batteries (greener alternative). You can **purchase accessories to enhance enjoyment and experience** of using a notebook such as a bigger hard drive for storages, a larger screen, a wireless external mouse or keyboard, or more memory.



PC Notebook



Mac Notebook

- **Netbook:** similar to notebook but smaller and less expensive, and designed to handle wireless communications or access to Internet only.



- **Tablets:** are a type of notebook computers but screen can be rotated around 180°. So, the user can write or select items using a specially designed pen. All tablets have touch screen, which means you can touch a pen or pointing device at an item on the screen to select it.



Hand-held or Mobile Computers (Pocket Computers): are any computing devices that fit within the palm of your hand and are portable. For Example:

- **Cellular phones:** are now more sophisticated and can include:

- playing and listening to music
- taking pictures or video
- text messaging
- paging
- e-mail
- accessing the Internet
- global navigation systems (GPS)



- **Personal Digital Assistants (PDAs) or (Smart phones):** have specific software to help you make appointments, keep contact lists, or write notes. PDAs are very popular for portability and software (create document, calendars, take pictures or video, or access the internet). PDAs can be main computing device. All PDAs incorporates touch screen technology.



- **Music or Media Players (MP3):** refers to file type for music to be recognized on **audio player** only. But, Media player enables viewing of movies, videos, or books that Provide audio and visual capabilities or access to Internet.



There are **others hand-held or mobile computers** that are used in the daily life. For Example:

- **Game systems.**
- **Electronic book reader.**
- **Calculators.**

Other Electronic Computing Devices: is any computer technology which is found in variety of equipment used in daily life such as:

- **Equipment to diagnose automobile problems**
- **Automated Teller Machines (ATMs)**
- **Point-of-sale machines**
- **Global Positioning Satellite (GPS)**
- **Robotics**
- **Medical equipment**
- **Small home appliances(microwaves, and coffee machines)**
- **Large home appliances(ovens, and washing machines)**

Review Questions

1. What is the biggest advantage of using a notebook?
 - a) Cost
 - b) Speed
 - c) Portability
 - d) Size
2. Which of the following are true?
 - a) MP3 refers to music file types for audio and visual.
 - b) Some tablets have touch screen but PDA doesn't have.
 - c) Generally, desktop computers are two types (PC & Apple).
 - d) A netbook is similar to notebook but smaller and more expensive.
3. A server is a computer that has been designated to share resources and data.
 - a) True
 - b) False
4. Game systems include a computing chip that enables you to:
 - a) Obtain updates for the game system
 - b) Play games with other people on the same game system network
 - c) Get technical support
 - d) Any of the above
 - e) a and b
5. An example of a household appliance that has a computer chip embedded as part of its equipment is:
 - a) Refrigerator
 - b) Microwave
 - c) Entertainment system
 - d) Doorbell
 - e) Coffee machine
 - f) Cereal turn-wheel dispenser
 - g) Any of the above
 - h) a, b, c, or e

Unit 1: Recognizing Computers

Lesson 2: Elements of a Personal Computer

Objectives

- System unit
- Microprocessor chip
- How memory is measured
- What ROM is
- What RAM is
- How memory works

Looking at system unit:

The System Unit or Box is often the most important and expensive part of the computer system.

There are many separate devices inside the box (motherboard, CPU, RAM etc....) that perform specialized functions for the computer. If one of these devices fails, it can usually be replaced.



A Notebook has the same component as a desktop, and can run on batteries.

The Microprocessor chip:

The microprocessor chip is often called the “brain” of the computer as instructions from the software programs and input from user are received and executed here. This Chip is often referred to as the **Central Processing Unit (CPU)**. Each model or type of CPU processes information and instructions at different speed, measured in Megahertz (MHz) or Gigahertz (GHz).



Hertz (HZ) measures the speed of the internal computer clock in terms of frequency or number of cycles per second. Megahertz refers to millions of cycle per second and Gigahertz refers to billions of cycles per second.

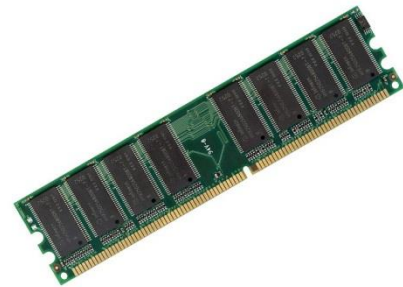


Dual and quad core processors contain two or four processor chips, which together perform faster than a single processor chip with higher speed capabilities. These microprocessors are readily available in new computers.

Looking at Memory:

Computers were developed using a numbering system of 1s and 0s, known as the binary system. These two unique numbers represent the charged or uncharged nature of electricity.

For a computer to store information, it needs to have memory chips installed. Memory is measured in bits and bytes. A bit is the smallest unit of data used by computers. It can be a value of 0 or 1. A group of eight bits make one byte. **(8 bits= 1 byte)**.



The smallest unit of data used by humans is one alphanumeric character ('a' to 'z', or 0 to 9) which need a full byte of computer memory to represent it.

The following shows how computer technology and the requirement for storage capacity have grown:

Size in byte

Term	Abbreviation	Approximate Number of Bytes	Exact Amount of Bytes
Kilobyte	KB	1 thousand	1,024
Megabyte	MB	1 million	1,048,576
Gigabyte	GB	1 billion	1,073,741,824
Terabyte	TB	1 trillion	1,099,511,627,776

All data processing within a computer requires the use of various combinations of bytes, as calculated by the computer. Every file used by the computer has a specific size which may increase depending both on the amount of content and the way the content is being used. For instance, the size of a data file will increase or decrease based on what actions are stored in that file, such as centering a title, formatting words in bold type, calculating a formula, or inserting a photograph. The larger the file is, the more memory you will need to process and store information in the file. Even if a file is not being stored on the computer, your computer still needs memory in order to process it.

Read Only Memory (ROM) BIOS:

Read Only Memory Basic Input/ Output System have information stored in them by the manufacturer. It refers to memory chips responsible for starting your computer, checking RAM, loading the operating system. This occurs only when you turn the computer on or each time you have to restart or “reboot” it. ROM is also used to control input and output devices such as disk drives, keyboard, and monitor while the computer is running.

“Read only” means the CPU can read, or retrieve, data and programs written on the ROM chip. However, the computer cannot write-encode or change-the information or instructions in ROM. Unlike RAM chips, ROM chips are not volatile and cannot be changed by the user.

This type of memory is found in calculators and printers, as it reads information that is entered and processes it during time it resides in memory. When the process is complete, clears itself and waits for next entry. It does not perform any tasks other than reads information and processes it.

Random Access Memory (RAM):

Random-access memory (RAM) chips hold the program (sequence of instructions) and data that the CPU is presently processing. RAM is called temporary or volatile storage because everything is lost as soon as the computer is turned off. Therefore, software programs must permanently reside on hard disk or optical disk. From there, the

computer can load the program and files into memory while they are in use, and remove them out of the memory when programs or files are closed.

The speed of RAM is measured in nano seconds (ns). A nanosecond is extremely fast; a computer can perform large number of tasks in 10 nanoseconds.

RAM chips are used in video display cards, which increase how quickly picture appears on your monitor. RAM also used to buffer information sent to the printer. This increase printing speed and allows the computer to perform other operation while the document is being printed (multi-tasking).

Understanding How Memory Works:

- When you first turn on your computer, ROM BIOS take control. Its main job is to load the Operating System (OS).
- When the computer loads the windows operating system and passes control over to it, the first screen you will see is the Windows “splash screen”, identified by the Windows logo and confirmation of the version of windows you are using.
- Windows uses up a certain amount of RAM used to run basic files
- When starting software “application” or program, asking computer to put copy of program in RAM.
- Close application program when not in use to make RAM available

Review Questions

1. The speed of a microprocessor chip is measured in frequency or number of cycles per second.
 - a) True
 - b) False
2. What are binary numbers?
 - a) 1s and Is
 - b) 0s and Os
 - c) 1 to 9
 - d) 1s and 0s
3. Read Only Memory is used only when you turn the computer on.
 - a) True
 - b) False
4. Why is RAM considered volatile?
 - a) It disappears when the computer is shut down or reset.
 - b) It uses up only as much memory as it needs for processing.
 - c) It always uses a certain amount of memory for Windows.
 - d) a or b
 - e) a or c
5. The best way to gain more RAM for processing a newsletter is:
 - a) Close any files you are not currently using.
 - b) Close any application programs you are not currently using.
 - c) Restart the computer.
 - d) Any of the above
 - e) a or b

Unit 1: Recognizing Computers

Lesson 3: Working With Storage System

Objectives

- What is a storage system?
- Working with Disk Drives.
- Working with internal Hard Disk Drives.
- Using Optical drives and Optical writers.
- Working with other types of storage devices.
- Network drives.
- Remote or virtual storage systems.

What is a storage system?

- It is the ability to store data and information on a computer for future use. RAM is temporary so you must save your work to any storage device, for example (CD, DVD, flash memory, floppy disk, hard disk, etc.)
- Storage device you use depends on amount of storage you need and speed of data transfer rate.
- **Data transfer rate:** The amount of digital data that is moved from one place to another in a given time.
- Hard disk drives used most often to store and retrieve software programs and data.

Working with Hard Disk Drives

- Hard disk drive is a primary storage area for both data and programs.
- Both Disk drives “internal” or “external perform same three functions:
 - Rotates disk at constant speed to access sectors on entire disk surface
 - Moves read/write head across tracks on entire disk surface
 - Reads data from disk and writes data to disk using read/write head



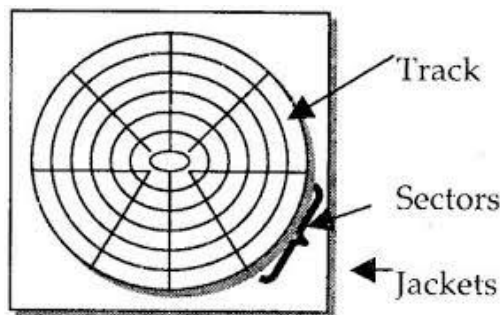
Internal Hard disk



External Hard disk

Data and information located on the disk must be divided into tracks and sectors.

- **Formatting:** is process of preparing disk for use.







Working with Internal Hard Disk Drives and Optical Writers

- Data transfer rate (throughput) of hard drive is function of hard drive rotation speed and number of heads per surface.
- The higher the rotation speed and/or number of heads, the less time it takes to find data.
- Range in capacity from 100 MB to 100+ GB
- Also used in network servers where drives very large to accommodate requirements of whole organization and data storage requirements.
- Data transfer rate quite fast although can be restricted by type of network interface cards and number of users or tasks to be processed.

Working with Optical drives and Optical writer

- Designed to read flat, circular disc, commonly referred to as Compact Disc (CD) or Digital Versatile/Video Disc (DVD)
 - Read by laser device that spins disc at speeds from 200 rpm or higher.

Optical disk	Read	Write	usage
 <p>CD-ROM</p>	YES	NO	player in audio/video entertainment system
 <p>DVD-ROM</p>	YES	NO	
Optical writers /Burner Drived	Read	Write	usage
 <p>CD-R</p>	YES	YES	Archive data and record music downloaded from internet.
 <p>CD RW</p>	YES	YES	Create and edit multimedia presentation.

 <p>DVD-RW</p>	<p>YES</p>	<p>YES</p>	<p>To record video</p>
 <p>DVD-RAM</p>	<p>YES</p>	<p>YES</p>	<p>To record video devices that support this format</p>

- Blank discs relatively inexpensive, with -R disks cheaper than – RW.
- Size of disc can be 650 or 700 MB, while DVDs can be 4.7GB to 17+GB with rapid access speeds.
- Special software needed to manipulate or edit video before burned to DVD.

Working with other types of storage devices

Tape drive or tape streamer: It uses cartridge with magnetic tape

- Generally used to back up large amount of data.
- Use different formats, with tape sizes ranging from 250MB to over 80GB.
- Other tape drives use **Digital Audio Tape (DAT)** format.



Tape Drive

Zip drive:

- It is similar to DVD-RAM drive except that disk can hold between 100MB and 750MB data.
- Offers relatively inexpensive storage option
- Newer systems not compatible with original 100MB devices

**Zip Drive**

Removable media systems: include flash memory cards, USB flash key/thumb drives, or external hard drives

- Benefits include portability, large storage size, and data-sharing capability.

**Flash memory card****USB flash key/thumb drive****Network drives:**

- Hard drives in network server similar to hard disk drives in computer
 - Traditionally much larger than available with desktop computer
 - May be set as disk array, as drives usually organized to work together.



Network server

Remote or virtual storage systems: is defined as memory created by using the hard disk to simulate additional RAM.

- Do not exist on your computer or location.
- Common service provided by **Internet Service Providers (ISP)**
- Drives on network or dedicated server at particular site
- Must login to with secure ID and password to access information
- Very useful for off-site backup storage of data, or as “central system” for people in multiple locations to share information
- Disadvantage can be speed of Internet connection

Review Questions

1. You can use hard disk drives to store and retrieve software programs and data because of their speed and storage capacities.
 - a) True
 - b) False
2. Why should you save your files to a storage device?
 - a) To prevent data loss if the computer is turned off
 - b) To store information from RAM onto the storage device
 - c) To have a copy of the data
 - d) Any of the above
 - e) a and b
3. Which removable storage device would you use to copy pictures from one computer to another?
 - a) External hard drive
 - b) Memory card from digital camera
 - c) USB memory key
 - d) Any of the above
 - e) b or c
4. A virtual storage system can exist at a location such as your ISP, where you can store data from anywhere in the world.
 - a) True
 - b) False
5. How can you access a remote storage system?
 - a) Start a Web browser and navigate to that site
 - b) Through your e-mail program
 - c) Using a USB memory key
 - d) Log on with a valid ID and password

Unit 1: Recognizing Computers

Lesson 4: Using Input/ Output Devices

Objectives

- What are Input/ Output Devices?
- Common input/ output device
- Specialized device
- What are Ports?
- What is Device driver?

What are Input/ Output Devices?

Input or output device: enable communication between the user and the computer. There are three classifications of input/ output device:

- Send information to computer (example: keyboard).
- Display or transmit information from computer (example: monitor).
- Communicate between computers (example: modem).

Input device: Anything used to enter data into computer.









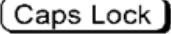




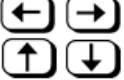
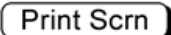


Output device: Anything used to display data on or from computer.



Common input/output device


Keyboard: is **input device** that allows you to send information to the computer. It is the primary tool for inputting data. You can also use the keyboard to input commands for a task in an application program.



- **Typewriter Key:** These keys enter text or commands in to the computer.

	Executes typed command, performs selected option, marks end of line, or creates blank line.
	Deletes one character to left of flashing cursor; may show as left arrow (←).
	Also on numeric keypad as  ; deletes character above or to right of flashing cursor.
	Inserts blank space between words or sentences.
	Cancels current selection, or generates special code for computer; called <i>Escape</i> key.
	Advances cursor to right by specified number of spaces in word processing program, or to next cell in spreadsheet program.
	Selects uppercase letters for typewriter keys and punctuation symbols on number keys. Can use with other keys to perform function or task.
	Locks letter keys to produce only uppercase characters.
	Provides secondary meaning or function for specific keys.
	Displays Start menu.
	Displays shortcut menu similar to right-clicking item. Options in menu depend on where mouse pointer was when key pressed.
	Provides secondary meaning or function for specific keys.
	Move cursor up, down, left or right. Located between typewriter keys and numeric keypad.
	Captures information on screen and sends to Windows Clipboard.
	Toggle (start and stop) scrolling display of data on screen.
	Stop or freeze computer, then continues when any key pressed; sends <i>Break</i> code to computer to unfreeze or unhang computer.

- **Function Keys:** These are located at the top row of the keyboard  and are labelled through to . Each key assigned special meaning or function in application programs. Its primary purpose to provide shortcut for commonly used commands.

- **Cursor and Numeric Keypad:** This is located at the right of the keyboard and it can toggle on and off by pressing  key:
 - When on, pad becomes calculator or numeric pad.
 - When off, pad becomes arrow or cursor movement pad.

Pointing Devices: are **input devices** that enable you to select or activate items on screen by placing pointer arrow on item and performing required action.

Types of pointing devices:

- **Traditional mouse:** has left and right buttons used to performing some actions by **click, double-click, Right-click.**

Click: Point mouse cursor at item, then press left mouse button once and release button to *select item.*

Double-click: Point mouse cursor at item and then click left mouse button twice quickly to *initiate programs or open files.*

Right-click: Point mouse cursor at item and then click right mouse button to *display shortcut menu.*



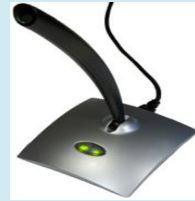
- **Trackball:** has ball on side where your thumb rests; rotate ball to move pointer on the screen.



- **Touchpad:** enables you to use finger to move pointer by moving your finger on the pad. It has two buttons that work as left and right mouse buttons.



Microphones: input devices that Record sounds and converts into digital format for use on computer.



Monitor: Output device that enables you to view information computer displays.



Specialized device

Scanners: input devices That “Takes picture” of original and then converts to digital format.



Bar Code Reader: input device that Scans or reads thin and thick lines and bar codes.



Game Controllers or Joysticks: input devices Designed to use with games.



Touch Screens: input/output devices that Use pen or finger to select or activate items.



Digital Cameras: input/output devices that Captures pictures and transfer directly to computer.



Webcam: input device and Type of digital camera connected to take pictures and video to share live with others.



Remote Control: input device used to activate commands on projector or while running slideshow.



Security Devices: input device used as Biometrics handle security issues for logon process and to maintain integrity of data on computer.



Projector: Output devices used to display presentation on screen only, surface such as wall-mounted screen, or both.



Printers: Output devices that convert what is on screen into print using variety of print options.

Types of Printers:

Inkjet-Printer: printing simple documents and used in homes. Has Print quality and speed are quite good. It is inexpensive.



Laser printer: used for large amount of printing. It contains several trays of varying paper sizes. There are black-and-white or colour laser printers.



Photo Printers: Print photographs on special photographic paper.



Plotters: Specialized printers designed to print onto very large pieces of paper.



All-in-One Printer: for all uses.



Connecting Ports:

Parallel Ports: used for connecting printers



Serial Ports: used for connecting mouse devices or modems.



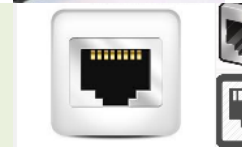
SCSI (Small Computer System Interface) Ports: used for connecting Hard disk.



USB (Universal Serial Bus) Ports: used to connected newer devices such as flash memory, digital camera.



Network Ports: used for connecting with another computer or a modem.



Midi (musical instrument digitized interface) Ports: are specialized to handle musical devices.



Wireless devices: these devices do not use a cable, but use Bluetooth or infrared radiation.



Using Software

Device driver: It is a **mini-program** tells operating system what kind of device it is, how it is works, and its purpose. Device driver used to enable **communication** between operating system and device. It is important to have correct driver for device to work properly.

Plug-and-play: It is the feature that enables the operating system automatically identifies new device connected to the computer so it looks for and **installs device automatically**.

Review Questions:

1. What are three common input devices?
 - a) Keyboard, mouse, monitor
 - b) Keyboard, mouse, speakers
 - c) Keyboard, mouse, printer
 - d) Keyboard, mouse, microphone

2. Which mouse button would you press to select an option?
 - a) Left
 - b) Right

3. How can you use a biometric device on your computer?
 - a) To identify someone who wants access to that computer
 - b) To identify the person as valid using their fingerprint
 - c) As another security method to logon to the computer
 - d) Any of the above
 - e) a or c

4. Identify the type of port shown in the following image:
 - a) Network
 - b) Serial
 - c) USB
 - d) Parallel

5. Why is it important to have the correct device driver installed?
 - a) The computer can recognize the purpose of the new device driver.
 - b) It enables the Windows operating system to install it automatically.
 - c) The device driver is the configuration file that identifies what the device is and how it should work.
 - d) Any of the above
 - e) a or c

Unit 1: Recognizing Computers

Lesson 5: Basic Troubleshooting Techniques

Objectives

- Factors that affects computer performance.
- Protecting your computer.
- Solving hardware problems.
- Basic troubleshooting techniques.

Factors that affects computer performance.

The computer performance is characterized by the amount of useful work accomplished by a computer system and after period of time find the performance of the computer appears to decrease (Slowdown) that effect by many factors such as:

- Size of RAM if is smaller that will effects:
 - System resources are too low to process work if many programs and files open at same time.
 - Take a long time to display the contents of document on screen.
- Size of hard disk(HD) if is smaller that will effects:
 - No enough space to install many programs and save files.
 - No enough space for operating system to processing many programs at the same time.
- Speed of CPU if slower that will effects :
 - Take a long time on open and close large file.
- Add new hardware, and software for computer that will cause:
 - Slowdowns the computer.
 - Conflicts with other system components.

Protecting your computer:

There are many ways to protect your computer from theft and damage. For example:

- To protect your computer system from theft you should to do:
 - Use security cable to lock down your computer.
 - Store it in locked room and can't any person to enter into it.
 - Void store any sensitive data or information in your computer.

- To protect your computer system from overheating you should to do:
 - Do not store near heat source or cold environment.

- To protect your computer system from magnetic fields you should to do:
 - Ensure there are no magnetic items near computer.

- To protect your computer system from electrical damage you should to do:
 - Use surge suppressor or UPS to protect from power surges, brownouts, or general fluctuations.
 - Use converter that adapts electrical system and voltage.
 - Avoid connecting too many electrical devices on same power bar.

Solving hardware problems:

You sometimes find that hardware has stopped working or does not respond. Following is table include examples of common hardware problems and how to solving them:

Name of hardware	Problem	How to solving it
Hard Disk (HD)	<ul style="list-style-type: none"> No enough space 	<ul style="list-style-type: none"> Use disk Cleanup tools to(remove temporary files¹, empty the recycle bin, remove installed programs that you no longer used) Use disk defragmenter tool to (reorganize files on HD And speed up retrieval of files)
Mouse and keyboard	<ul style="list-style-type: none"> Not work properly 	<ul style="list-style-type: none"> Cleaning it by using cleaning kits. Replace it if spilling liquid into it.
Printers	<ul style="list-style-type: none"> Cannot print 	<ul style="list-style-type: none"> check printer connected and on Check cable connections Check printer exists and is active If connections active but printer does not print, check for error messages

If you unsure how to proceed with changes, ask for help from specialist when and work with specialist to learn how to make changes safely and effectively.

¹ Generated when you install programs, use attachments, visit Web sites, or register/subscribe on Web site

Basic troubleshooting techniques

1. Collecting Information.

When you see problems with computer, write information down for reference, and keep notes about frequency of each message and what you were doing when message appeared. For Example: **Mouse doesn't work.** How to collect information about this problem? Ask you self some questions How? , What?, When?, and Why?

2. Analyzing the Information.

Analyze information for any patterns or common themes. For Example: If the errors occur when you use the mouse, this could mean the mouse needs a new battery or you may need a new mouse.

3. Attempting Basic Solutions.

Try simple troubleshooting. For Example: If the errors occur when you use the mouse, try simple steps such as replacing the mouse battery, or replacing the mouse.

4. Finding Help.

If the message continues, seek help and advice from technical support specialist, or IT department, or online sources, such as the Internet, offline sources, such as the library.

5. Communicating the Problem Accurately.

Be accurate and concise when communicating problem with technical support specialist and provide text of error message, and what you did during the problem occurred. Provide as much detail as possible so the specialist can begin to find a solution.

6. Analyzing and Selecting the Proper Action.

By providing as much detail as you can, so specialist can provide list of options to correct the situation, from the easiest to hardest solution. For Example: recoding to mouse not working, try first to

change battery of mouse, if it still doesn't work try to reset device driver of the mouse, if it still doesn't work try to buy new mouse.

7. Implementing the Solution.

When you know all the options for fixing a problem, try to apply all option in order from easiest to hardest.

8. Confirming the Problem is Fixed.

After implementing each option, try to duplicate problem to see if error occurs again. Repeat with each option until the problem is fixed.

9. Documenting and Communicating the Incident.

When the problem is resolved, be sure to document incident to use for future reference and share document with others that let all users on network to know and learn to solve problem on their own.

10. Avoiding Similar Problems in the Future.

Documenting issue can help prevent similar problems in future. For Example, if the problem was a virus that came from installing a program you download from internet, scan any files you download, update antivirus program regularly.

Review Questions

1. Ahmed is beginning to see many messages about no enough space on his hard drive. What should he do next?
 - a) Gather information regarding the messages.
 - b) Call technical support to fix the problem.
 - c) Shut down the computer until technical support arrives.
 - d) Buy a new computer.

2. Where can you find help or advice for fixing a problem on your computer?
 - a) IT department
 - b) Online sources, such as the Internet
 - c) Offline sources, such as the library
 - d) Any of the above
 - e) a or b

3. If you notice printer cannot print, what solutions could you do?
 - a) Check printer is on
 - b) Check cable connections
 - c) Check printer exists and is active
 - d) All of the answers

4. To protect your computer system from electrical damage you should to do:
 - a) Use surge suppressor or UPS.
 - b) Store it in locked room.
 - c) Use converter.
 - d) Do not store near heat source.
 - e) A and c

5. It is important to communicate the problem as accurately as you can so the specialist can isolate the problem and resolve it.
 - a. True
 - b. False

Unit 1: Recognizing Computers

Lesson 6: Buying a Computer

Objectives

- Hardware considerations
- Software considerations
- Price considerations
- Support or service considerations

Deciding What to Purchase

Many factors are involved when buying a computer. These vary depending on the purpose of the computer, as well as how and where it will be used (for example, school, home or business). These same factors will determine the type of computer you purchase or the operating system you choose. Some additional Factors are listed below.

Determining the purpose

The first factor is purpose: how will this computer be used and by whom? For example, if the purpose is to store a large amount of data that must be available to multiple users around the world, then this computer will likely need to be a server with one or more large hard drives.

Hard drive size and type are crucial when purchasing a computer that will become a server. The computer type and model are also important, especially if it will store a large amount of data. You will also need to ask what other equipment you will need to protect the data on the server, such as a backup device or a UPS.

On the other hand, if the computer is for a new sales representative who will be travelling around a lot, he/she may need a notebook that can be set to connect to the server at head office and should include a number of features that will enable him or her to present information to customers (for example, ensure there is an appropriate port to allow a LCD projector to be connected, or wireless networking).

If the computer is for someone in marketing who works with videos, graphics, or other media, the microprocessor speed, amount of RAM, quality of video card, size of monitor, and size of hard drive are important. How many monitors and what size of monitor will this person need?

Someone who will be using the computer at home may only need a base-model notebook or a Netbook. The latter can be an inexpensive option for the home user who wants Internet access only and does not plan to store many files on the computer. Alternatively, if the home user is a student who requires the portability of a notebook consider the amount of hard disk space needed to accommodate application programs and personal data such as homework or shared photographs and videos.

Identifying other requirements

When purchasing a computer for a particular organization, you may need to consider company standards. Specific department may require standard configuration or types of computers; for example, perhaps all field sales people need a minimum hardware requirement on their notebooks, which are passed along to administration staff every two years when the sales people are upgraded with the latest notebooks.

Similarly, a school may purchase computers from a designated vendor who can accommodate one set of standards for classroom computers and another set of standards for faculty. A library may need computers without hard drives (called thin clients) in order to offer free courses to the public while ensuring that participants do not save anything to the library network. An Internet café may only need a server that handles wireless Internet access for customers.

An organization such as a travel agency may not need computers with large hard drives as they will be connected via the Internet to a number of other organizations, like airlines and hotels, which provide enquiry services. The major requirement here could be adequate bandwidth to search these databases in order to make reservations.

Selecting the Operating Platform

In addition to hardware requirements, you will also need to consider which operating platform should be installed. In some cases, an organization may use multiple operating platforms. An example would be a university that uses a Unix or Linux platform for its school database system, while students might be using any computer with any operating system when they sign on to the university Web site to find information. Alternatively, all employees at a particular business may use PCs, except for the marketing department staff, which uses Mac-based computers for the specific types of documents they create and use.

Another factor in selecting an operating platform is what application programs will need to run on it. While many applications designed for different platforms share similar features, there often is enough of a difference to create problems in sharing files or features. For example, Microsoft Office 2007 on the PC shares many features with Microsoft Office 2008 for the Macintosh. Consider compatibility issues that may arise from using different operating platforms for a variety of tasks in the organization, such as whether the contact management program works the same on a PDA as it does on a desktop, or what is required to set up access to the contact management program on a PDA.

Looking at Support Options

New computer are covered by warranty; the length of coverage depend on the vendor. The warranty is usually one year and covers any replacement costs associated with manufacturing defects, such as abnormal hard drive failure, malfunctioning network card, or faulty monitor. Warranties do not cover damage caused by careless action such as dropping a notebook or spilling liquid on it.

Retailers often offer support agreements which can help extend the life of your computer for a cost that may be less than paying for each repair as need arises. Prices are adjusted based on call volume and cost of parts. The term of agreement and the services included will also vary. Some agreements include an option for the retailer to lend you another computer while yours is in for repair.

Extended warranties differ from support agreements as these do not extend the life of the computer. These warranties typically cover two years beyond the manufacturer's one year warranty.

Review Questions

1. What factors should you consider when purchasing a computer for someone who works with video files?
 - a) Large Hard Drive
 - b) Digital Camera
 - c) Microprocessor Speed
 - d) Amount of RAM
 - e) Any of the above
 - f) a, c, or d

2. An organization that may not need computers with large hard drives would be:
 - a) Library
 - b) Internet Café
 - c) School
 - d) Travel Agency
 - e) Any of the above
 - f) a or b

3. The useful life of a computer is exactly two years.
 - a) True
 - b) False

4. What factors should you consider when choosing an application program?
 - a) The ability to share files between operating platforms
 - b) The ability to use the same features in similar application programs on the different operating platforms
 - c) How to use the same application program on different computer devices
 - d) Any of the above
 - e) a or b

5. A support agreement is:
 - a) A replacement for a warranty
 - b) An agreement that can extend for the life of the computer
 - c) An extra cost that you do not need
 - d) Any of the above
 - e) a or b

Unit 1: Recognizing Computers

Lesson 7: Looking at Software

Objectives

- What software programs are
- How software programs are developed
- What the operating system is
- Which software programs are designed for specific tasks

What is a Software Program?

Refers to everything that makes computer run .Only functions when loaded into computer's RAM that tell the computer how to process data into the form you want. There are two major kinds of software:

1. **System software** works with end users, application software and computer hardware to handle the majority of technical details.
2. **Application software** can be described as end-user software and is used to accomplish a variety of tasks. Application software can be divided to three categories. Application software divided into 3 main parts:
 - **General purpose applications**, includes word processing programs, spreadsheets, database management system and presentation graphics.
 - **Specialized applications**, includes thousands of other programs that tend to be more narrowly focused and used in specific disciplines and occupations.
 - **Mobile apps**, is programs designed for a variety of mobile devices including smart phone and tablets.

You can think of application software as the kind you use. It created using **programming languages** that contain commands to perform specific tasks. These commands that users will activate in order to complete that ask. The commands are based on a set of rules (referred to as algorithms).

Algorithms are exactly telling the computer what to do using Step by step procedures designed to perform an operation. They specify how software program identifies input type, and then proper format for output. The following example describes exactly how the algorithms work:

```
Public static int partition (int[] a, int p, int r)
{
    int x = a[p];
    int i = p;
    int j = r + 1;
    while(true)
    {
        while(a[i] < x)
        {
            i++;
            if (i == r) break;
        }
        while(x > a[j])
        {
            j--;
            if (j == p) break;
        }
        if (i <= j) {
            tmp = a[i];
            a[i] = a[j];
            a[j] = tmp;
            i++;
            j--;}

        **int exch = a[p];
        a[p] = a[j];
        a[p] = exch;**
    }
}
```

Software programs are created to help the user perform tasks on the computer. Which software you use depends on what requirements you or your office may have to output. The choice for software is really based on what you need to accomplish, the degree of detail and features needed, and you can afford.

All retail software programs go through thorough process before being released to public. The software vendor Perform quality controls on software based on most commonly used tasks in order to minimize the amount of problems that could occur once the program is installed on the computer.

When purchase software program, actually purchasing license to install and use that program on one computer only. The traditional

way of purchasing software is with CDs in package that includes booklet with instructions on how to install and use the program. You can also purchase by Download software online where you pay with credit card, and then receive separate e-mails from vendor confirming purchase and providing license number.

Organization with large number of users usually purchase **network license**. Network administrator purchase one media (for example, CD) that contains the software, as well as options copied to network folder, and then installed to individual computers. This option is an effective option to reduce amount of time needed to install a program on many computers.

Software as a service (or SaaS) is another method to obtain software. It is a way of delivering applications over the Internet—as a service. Instead of installing and maintaining software, you simply access it via the Internet, freeing yourself from complex software and hardware management. SaaS applications are sometimes called Web-based software, on-demand software, or hosted software. Whatever the name, SaaS applications run on a SaaS provider's servers. The provider manages access to the application, including security, availability, and performance. SaaS customers have no hardware or software to buy, install, maintain, or update. Access to applications is easy: You just need an Internet connection. A good way to understand the SaaS model is by thinking of a bank, which protects the privacy of each customer while providing service that is reliable and secure—on a massive scale. A bank's customers all use the same financial systems and technology without worrying about anyone accessing their personal information without authorization. Once SaaS contract expires, you can no longer access software until you renew.

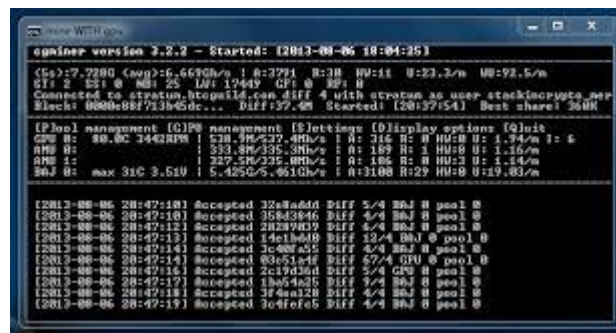
Although these are the most common ways to obtain software, there are other methods include Shareware, freeware, bundling and open source. Shareware are trial version software you download for free, but usually have limited functionality or provide limited amount of time to access program, for example Some software developers offer a shareware version of their program with a built-in expiration date (after 30 days, the user can no longer get access to the program). Freeware is software that is free to use. Unlike commercial software, it does not require any payment or licensing fee. It is similar to shareware, but will not eventually ask you for payment to continue using the software. You can legally download and use freeware for as long as you want without having to pay for it.

Many types of software programs are offered as freeware, including games, utilities, and productivity applications. Since the software is free, you might wonder what incentive developers have to create freeware programs. Below are a few reasons a program might be offered as freeware:

1. To offer a program developed by a non-profit or educational institution to the public
2. To promote a brand or drive traffic to a company's website
3. To generate revenue through advertisements or in-app purchases within the program
4. To generate revenue by offering other programs during the installation process
5. To provide a "lite" version of a program that may lead users to upgrade to the full-featured version.

Software can also be “bundled”. Alternatively referred to as bundle ware and pre-installed software, bundled software is any software that is included with a new computer, hardware, or other software program. This bundled software is included at no additional cost to the user and is used to help promote the software with demos of the actual program. In some cases, it may be full versions of programs, but often is trial programs that expire after so many days or is limited versions of the actual program. Common types of bundled software include operating systems, utilities and accessories sold with desktop or laptop computers, as well as mobile devices. Other types of bundled software are multiple programs sold as a single software service or product that can provide more than one use.

Open Source is where programming code available to anyone. You can Modify program to your needs and then share your version with others but cannot charge for it (available at no cost).



Whichever way you obtain software, your responsibility to ensure you observe whatever licensing rules apply. If you do not have a valid license, you will be violating the vendor’s copyright and could be subject to legal action. A network administrator is aware of this responsibility and should take the necessary steps to ensure there are enough licenses for each computer in the organization.

As most people know, it is very unusual for software programs to be error free with the first release of the software. A lot of bugs (errors) that occur generally are items that the software company cannot always predict based on how customer uses that program.

Update or upgrade are not always problems with software, they could be created to address Changes in government regulations such as new tax table for accounting programs or other external factors such as a new viruses.

Updating and upgrading a software program are two different things. Updates are Renew for a program that allows adding new some features in that program, , are almost always free , typically very small and the process of running an update on the computer that installs the latest up-to-date code and fixes. For example, Computer Hope may recommend updating your software to resolve an issue you may be experiencing; While Upgrade is replaced of a program with newer version of the same program, and is usually not free and often requires installing a full copy of a program. For example, if you have Microsoft Windows XP and wanted to install Windows 7 you would have to "upgrade" to Windows 7. When you register your copy of the software, you can become entitled to receive notification about updates or upgrades, usually by e-mail that you can use to download the upgrade. Some software vendor build a feature within the program to automatically check the for online updates, and display messages to indicate when a new update is ready to for installation.

To use application software you must instruct the operating system start a program. An operating system is a set of programs containing instructions that coordinate all the activities among computer hardware resources. Most operating systems perform similar functions that include starting a computer, providing a user interface ,managing programs, managing memory ,scheduling jobs, configuring device, establishing an internet connection, monitoring performance, and providing file management utilities. Applications software designed for a specific operating system may not run when using another operating system. For example, PCs often use Windows XP, and iMacs use Mac OS X. When

purchasing application software, you must ensure that it works with the operating system installed on your computer. The computer must load the OS into memory before it can load any application.

An application program performs a specific function such as accounting, word processing, or drafting. It is important to use the appropriate software program to complete a specific task to help organize and generate information as needed. Many programs share a number of features to choose the one that best suits your need, look closely to what you need to accomplish.

Business software

Business software is application software that assists people in becoming more effective and efficient while performing their daily business activities. Business software includes programs such as word processing, spread-sheet, database, presentation graphics, and note taking, personal information management software, PDA business software, software suites, project management, accounting, document management and enterprise computing software.

The following section discusses the features and functions of some of business software.

Word processing software

Word processing software sometimes called Word processors. It create text-based documents and are one of the most flexible and widely used software tools. All types of people and organizations use word processor to create memos, letters and faxes. Organisations create newsletters, manuals, and brochures to provide information to their customers. Students and researchers use word processor to create reports. It can even be used to create personalized web pages.

Word processing software has many features to make documents look professional and visual appealing. Some of these features include the capability of changing the shape and size of characters, changing the colour of characters, and organizing text in newspaper-style columns.

Most word processing software allows users to incorporate many types of graphical images in documents. One of popular type is **clip art**. **Clip art** is a collection of drawing, diagrams, maps, and photographs that you can insert in documents.

Word processing software provides some basic capabilities to help users create and modify documents. Defining the size of the paper on which print and specifying the margin (the portion of the page outside the main body of the text).

In addition of these basic capabilities, most current word processing programs provide numerous additional features.

Spreadsheets

Spreadsheets organize, analyse and graph numeric data such as budgets and financial reports. Once used exclusively by accountants, spreadsheets are widely used by nearly every profession.

The most widely used spreadsheet program is Microsoft Excel. A spreadsheet file is similar to a notebook with up to 255 related individual worksheets .Data is organized vertically in columns and horizontally in rows on each worksheet.

A cell is the intersections of a column and row .Each worksheet has more than 16 million cells in which you can enter data. Cells may contain three types of data: labels (text), values, and formula. Values or numbers that contained in cells can be used in calculations and formulas. Formulas perform calculations on the data in the worksheet and display the resulting value in a cell.

Another standard feature of spreadsheet is charting, which depicts the data in graphical form.

Presentation

Presentation is a program that combines a variety of visual objects to create attractive, visually interesting presentations. You can create slides with any type of content for presentations .Also; you can add Special effects include animation, slide transitions, and theme designs. Presentation graphics software typically includes a clip gallery that

provides images, pictures, video clips, and audio to enhance multimedia presentation .The presentation can be broadcast over Internet, to live audience, or as self-running slide show.

Database Management

A database is a collection of related data. A database management system is a program that sets up or structures, a database. It also provides tools to enter, edit, and retrieve data from the database.

Database management can also be used to generate monthly sales reports that can assist a company's management in making sound business dcission.

Databases are identified by their structure:

- Fields contain individual pieces of data
- Collection of related fields make up record
- Collection of records make up table
- Multiple tables of related records make up database

With this structure, you can Use queries to extract data, generate reports, use forms to access fields within table, set up key fields, and link tables to each other. Not all databases are created for companies to collect information. May websites use databases be “behind the scenes” to help you find and purchase items on Web site.

Graphics and Multimedia software

Many people work with sophisticated software designed specifically to allow them to work with graphics and multimedia. This software includes computer aided design, desktop publishing; paint/image editing, photo editing, video and audio editing and multimedia. In graphics software, you can obtain graphics from different sources, create your own, or customize picture files. This software can be grouped with multimedia software programs to create or edit sounds or video. The program you use will allow you to save files in specific file formats such as .gif, jpg,.png and etc. This type of programs Include basic set of tools for drawing shapes, text, painting fill colors or patterns, changing line styles, width color, or filling in arrowhead styles.

“Multimedia” encompasses any software programs that incorporate graphics, music, or video. Multimedia software has grown in popularity as these programs have become much easier to use, especially when building items for a Web site. Having fundamental knowledge on how best to structure or edit video is helpful to produce professional files for distribution. It allows you to add elements such as video, music, or animation. As with graphic programs, you need to save multimedia files in correct file format such as Adobe Flash, Windows Media Player or Quick Time software.

Education and Entertainment software

Sophisticated Programs designed specifically to entertain and educate people of all ages. These programs Integrate simulation and interaction as a way for one or many users to acquire information. Many educational programs using game system work as entertainment methods, For example, **Xbox** (online multiplayer gaming and digital media delivery service created and operated by Microsoft) or **Wii** (home video game).

Computer-Based Training (CBT) or eLearning is another educational program. It is Self-paced learning offered though vendor’s Web site. It May have measures built into program to track progress or assess skills. Learning is also available in form of audio or video file that can be downloaded from Web site for use in another media or location.

A virtual environment is another program that is used by simulation to teach crucial skills for dealing with real-life scenarios. For example, an airline pilot which use flying simulation to practice handling plan in different weather conditions.

Utility Tools are specialized programs designed to make computing easier. There are hundreds of different utilities programs, the most essential are”

- **Antivirus program Protection** that protects your computer system from viruses that may corrupt files and invade your computer system.

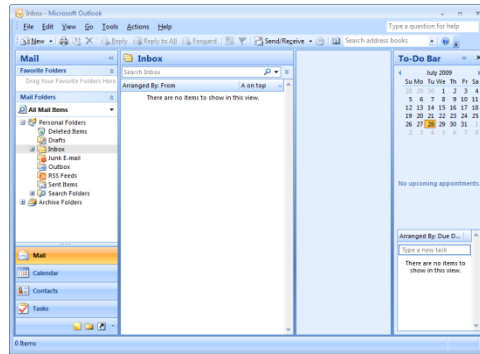
- **Adware /Spyware Protection** is a special utility provided with antivirus program to finds and blocks unwanted items from the Internet such as spyware and adware. Spyware referred to a Software program designed to collect information about you, about where and what you are browsing on Internet without your permission. Adware referred to Programs that display advertisement automatically.
- **Disk Compression**, Frees space to store more files in most accessible area.
- **Disk Cleanup**: Reduces number of temporary files
- **Backup Protection**: Schedule backups or copies of specific data should computer fail.
- **File Compression**: Reduce size of file for storage purposes or to transfer file from one location to another.
- **Widgets/Gadgets**: Mini-programs that provide quick access to information, services and tools from Internet.

Accounting or Financial programs

- **Accounting programs**: Automates tasks performed by bookkeepers and accountants. Users need accounting fundamentals to understand all features available in accounting software program.
- **Financial programs**: Focus on specialized areas such as small business management, investments, or personal finances.
- **Financial investment programs**: Can be obtained from financial institution where you do your banking. These can be downloaded from their web site ,so that can Manage financial portfolio on your own or with help of investment advisor.

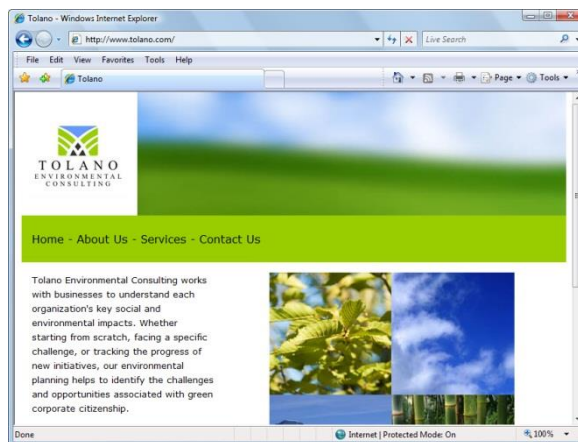
Electronic Mail

It referred to as e-mail. The Process of sending e-mail similar to manual process for addressing, writing, and mailing hard copy letter.E-mail requires you have e-mail program, correct e-mail address, and Internet connection.



Web Browsers

It enables you to view Web sites placed online by different companies, organizations, or individuals. You must have Internet connection, and Web browser to enter address of site to visit. You can then, Click links on Web site to navigate to different areas of same Web site, another Web site, or enter new Web address to go to new site.



Messaging

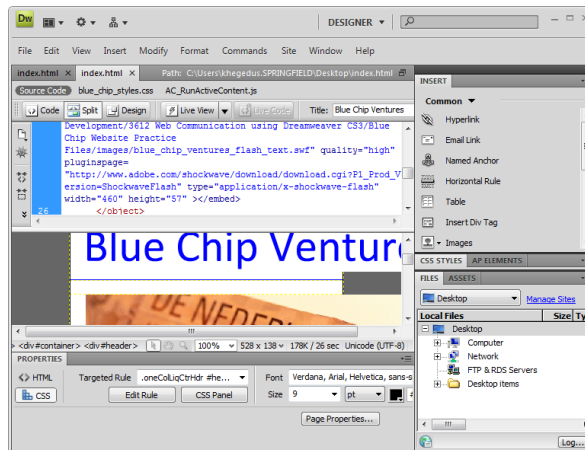
It is a very popular way to communicate quickly with others through Instant Messaging (IM) or Chat room.

- **Instant Messaging (IM):** Is when you Send text messages using cellular telephone or Internet. This type of communication is limited - only one “line” of communication can display text submitted by one person at time.It is very useful when quick response required. You can include emoticons.

- **Chat room:** It needs to subscribe to particular group with chat room. It can be included in instant messaging programs or search for Web sites of interest and join their chat rooms. There will be numerous conversations happening at same time although only one line of communication displays at a time.

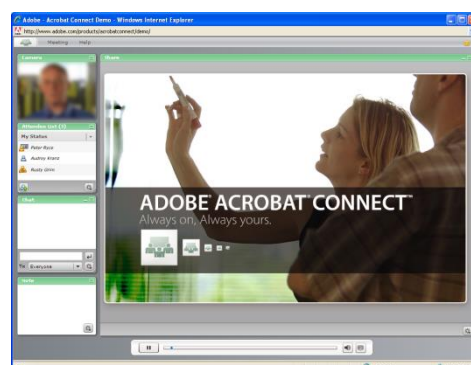
Webpage authoring programs

Programs are used to Create and design pages for Web site with focus on options important to consider. You need to know some fundamentals about Web site design and maintenance. These programs work in combination with multimedia programs to include entertainment items such as video or pictures.



Web Conferencing

It is a method of communicating with people in different locations. It is similar to traditional conferencing. All participants attend one physical location or are connected via telephone service.



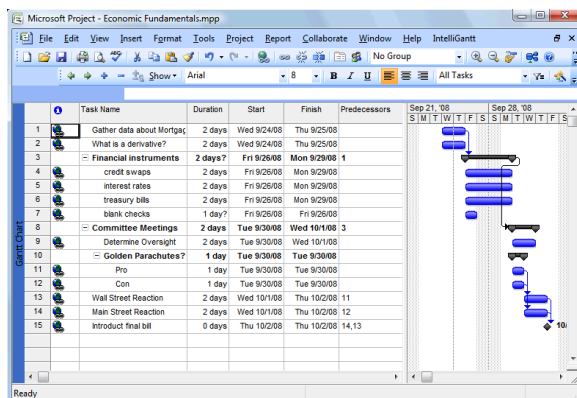
Computer Aided Design

CAD Programs are used to design objects, or create plans or drafts and to animate special effects. Many designs can be set up in two or three dimensions.



Project Management

Project Management programs enable you to Plan and track tasks for small and large projects using many people or resources. By entering tasks into a program such as Microsoft project, you can organize tasks, people, and other resources to accurately estimate and track start and end dates and important milestones in between. As things change in project, you can make changes to see how timeline or resources affected.



Group Collaboration

Programs Enable people to share information or coordinate activities, usually within organization although can include external people. Most group collaboration software such as Microsoft SharePoint or Lotus Notes, enable members go to central spot to view or find information about activities in organization. They can add or modify items for own department or for themselves. Group Collaboration programs Include tools network administrator can set up to look and feel like company Web site.

Integrated Suites

Are group of programs packaged together for purchase. For example, Microsoft office suite might consist of word processing, spreadsheet, presentation and e-mail programs, perhaps database or graphics program. The programs are all integrated or compatible with each other, so the Data from one program can be used in any other program without difficulty. Grouping programs is generally more cost-effective than purchasing programs individually.



Specialized or Custom

Is any program that targets specific market for certain tasks such as managing contacts, generating reports or filling income taxes. Custom programs developed for specific companies with company's needs as main purpose. They May also be used for many tasks in other industries.



Custom programs can be used for many tasks in many industries such as scientific, medical, engineering doing inspections, tracking patient progress.

Review Questions

1. What are algorithms?
 - a) A set of rules used for computer software code
 - b) Designed to complete specific tasks in specific sequences
 - c) Specifications for how data is inputted into a software program
 - d) Any of the above
 - e) b and c

2. When you purchase a software program, you are actually purchasing a license to use that software program.
 - a) True
 - b) False

3. Which is the most cost-effective method for a network administrator to purchase licenses for 25 computers in an organization?
 - a) Purchase 25 licenses from a retail store
 - b) Purchase a network license for 25 computers
 - c) Purchase a SaaS for 25 computers
 - d) Any of the above
 - e) b or c

4. Which software program would you use to manage a quarterly sales report for expenses?
 - a) Word Processing
 - b) Spreadsheet
 - c) Accounting
 - d) Utility
 - e) Any of the above

5. If you wanted to have a meeting with someone in Tokyo, London, and Miami, which type of program would be best to use to simulate everyone being in the same room?
 - a) Teleconferencing
 - b) Web conferencing

References

1. <https://www.salesforce.com/saas/>
2. <http://www.techopedia.com/definition/4240/bundled-software>
3. <http://www.bitcoinst.com>

Unit 2: Using Windows 7

Lesson 8: Looking at Operating Systems

Objectives

- Operating system definition
- Identifying different operating systems
- Operating systems interaction with other computers
- Capabilities and limitations of operating systems
- Common problems related to operating systems

Operating system definition

Operating system: is a collection of programs designed to control interaction and communication with user. It does two important functions:

- Manage input devices, output devices, and storage devices.
- Manages files stored on computer and recognizes file types.

Every computer requires an operating system to function. A computer must load the operating system into memory before it can load any application program.

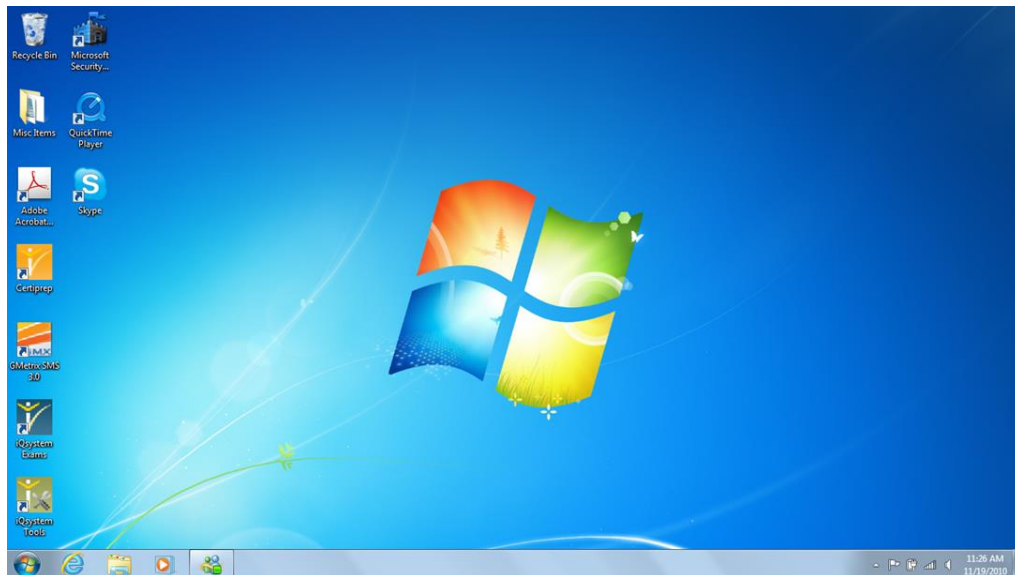
There are two types of operating systems:

- **Command Line Interface (Text-based software):** required single line commands to perform functions or managing files (**Examples: Dos, Unix**). Text-based software requires you to enter a command by typing codes or words. It uses the keyboard for input
- **Graphical user interface (GUI):** enables you to use a pointing device such as the mouse to point and select functions. Many of these functions or commands appear as buttons, pictures or icons to reduce time needed for each functions (**Examples: Windows, Linux, and Mac OS**).

Identifying different operating systems

Microsoft Windows 7

This operating system was released in October 2009 and designed to take advantage of features of *Vista* and *XP* by simplifying common tasks.



Microsoft Windows Vista

Vista is an Operating system for **PCs**. Windows products include a **WYSIWYG** (*What You See Is What You Get*) screen display which



enables user to have an overall preview of what is available.

Mac OS

This operating system is designed for Apple Macintosh computers. It



uses the graphics interface so the computer will be much easier and faster. Newer versions of Mac operating systems use **Unix** as its underlying structure, providing a very secure and stable computing device.

Unix

This operating system was released in early 1970s by programmers for programmers. The system was designed with portability in mind for multiple uses and users. The main drawback to this operating system is that it is based on **one-line commands** controlling functions. This system is very popular with **universities** and **scientific or research organizations**.

```
UNIX33.andrew.cmu.edu - PuTTY
tsh> echo "This is a shell that I wrote for 15-213" > file.dat
tsh> cat < file.dat
This is a shell that I wrote for 15-213
tsh> echo "Now I will start a background job!";
Now I will start a background job! ;
tsh> ./myspin1 10 &
[1] (14966) ./myspin1 10 &
tsh> jobs
[1] (14966) Running ./myspin1 10 &
tsh> fg 1
tsh> jobs
[1] (14966) Running ./myspin1 10 &
tsh> echo "Suspend signals work too";
Suspend signals work too ;
tsh> emacs file.dat
Job [1] (14978) stopped by signal 20
tsh> echo "However, my shell does not support pipe streaming...";
However, my shell does not support pipe streaming... ;
tsh> ls | grep "asdf"
ls: |: No such file or directory
ls: grep: No such file or directory
ls: asdf: No such file or directory
tsh>
```


Linux

This operating system is based on Unix with a graphical user interface. This system is readily available and very popular for use with **high-end servers** and **entrepreneurial** software developers.



Handheld Operating Systems

These operating systems work with a PDA (*Personal Digital Assistant*) device. The first operating system used in PDAs is **Palm OS**. Recently the PDAs spread in the word and the companies developed new operating systems for PDAs such as **windows**, **Apple**, **Linux** and **Android OS**. The options for each system vary depending on the type of handheld device.



Embedded Operating Systems

Embedded operating systems manage and control operations for the specific types of equipment for which they are designed. They follow a process similar to those used in typical computing devices, but recognize the purpose of specialized equipment. Some manufacturers embed a modified version of Windows programs in the equipment so they simulate a PC environment. (Examples: ACs, Microwave, coffee Machine, ATM machine, television, car, plane).



Operating systems interaction with other computers

In general, not all users at one network use the same operating system or same computer type. Operating systems designed to interact with each other to share data or communicate. In the same network we can have many devices with different operating systems but they can communicate and interact with each other without any problem. Equipment with embedded operating systems interacts with larger systems with network operating systems. For example, *ATM machine* connected to the bank server in the network.



Capabilities and limitations of operating systems

There are some examples of operating systems Capabilities and limitations:

- You can save files using names that are up to 256 characters long, enabling a detailed description of files content.
- If you are using PC, you cannot use these characters (\? : < > |), but if you are using Mac OS you cannot use colon (:).
- You can open two or more programs at same time.
- You can customize an operating system to your preference by change the desktop background, the color, or the screensaver. On network environment or school environment, your customization options may be restricted; for example, you may not allowed to change system setting such as colors background picture and so on.
- On a stand-alone computer, you can install programs or download items from the Internet. You may be restricted in environments such as school or company network.
- In a network, you can view contents of folders for other departments but cannot move or delete any of these files. Also you can make a copy of the file to your own folder but cannot change original file.

Common problems related to operating systems

Operating systems have some problems include:

- Incompatibility between application program and operating system may prevent software programs from working. For example, you may be able to install and use older software on newer operating systems, but you cannot run a software program designed for a newer operating system on older operating system.
- An error message may appear indicating that a device does not work, usually because of the operating system cannot identify hardware.
- Other problems can arise from:
 - Power failures
 - Shutting down computer incorrectly
 - Installing too much software or installing it incorrectly
 - Viruses
 - Conflict between software and the operating system
 - Deleting system files
- If your system displays many error messages or requires you to restart computer several times, you should check with specialist to reinstall or upgrade the operating system.
- The operating system or an application program may fail after an update. In this case you need to remove the update by uninstall it.
- If you see an error message indicate you do not have access to particular PC, drive, software program, file, or folder, it means that the login ID is incorrect, or network restrictions have been placed on your ID.

Review Questions

1. An operating system is a collection of programs designed to control the computer's interaction and communication with the user.
 - a) True
 - b) False

2. An example of interaction between operating systems is the transfer of data between a notebook and a PDA.
 - a) True
 - b) False

3. If you changed the desktop background color yesterday and it is the original color again today, why did the color not remain with the preference you chose?
 - a) You do not have rights to change the background color.
 - b) The computer was set to revert to the original color when it was shut down.
 - c) You cannot change anything in the operating system.
 - d) Any of the above
 - e) a or c

4. It is crucial that you do not change any of the operating system files without working with an IT specialist.
 - a) True
 - b) False

5. What should you try if you cannot open an application program after updating Windows?
 - a) Uninstall the Windows update
 - b) Uninstall the application program
 - c) Make sure the file is valid
 - d) Any of the above
 - e) a or c

Unit 2: Using Windows 7

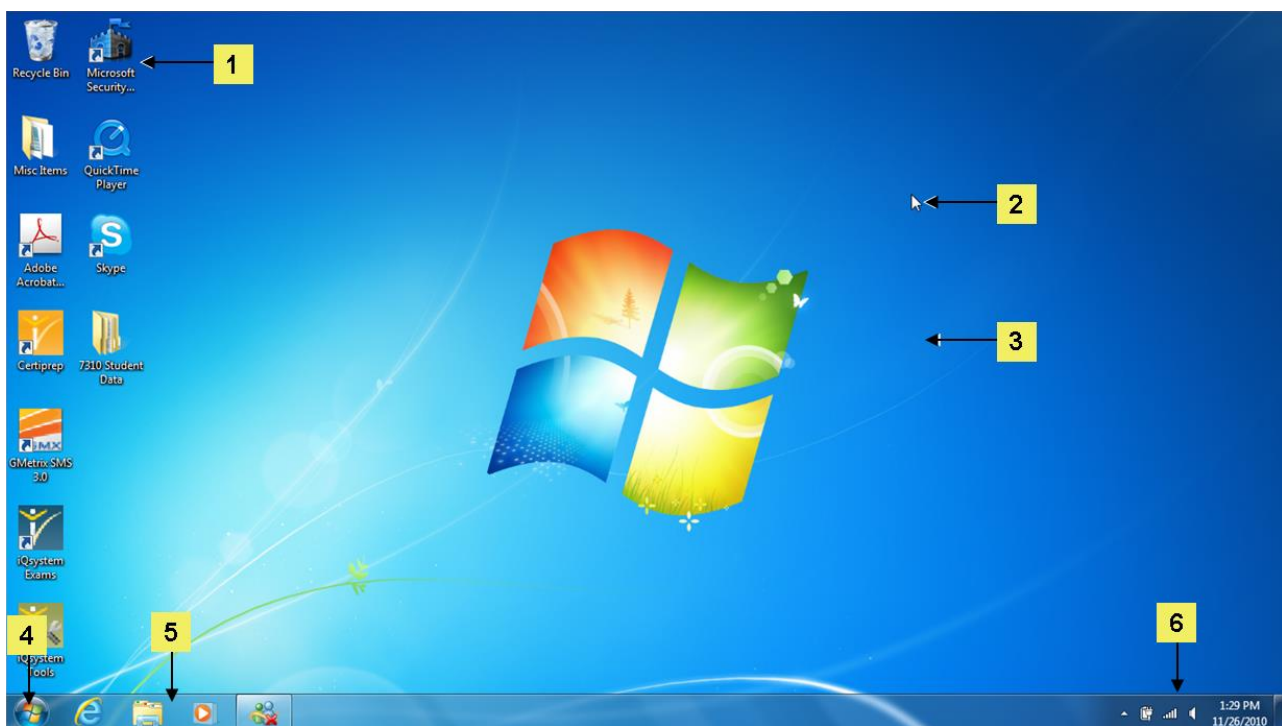
Lesson 9: Looking at the Windows Desktop

Objectives

- Looking at Windows Desktop.
- Using Start Button.
- Exiting the Computer Properly.
- Restarting the computer.
- Using Taskbar.
- Looking at Typical Window:
 - Moving Window.
 - Sizing Window.

Looking at Windows Desktop

When turn on your computer, a windows logo will stay few seconds then you will see windows desktop include small symbols (icons) on a colored or pictures background that will look similar to following screen :



1 Desktop Icons

3 Desktop

5 Taskbar

2 Mouse Pointer

4 Start Button

6 Notification Area

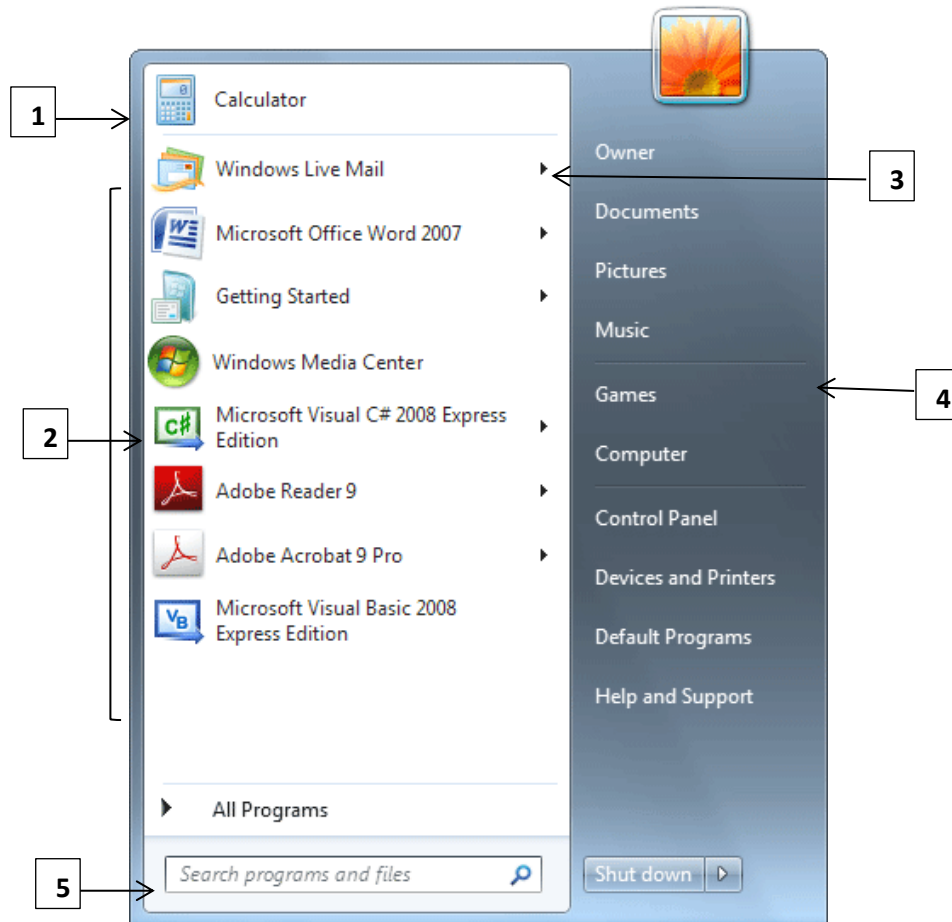
Desktop Icons	Shortcut buttons that open frequently used programs, folders or files.
Mouse Pointer	Arrow that follows the same movement when you move mouse; use to identify which option to select or activate.
Desktop	The work area where windows, icons, menus, and dialog boxes appear.
Start button	Start programs, open documents, find items, get help, or log off and shut down computer.
Taskbar	Contains Start button, taskbar notification area, and Quick Launch or other toolbars. Each open program or file displays as a button.
Taskbar Notification Area	Small icons may notify of a program status, or be another shortcut route to open programs.

Using Start Button

The Start Button appears on the Task Bar. It contains everything you need to begin using Windows such as: starting programs, accessing online help, logging off the network, switching between users, or shutting down the computer.

To display Start button, you can:

- Click **Start**
- Press 
- Press  + 



1. Pinned programs (appear on left side of start menu).
2. Recently opened.
3. Indicates submenu available.
4. Useful System Folders.
5. Search Box.

Exercise

If you use a program regularly, you can create a shortcut to it by pinning the program icon to the Start menu.

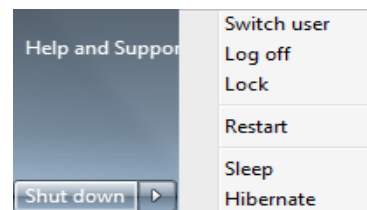
1. **Right-click** the program icon you want to pin to the Start menu, and then **click Pin to Start Menu**.
2. To unpin a program icon, **right-click it**, and then **click Unpin from Start Menu**.

Exiting the Computer Properly

To quit windows and exiting the computer properly, it is important to save your files, close the programs, log off the computer when you finish working, **to prevents unauthorized access to files or to company’s network.** You can shut down the computer completely using the shutdown button to prevent others from using it. Never turn off your computer without closing your files and open software programs in the correct manner, has this will Protects software and data files from being corrupted or lost.

1 Shut down

2 Shut down options



Switch user	Switches to another user account without logging out of the current account.
Log off	Closes all open items, logs out of the current user account, and returns to the log on screen.
Lock	Hides the desktop behind a log on screen.
Restart	Closes all open items and restarts the computer; also called a reboot or warm boot.
Sleep/ Standby mode	Puts computer in state where it consumes less power without losing your place on the screen; computer does not shut down. If using desktop computer, Sleep command appears as Standby, where monitor or hard disk turns off after set interval of time. If power failure occurs while in this state, you will lose any unsaved information. To return to normal, move mouse or press key .Use when you want to leave computer on but not using it for length of time

Hibernate	Available only on notebooks, saves what is on desktop and then shuts down the computer completely. When you restart and log on, desktop returns to where you left it.
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Restarting the computer

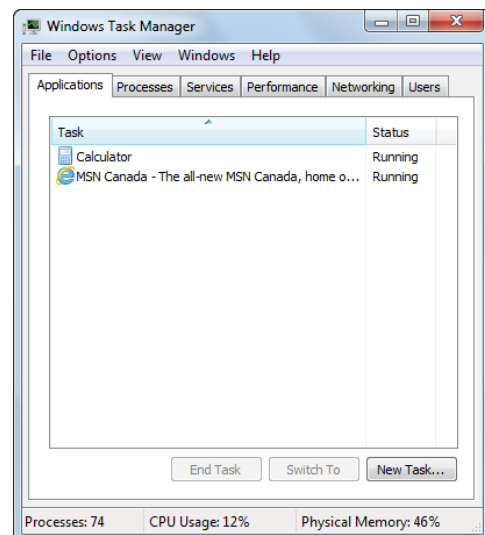
You may sometimes find that the computer does not respond to a request. When this happens, you need to reboot or restart using the Task manager.

To display Task Manager:

1. Press **Ctrl** + **Alt** + **Delete** or **Ctrl** + **Shift** + **Esc**, then click Start Task Manager.
2. Right-click taskbar and click Task Manager

To switch programs, start program, check which programs running and status, or safely close program if problems occurring, such as it is no longer responding.

The Task Manager is advanced application; the others tabs in Task Manager should be used by an experienced user. If Task Manager not respond or close down applications appropriately, you will need to press keystrokes to restart computer **Ctrl** + **Alt** + **Delete** or **Alt** + F4 key. If you can to activate Start menu, use Restart option from Shut Down.



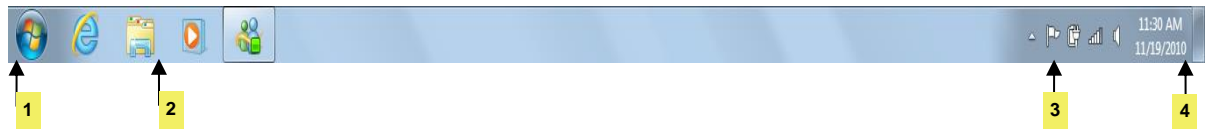
Exercise

You will now start a program and then, for demonstration purposes, use the Task Manager to end it:

1. Click **Start, All Program, Accessories**, and then **WordPad**.
2. Right-click a blank area of taskbar and select **Start Task Manager**.
3. Ensure the **Application** tab is active.
4. In Windows Task Manager, **Click Document – WordPad** and then **End Task**.
5. This closes the WordPad Program.
6. Close the Task Manager.

Using Taskbar

The taskbar is at the bottom of windows desktop, includes the Start button, a notification area, the clock, and a taskbar button for each open program.



- 1 Start Button** **2 Taskbar Buttons** **3 Notification Area** **4 Show desktop**

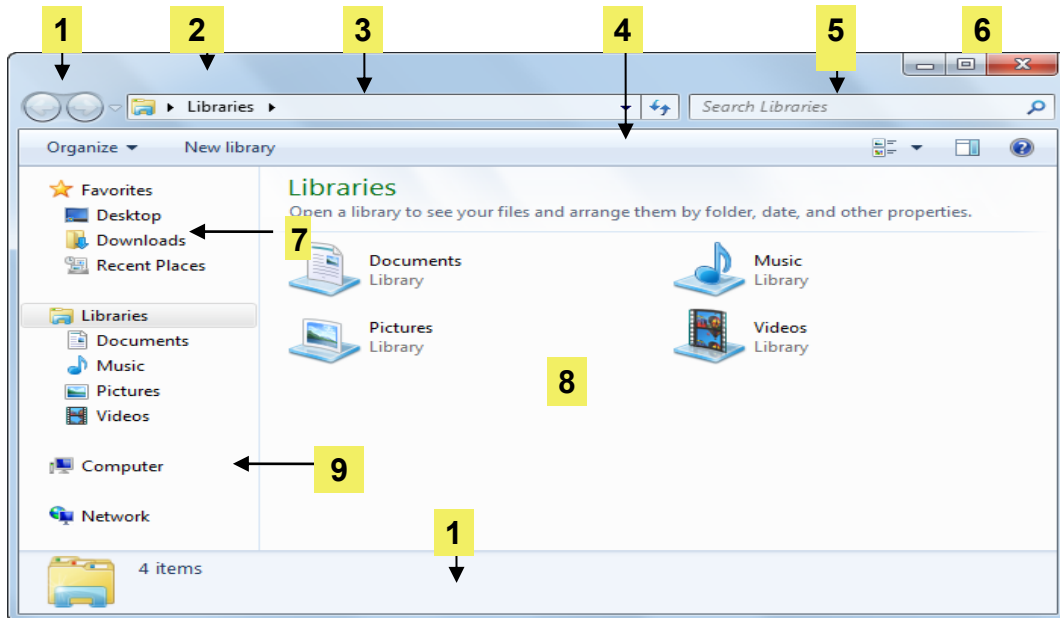
The Notification Area displays date and time, volume control, and with access to startup programs such as antivirus program.

Can move the taskbar or change the way it displays as follows:

- Point the mouse pointer over blank area of taskbar and drag to any side of screen.
- To change size, point mouse over edge of taskbar and drag to **desired height**.
- To prevent changes or movement, right-click area of taskbar and **click Lock the Taskbar**.
- To customize properties, right-click area to customize, or right-click Start button and click **Properties**.

Looking at Typical Window

When program or folders are opened, they appear on desktop individual “windows.” You can have multiple windows displayed on the screen, but each window will share features.








- 1 Back/Forward Navigation Buttons
- 2 Title Bar
- 3 Address Bar
- 4 Command Bar
- 5 Search Box
- 6 Control Buttons
- 7 Favorite Links
- 8 Contents Pane
- 9 Navigation Pane
- 1 Details Pane

Back / Forward	Navigate between different views of files and folders.
Title Bar	Displays name of feature or application program currently active.
Command Bar	Contains commands to organize, view, or protect your data.
Address Bar	Click name in bar to go to that folder, or click arrow to see items in folder.
Search box	Enter criteria to search for file or folder.
Control buttons	closes window to button on taskbar, displays window full screen, restores to size before maximized, and closes window.
Favorite Links	Displays commonly used folders or locations as links.


Navigation Pane	Displays list of folders and drives you can access to view contents.
Contents Pane	Displays contents for selected folder or drive in Navigation pane.
Details Pane	Displays properties or details for selected file or folder in Contents Pane.

Exercise

1. Click **Start**, and then click **computer**.
2. Click the  (**Maximize**) button at the top right corner of the window.
3. Click the  (**Minimize**) button.
Notice that the window seems to have disappeared but it actually was moved to the taskbar.
Click the computer button on the taskbar to redisplay the window. The window is now maximized, occupying the entire screen, and the  (**Restore Down**) button appears.
4. Click the  (**Restore Down**) button.
5. Click the  (close) button.

Moving Window

You can move a window anywhere on the desktop using mouse and keyboard.

- Point mouse cursor on title bar and drag to new location
- With keyboard, press **Alt** + **Spacebar** to activate control icon
 1. Press  to select **Move** command and press **Enter**
 2. Use arrow keys to move window to new location and then press **Enter** to exit action

You can only move window in Restore Down (not full screen).

Sizing Window

You want to change the size of the window so that you can see more or less of multiple windows. You can use the mouse or the keyboard to size a window.

- Position mouse pointer anywhere on border to size and drag to desired size
- To size vertical and horizontal sides at same time, position mouse cursor on any corner of window, and then drag to desired size for window
- With keyboard, press **Alt** + **Spacebar** to activate control icon
 1. Press **↓** to select **Size** and press **Enter**
 2. Use arrow keys for side to size, pressing that key until window is size you want, and then press **Enter** to exit action

You will need to repeat this action for every side to be sized.

Review Questions

1. The best way to shut down the computer is simply to press the power switch on the computer case to turn it off.

a) True

b) False

2. Use the Task Manager to:

a) End a program that has stopped responding

b) Check the power usage on your computer

c) Check which programs are running and their status

d) Any of the above

e) a or c

3. To see the programs installed on your system, which option from the Start button would you use?

a) Documents

b) All Programs

c) Search


d) List of Quick Start items

4. If you wanted to make the window smaller than the full screen, which button would you use?

a) 

b) 

c) 


d) 

5. What would you do to move the window?

a) Click and drag the Control Icon to move to the new location

b) Click and drag the Title bar to move to the new location

c) Click anywhere in the window to move to the new location

d) Click on the  button

Unit 2: Starting Windows Applications

Lesson 10: Customizing System Settings

Objectives

- start an application program
- move between open application programs
- start an application using the Run command
- access online help
- understand the Help screens
- determine the version of Windows

Starting Application Programs

To start program is from the All Programs menu. You can also select shortcut for application program on desktop or button on taskbar.

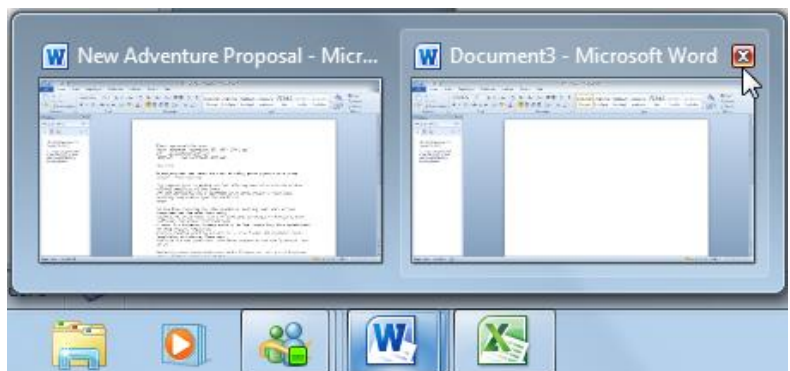


An application program might also create an option in the Startup folder during the time of installation, which means it automatically runs each time you start Windows.

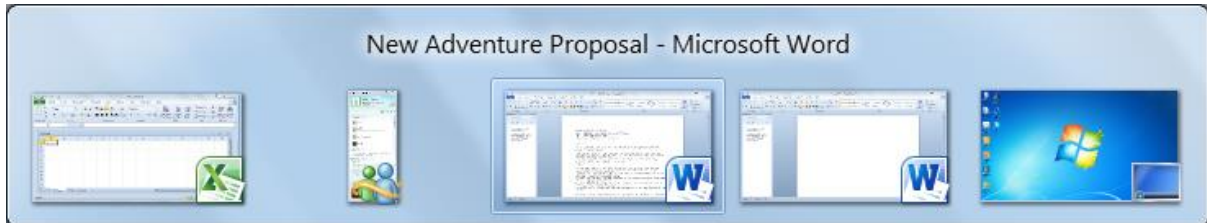
Each application program contains own set of control icons to manage application window.

Working with Multiple Windows

- Working with multiple windows and multiple programs at the same time is called multitasking.



- Using the keyboard, Press **Alt** + **Tab** or **Alt** + **Esc** to switch between programs, or press **Alt** + **Tab** to display small window with icons for each open program

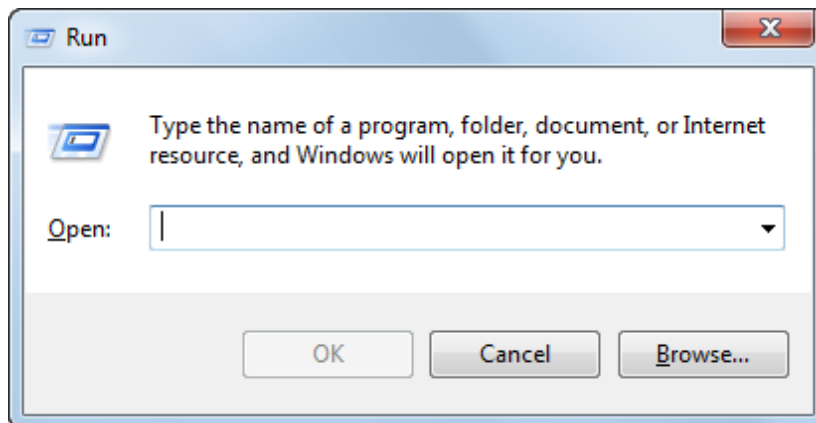


Using the Run Command

May need to start program that was or does not need to be installed and not in the Start menu using Run command.

To activate Run:

- Click Start, type: run in search field, and press **Enter**
- Click Start, All Programs, Accessories, Run
- Press **Alt** + **R**




Using Windows Help and Support

Windows provide an extensive online Help system displays step-by-step procedures, definitions for terms, and hypertext links to other related topics

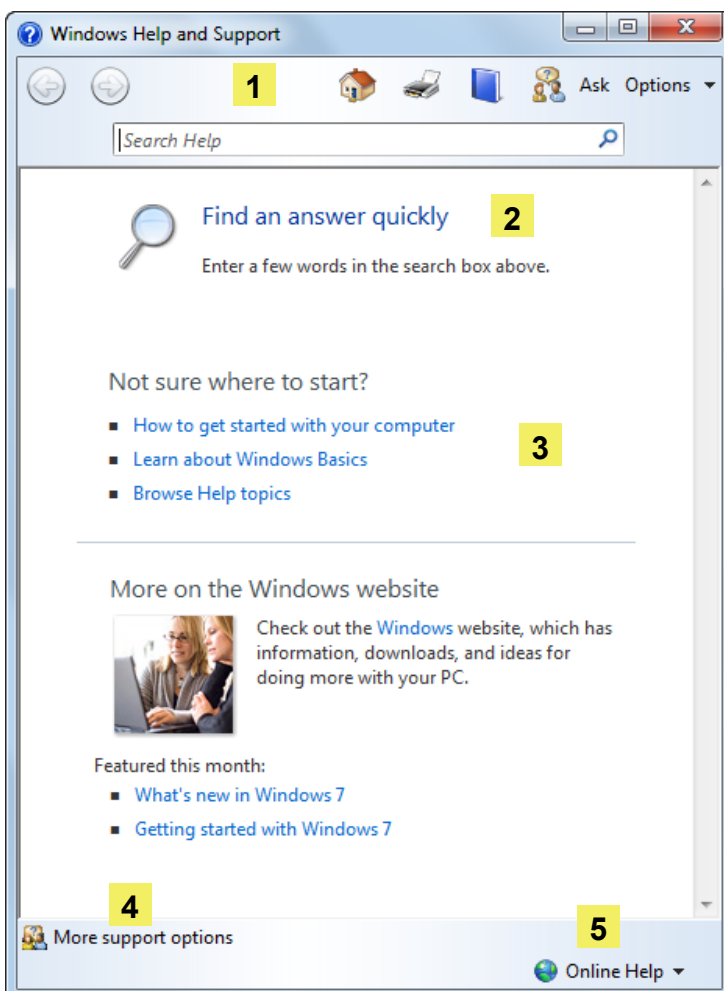
Web Help is available for additional online support via Internet.

To activate Help:

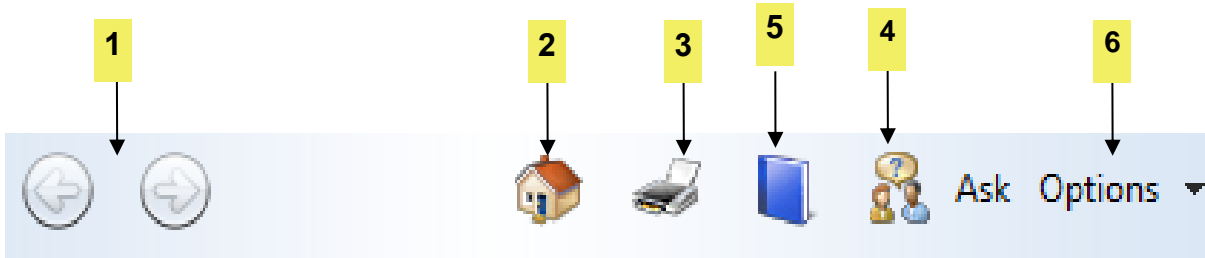
- Select Help and Support from Start
- Press **F1**
- Click  (Help) in any dialog box

Windows Help and Support window contains navigation and search tools, as well as links to variety of resources, such as assistance in finding an Answer,

Asking Someone, or Obtaining Information from Microsoft.



- 1** Toolbar
- 2** Links for navigating Help to locate the answer for yourself
- 3** Links for accessing additional information from Microsoft
- 4** Additional Help resources
- 5** Settings for searching Offline or Online



Arrows

- 1 Retrace steps through Help system.

Home and Support home

- 2 Goes to Help and Support home page.

Print

- 3 Prints currently displayed topic.

Browse Help

- 4 Displays current location in table of contents.

Learn about other support options




- 5 Goes to page with links to other resources.

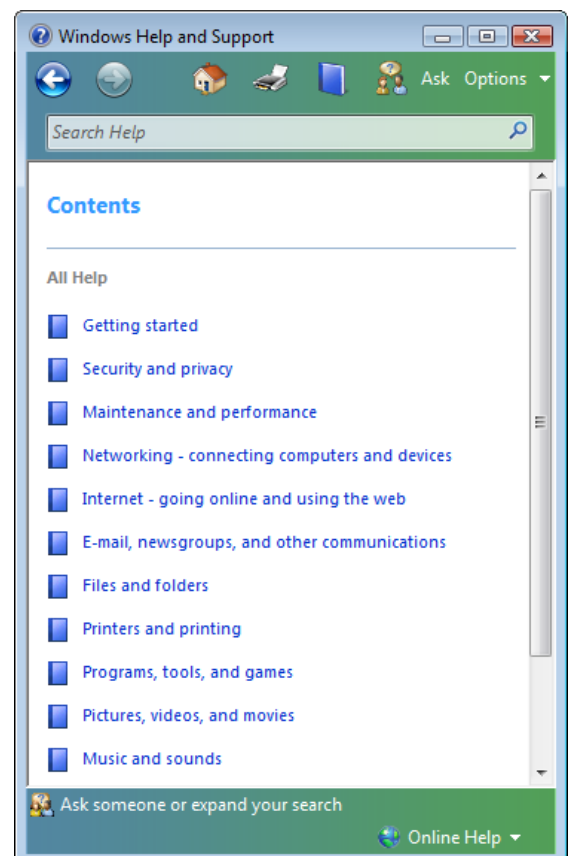
Options

- 6 Provides additional commands to get help.

Using the Table of Contents

Use a table of contents to find help on specific topics. Here, the topics grouped in types of task or activity.

- To activate Table of Contents in Help:
 - In Windows Help and Support window, click **Table of Contents**
 - On Help toolbar, click  **(Browse Help)**
 - Categories link you to specific features or options available
 - Links to window with description for topic 
 - Links to window with more options for topic 



- Displays hierarchy of selected topics with options to find more information

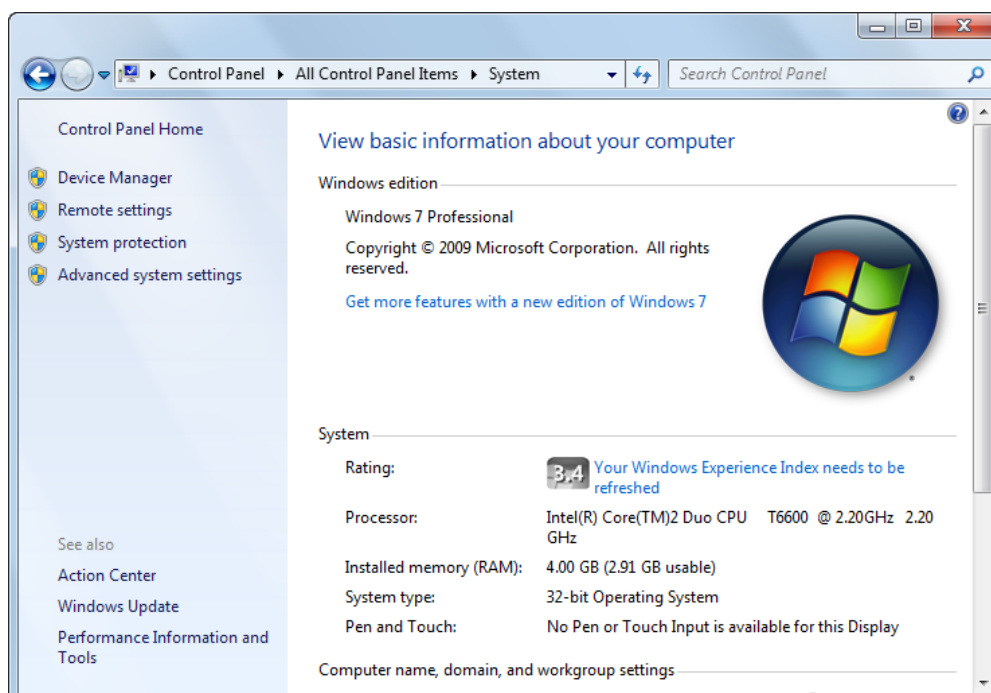
Getting Additional Technical Support

If you cannot find help on specific topic online, a number of other options for technical support are available:

- Contact Microsoft
 - List of numbers and ways to contact available in Help menu of Microsoft application program
 - Can also use online help option to find technical support
- Go to computer store that provides technical support
- Hire consultant who can come to your site to fix computer or provide training or assistance on problem
- Take additional courses on Windows to study advanced skills and troubleshooting techniques
- Search Internet for any groups that specialize in Windows 7 or have blogs where they share information

When you require further technical support, you may be asked which version of Windows you are using. It is important to tell technical support the version you are using so they can provide you with the correct support for that version.

- To display the version of Windows for technical support:
 - click **Start** button, click **Control Panel**, click **System and Security**, click **System**, or
 - click **Start** button, right-click **Computer** and click **Properties**



Review Questions

1. The most common way to start an application program is to use the Start button on the desktop.
 - a) True
 - b) False
2. Multitasking is a process whereby Windows allows you to work on multiple programs or documents at the same time.
 - a) True
 - b) False
3. How can you activate the Help feature?
 - a) Select Help and Support from the Start menu
 - b) Click a Help icon or button if it is displayed on the screen
 - c) Press
 - d) Any of the above
4. If you cannot find online help on a Windows topic, what options are available to you for further help?
 - a) Check with a technical person, either at your site or a computer dealer.
 - b) Contact Microsoft.
 - c) Search the Internet for groups of people who may have experienced the same problem or issue.
 - d) Hire a consultant to help you or take training courses that target the features you want to learn.
 - e) Any of the above

Unit 2: Windows 7

Lesson 11: Looking at Files and Folders

Objectives

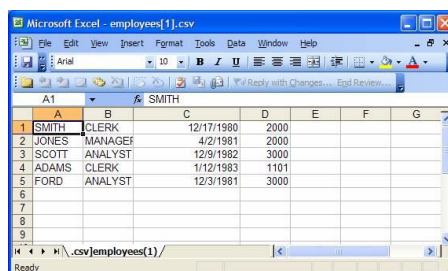
- What a file or folder is on the computer.
- How to recognize a file or folder on the desktop.
- How to recognize the drives available.
- Selecting files or folders.
- Moving and copying files or folders.
- Changing the view for drives, files or folders.
- How to create, customize, or change a folder's properties.
- Renaming files or folders.
- Viewing file or folder properties.
- Finding files.

Understanding Files and Folders

A **file** is an object on a computer that stores data, information, settings, or commands that are used with a computer program. It is created using a specific program. The type of program determines which type of a file it is.

There are three major types of file:

- **Application File:** it includes very detailed instructions for microprocessor on what tasks to perform like (read or write). It stored in program folder which resides in Program Files folder. Many simple examples of application files (Microsoft word, Excel, power point...)

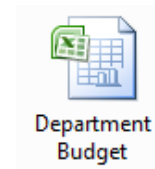


The screenshot shows a Microsoft Excel window titled 'Microsoft Excel - employees[1].csv'. The spreadsheet contains the following data:

	A	B	C	D	E	F	G
1	SMITH	CLERK	12/17/1980	2000			
2	JONES	MANAGER	4/2/1981	2000			
3	SCOTT	ANALYST	12/9/1982	3000			
4	ADAMS	CLERK	1/12/1983	1101			
5	FORD	ANALYST	12/3/1981	3000			
6							
7							
8							
9							

Application File

- **Data File:** This type of file Contains information entered and saved in application. For example, presentation power point, letter in word and so on.



Department
Budget

Data File

- **System File:** Contains detailed instructions for microprocessor on what tasks to perform, except they are part of operating system. Generally, many of system files remain hidden to protect them from any changed or deleted.



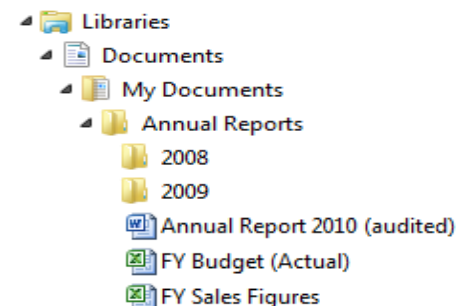
winhlp32

System file

Regardless of the type of file all files have icon that includes symbol of associated program.

Folder is a container for programs and files and method of organizing information. It represented by yellow icon that looks like file folder. Each folder has Hierarchical structure indicates how many levels and where folder exists. This structure is much like a family tree. Consider the example shown in at the right:

This structure shows libraries folder at the top level with underneath documents folder, and another folder below called my documents. This folder has a sub folder called annual report that contains two folders for 2008 and 2009 years. Also, it has three data files. To indicate the annual report 2010 file to someone, you need to write it as follows:



C:\Users\{login Name}\My Documents\Annual Reports\Annual Reports2010 (audited).doc

This Known as **path** as you are stating exact route to follow to get to location of file.

No limitations where you store file, or number of folders created, and no one correct method for setting up filing system. Just insure that you are following company's standards or create structure logical to you and others who share computer.

It is important to be more familiar about that, if you have any important, confidential or sensitive data you must have backups or copies. This will protect your data from the lost due to the theft or any hardware failure.

Understanding Files and Folders

To begin working with files and folders:

- Click **Start, Computer**
- Click **Start, Accessories, Windows Explorer**
- Click **Start**, type: *expl* in **Search** box, click **Windows Explorer**
- Double-click **Computer** icon on Windows Desktop
- Right-click **Start** button and click **Explore**
- Press  + **E**

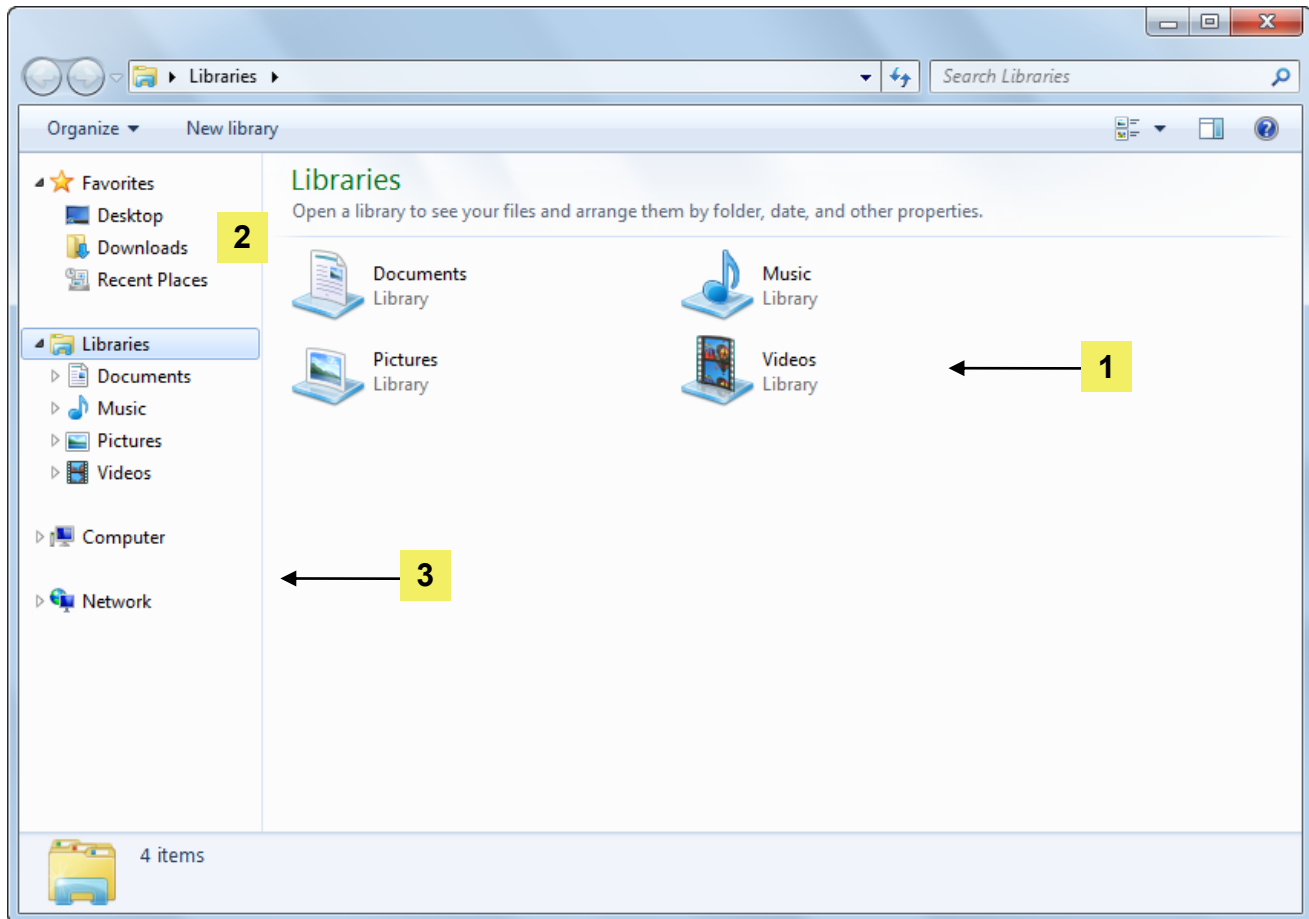
Actually, you are allowed to do many functions to manage your files and folders in both areas of computer and Windows Explorer. But, there is a difference in what appear when you start a computer versus windows Explorer. Computer area usually displays the storage devices in right pane, while Windows Explorer displays the contents of folder where you are storing your work.



Take view the following file management and the method of view the contents of the computer:

1 Contents Pane

2 Navigation Pane

3 Split Bar

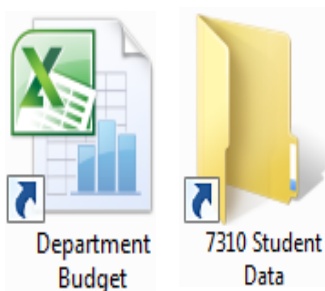


Navigation Pane	Displays Favorites , Libraries , and Computer or Network areas.
 Expand	Displays more folders or items at this level; may see several buttons depending how structure set.
 Collapse)	Hide items at this level; may see several buttons based on structure set up.
Split Bar	Drag bar to show more or less of either pane.
Contents Pane	Shows contents of drive or folder selected in Folders pane.

Files and folders both of them can be saved anywhere .But, It is important to identifying specific items in relation to recognizing a shortcut versus a program or file that has been set up in a location, i.e., on the desktop. Consider the following view of files or folders:



- Icon at left represents program to view or modify document
- Text below icon is file or folder name
- If delete icon, you delete actual file or folder.




- Small arrow at lower left corner represents shortcut to location where item saved
- Only shortcut deletes, not actual file.



- Shortcut to application program file
- Only shortcut deletes, not actual file to start program.

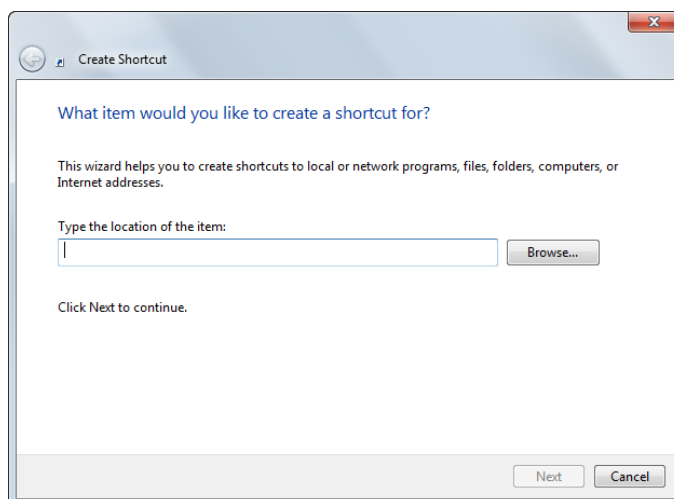
Creating Folders

You can create folders at any level, including on Desktop. To create folder:

- On Command bar, click  and click **New Folder**
- Right-click location in folders area, and click **New, Folder**
- Right-click in contents pane and click **New, Folder**


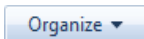
To create shortcut to folder:

- Right-click location in folders area, and then click **New, Shortcut**
- Right-click contents window and then click **New, Shortcut**

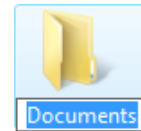


Renaming a Folder

Folder name can be as long or short as required. To change folder's name:

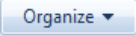
- Click folder icon to select it and  then press for Edit mode
- Click folder icon, then click inside folder name for Edit mode
- Right-click folder and then click **Rename**
- On Command bar, click  and click **Rename**

In Edit mode when see folder name highlighted, with name highlighted, type new name for folder. You can use mouse pointer or arrow keys to move cursor to exact location in folder name to insert or delete characters.



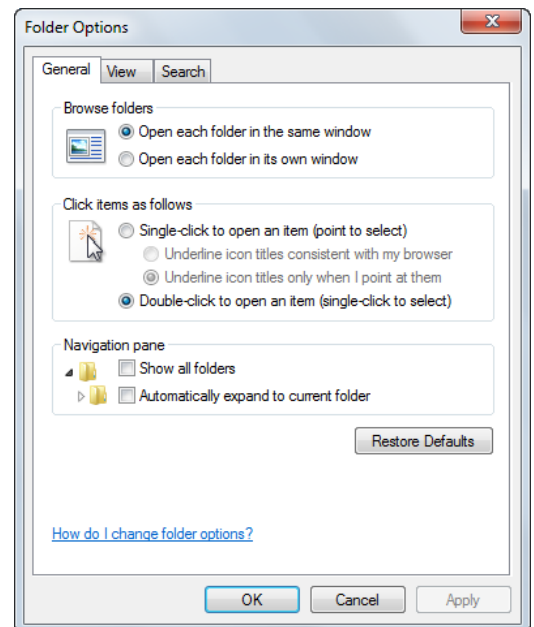
Changing Folder Options

You can Change folder appearance by changing properties. You can also, change view of folders and files or display file types.

To change the options: Select folder and on Command bar, click  and then Folder and Search Options.

The window will show three options:



- **Tasks:** Specifies whether to display details and Preview pane.
- **Browse folders:** Specifies whether each folder opens in same window, or in different window.
- **Click items as follows:** Provides options to single- or double-click to open items.



Changing the View

Sometimes you need to change the view of files or folders to display them in different ways.

To select view:

- On Command bar, click arrow  of
- Right-click blank area of Contents Pane and then **View**.
- On Command bar, click  to cycle through list of views.

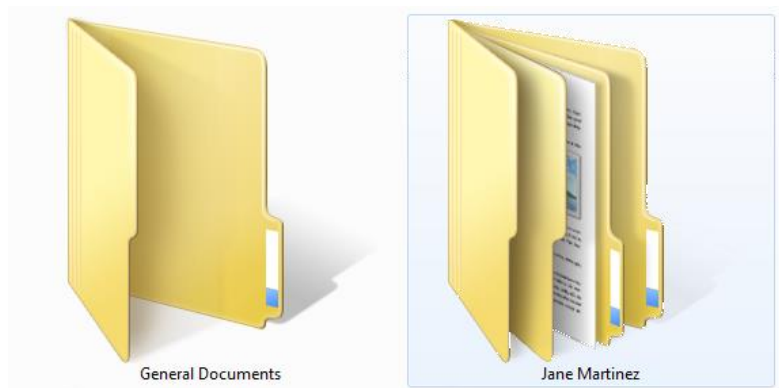
Use column headings to sort contents or manipulate view further:

- To adjust width of column, drag vertical line at right of column and drag to make column narrower or wider.
- To sort contents by item type, click **Type** column heading

The following views can be used for different purposes:

- **Extra Large Icons:**

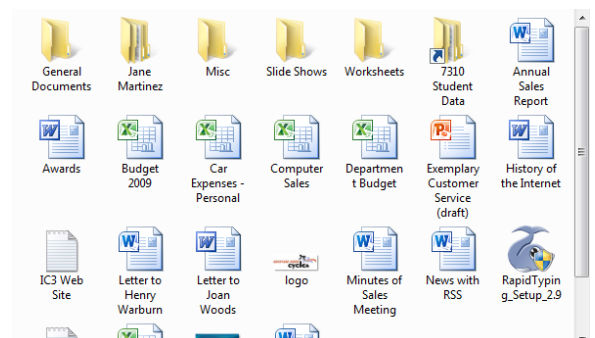
Shows as very large icons. File and folder names display below icon. This view is helpful for visually impaired users.



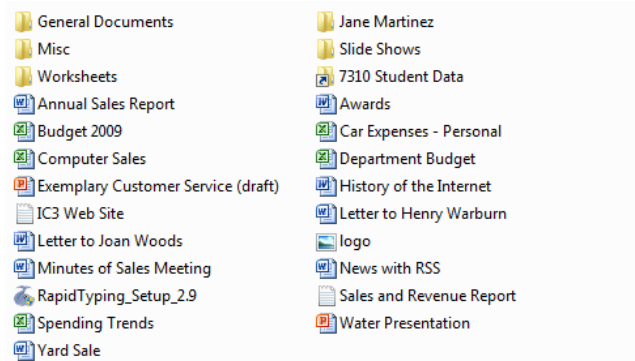
- **Large Icons:** This view displays files and folders as large icons. This is helpful to preview picture files.



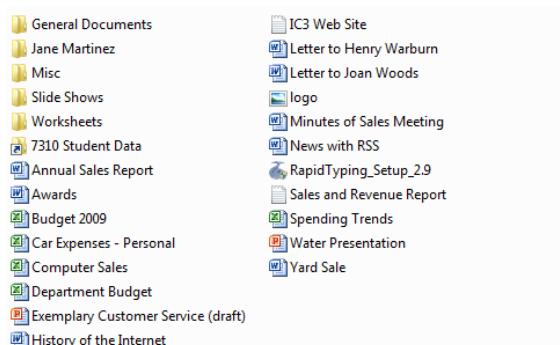
- **Medium Icons:** displays files and folders with names below icons. It is helpful for overview of folders or files in location.



- **Small Icons Lists:** files and folders with names displayed to right. The contents are sorted alphabetically in multiple columns from left to right.



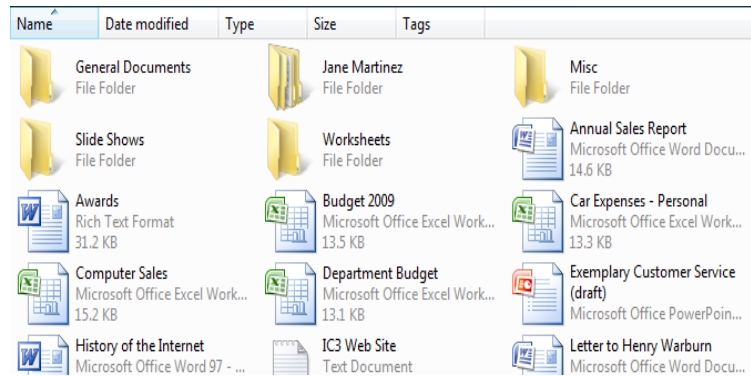
- **List view:** Displays contents of folder as list of names preceded by small icons. The main difference between this view and small icons view is how the contents are stored. List view is useful to scan contents for files.



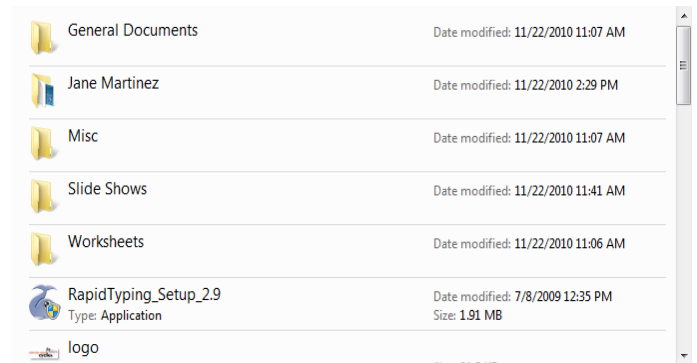
- **Details view:** lists contents of open folder with its detailed information inside it, including name, type, size, and date modified and shows the file in groups.

Name	Date modified	Type	Size
General Documents	11/22/2010 11:07 ...	File folder	
Jane Martinez	11/22/2010 2:29 PM	File folder	
Misc	11/22/2010 11:07 ...	File folder	
Slide Shows	11/22/2010 11:41 ...	File folder	
Worksheets	11/22/2010 11:06 ...	File folder	
RapidTyping_Setup_2.9	7/8/2009 12:35 PM	Application	1,962 KB
logo	5/15/2009 1:32 PM	JPEG image	22 KB
Department Budget	11/22/2010 2:23 PM	Microsoft Excel 97...	25 KB
Budget 2011	11/22/2010 2:21 PM	Microsoft Excel W...	12 KB
Car Expenses - Personal	11/22/2010 2:22 PM	Microsoft Excel W...	11 KB
Computer Sales	11/22/2010 2:22 PM	Microsoft Excel W...	14 KB
Department Budget	11/22/2010 2:24 PM	Microsoft Excel W...	11 KB
Spending Trends	5/15/2009 12:52 PM	Microsoft Excel W...	15 KB
Exemplary Customer Service (draft)	5/15/2009 2:50 PM	Microsoft PowerP...	49 KB

- **Tiles view:** displays files and folders with file names to right of icon. File format and file size also display.



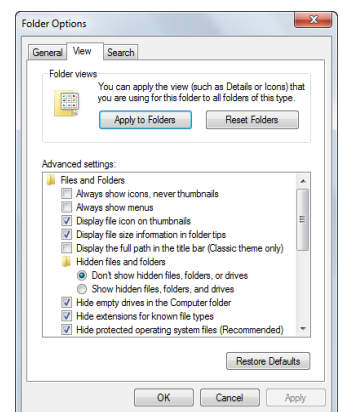
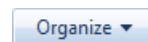
- **Contents view:** displays some of file's contents, such as the creator of the document, the time of last saved, etc.



Viewing the File Extensions

Sometimes, you may need to change some options that related to default setting in Windows like showing or hiding file extensions of the document. File extension is icon to left of file name is visual reminder of software program. The Displaying of file extension is helpful to see how the file is saved and organized.

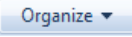
To display file extensions, on Command bar,



click **Folder and Search Options** and then on **View** tab, in **advanced settings** list, uncheck **Hide extensions for known file types**.

This option can be applied on Important files such as system files hidden to prevent them from being deleted or changed inadvertently.

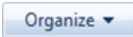
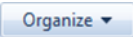
Selecting Files or Folders

- To select one file or folder, point to that file or folder. To select all files and folders here, click  and click **Select All**, or press **ctrl A**.
- To select consecutive multiple files or folders, point to first file or folder, press **shift**, and then point to last file or folder in list.
- To select files using lasso method, point at right of first file or folder, drag to select rest of files or folders.
- To select non-consecutive multiple files or folders, point to first file or folder, press **ctrl**, and then point at each file or folder
- If need to change any part of selection, use **shift** or **control** to add or deselect specific parts of selection.
- To de-select selection of any files or folders, click away from selection.

Copying and Moving Files or Folders

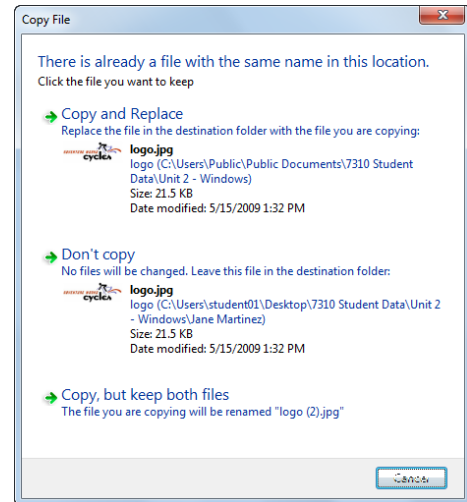
Copying file means: Original remains in source location and copy are placed in destination location.

To copy a file or folder, select files or folders and then:

- Click , click **Copy**, go to new location and click , click **Paste**
- Press **ctrl +c**, move to new location and press **ctrl + v**
- Right-click selection and click **Copy**, go to new location, right-click and click **Paste**
- If copying files from one drive to another, Windows automatically copies selection as you drag selection to new location.

- If copying files in same drive, press **ctrl** as you drag selected file or folder to new location.

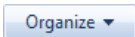
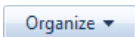
As Windows copies files from original location to new one, it will check if other files with same name exists. If so, message similar to screen at right. Always check whether new file to be copied over existing file. You can keep both copies and let Windows create number at end of filename to indicate copy



Moving Files

Physically moves file or folder to destination location. That means all contents in that folder move.

After selecting files or folders to move, use the following steps:

- Click  , click Cut, move to the new location, click  , and click Paste.
- Press **ctrl+x** , move to new location and then press **ctrl+v**
- Right-click selection and click **cut**, go to new location, right-click, and click **paste**
- Drag selected files or folders to new location on same drive. If different drives, Windows automatically copies selection unless you press **shift as** you drag.

Renaming Files or Folders

Renaming a file or folder can be an effective way to make it more descriptive, and you can do it easily. Whenever see black line around name means Edit mode active. So, Press **F2** function key for Edit mode, or click once inside selection. Remember that, there are two limitations

for file or folder naming conventions: the maximum number of characters that can be used in name is 255 , and special symbols like \/:* cannot be used in the file or folder name. Be very careful not to rename program files or folders and ensure you keep same extension for file.

To activate **Rename** using single-click:

- Point at file or folder to select it and then press **F2**
- Right-click on file or folder and then click **Rename**

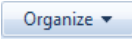
To activate **Rename** using double-click:

- Click file or folder to select it, and then press **F2**
- Click file or folder to select it, and then click once in file or folder name
- Right-click file or folder and then click **Rename**.

Viewing File or Folder Properties

Each file or folder has property sheet to determine size, when created, last modified, or last accessed. Number of tabs that appear when viewing properties for file or folder depend on folder and file type, or network connection and access rights.

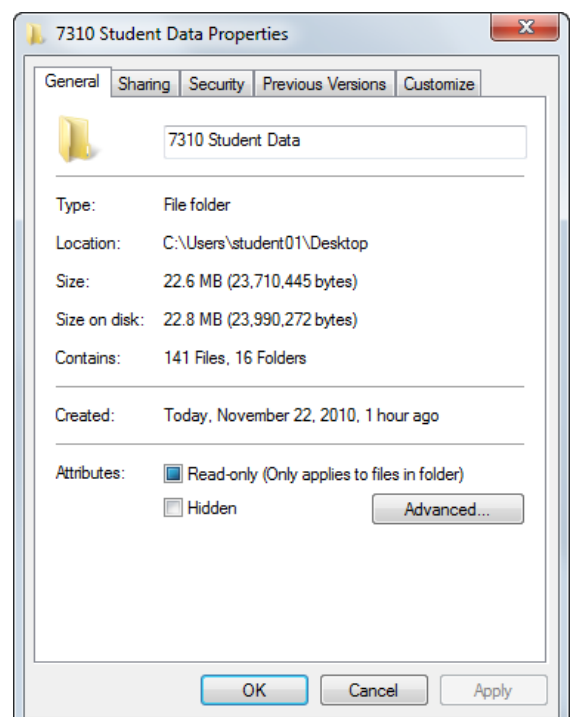
To display properties for folder:

- Select the file or folder, then on Command bar, click  and click **Properties**.

- Right-click file or folder and then click **Properties**.

- **General**

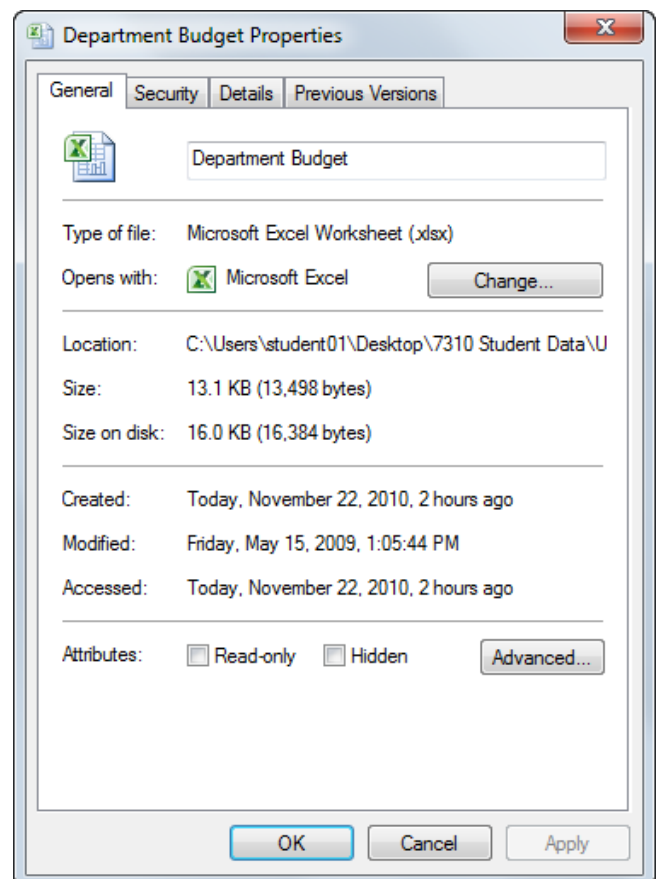
Displays folder type, location, size, contents, dates, and attributes.



- **Sharing**
Share folder with others on network.
- **Security**
Shows who has access rights to folder and type of rights assigned.
- **Previous Versions**
Displays copies of file created by Windows as part of restore point.
- **Customize**
Select or change options for how folder appears

To display properties for file:

- **General**
Displays file type, location, size, date created, date last modified, date last accessed, and attributes.
- **Security**
Displays who has access rights to this file.
- **Details**
Displays list of general information about file.
- **Previous Versions:** Displays copies of file created by Windows backup as part of restore point.

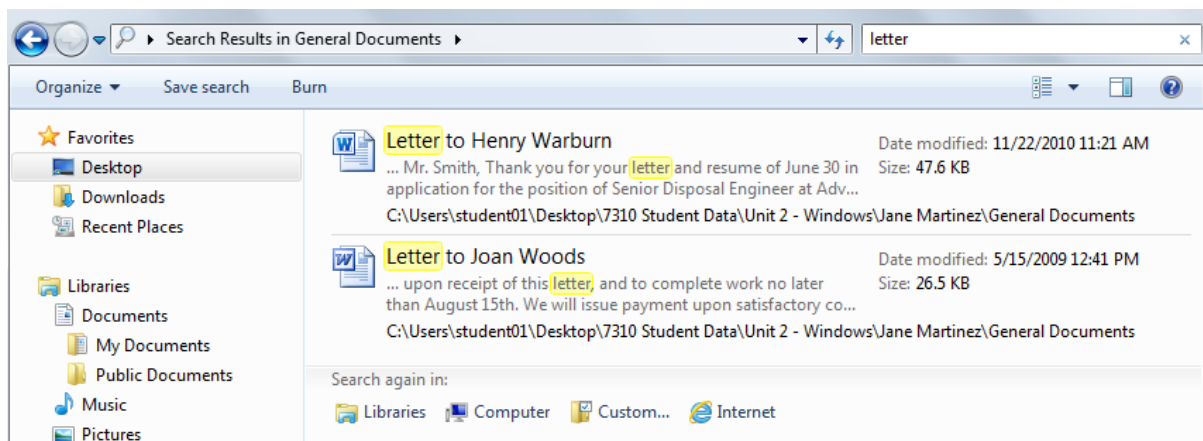


Finding File

You can search for file or folder in various disk drives or folders using specific criteria.

To activate Search feature, enter text in 

- Click  to clear all search criteria



Review Questions

1. A data file can be any type of document containing information you have entered and saved.
 - a) True
 - b) False
2. How can showing the path for a folder or file be helpful?
 - a) It tells you which drive the file or folder is stored in.
 - b) It tells you whether the file or folder is stored on a network.
 - c) It tells you the name of the folder and how many levels you must go through to get to it.
 - d) Any of the above
3. An item on the desktop that has an arrow on the lower left corner is a shortcut to the actual file location.
 - a) True
 - b) False
4. There is no difference between copying and moving files or folders.
 - a) True
 - b) False
5. Why might you want to change the details for a file's properties?
 - a) To add more information to help find the file
 - b) To change or update the name of the file
 - c) To prevent anyone else from looking at the file contents
 - d) Any of the above
 - e) Only a or b

Unit 2: Using Windows 7

Lesson 12: Using the Recycle Bin

Objectives

- Looking at the Recycle Bin
- Deleting files or folders
- Restoring files and folders
- Emptying the Recycle Bin
- identifying common problems with files

Looking at the Recycle Bin

The **Recycle Bin** is a temporary storage area for files and folders you delete from the local hard disk. Files and folders deleted from an external disk (such as a flash drive, memory card, or virtual storage device) or from network drive are permanently deleted and cannot be restored from Recycle Bin.

The Recycle Bin has an icon on the desktop. Also you can find other icons in the Windows Explorer and computer.



This icon indicates there is something in the Recycle Bin that can be stored or removed.





This icon indicates the Recycle Bin is empty.

If the computer shared by multiple users, a separate Recycle Bin exists for each user. To permanently delete a file or a folder and bypass Recycle Bin, press **Shift** key while deleting the file or folder.

Deleting files or folders

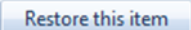
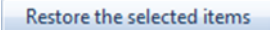
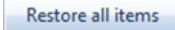
If you no longer need files or folders, or you want to save disk space, delete these items. Before delete any folder, always check the content of the folder and make sure you not need it.

To delete a file or folder, select file or folder and then:

- Click  and then click Delete
- Press 
- Right-click and click Delete
- Drag item to Recycle Bin folder

Restoring files and folders

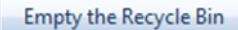
You can restore a deleted file or folder to its original location. To restore a file or folder, open the Recycle Bin then do one of the following:

- Select the file or folder to be restored, and then click , or
- To restore multiple files or folders, select appropriate files or folders, and then click , or
- To restore all items, click , or
- Right-click selected files or folders and then click **Restore**.

Emptying the Recycle Bin

Deleted files remain in the Recycle Bin until you empty it or it is full. If the Recycle Bin is full and you deleting more items, windows will automatically delete older files and folders to free up enough space for new items. When a file or folder deleted from Recycle Bin, they are permanently deleted from your computer.

To empty Recycle Bin, use one of the following:

- On Command bar, click , or
- Right-click Recycle Bin window and click Empty Recycle Bin, or
- Right-click Recycle Bin icon on desktop and click Empty Recycle Bin.

Identifying common problems with files

When working with files, you may face a problem accessing, using or finding a file. Following are some ways to identify problem and resolve it:

- Use a standard naming convention when saving files, ensuring each file name is unique and do not overwrite any files.

- If you display the file extension or file type with the file name, be careful not to change this extension or, if you rename the file, be careful to type the file extension correctly.
- When renaming files, remember characters you cannot use.
- When moving files, be careful to select the appropriate file.
- When using portable storage device, copy from hard drive to storage device to ensure you have a copy in case you lose the portable device or it does not work.
- Always delete files to Recycle Bin if you might need them later.
- Carefully read any error messages Windows displays about files before closing message to understand any problem with accessing the file.
- If you see an error message indicating that you are low on space on the hard drive, first delete data files you do not need or use.
- Be very careful when using passwords with confidential or sensitive files; ensure you choose a password that is logical but not easy to guess.
- If you cannot make changes to a file, it is likely the file has been set to read-only status.
- If the error message indicates file may be corrupted, try opening file on another computer to see if can duplicate the message. Corruption o files can occur due to these reasons:
 - Hardware failure
 - Power surges
 - Software or hardware incompatibilities
 - Software issues
 - viruses
- Be very careful when working with hidden files and change them back to hidden status once you have completed the necessary actions.
- If Windows cannot find a program on your system to automatically accept or open a file, usually indicates you do not have proper software installed on your computer.

- Always you need to check with technical support whenever you are unsure what is happening on the system with files, or cannot get access to the files.

Review questions

1. The Recycle Bin is a temporary storage area for files and folders that have been deleted from the hard drive.
 - a) True
 - b) False
2. When you empty the Recycle Bin, you can still restore these files or folders.
 - a) True
 - b) False
3. Always be careful when renaming a file that displays a file type or file extension to ensure you do not accidentally change the file to become unrecognizable to a program in Windows.
 - a) True
 - b) False
4. How can corruption of a file occur?
 - a) Virus
 - b) Hardware Failure
 - c) Power Surges
 - d) Software Issues
 - e) Any of the above
 - f) b or c
5. An error message indicating the system cannot associate the file with a program means you do not have a software program that can open that file type.
 - a) True
 - b) False

Unit 2: Using Windows 7

Lesson 13: Customizing System Settings

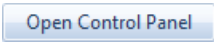
Objectives

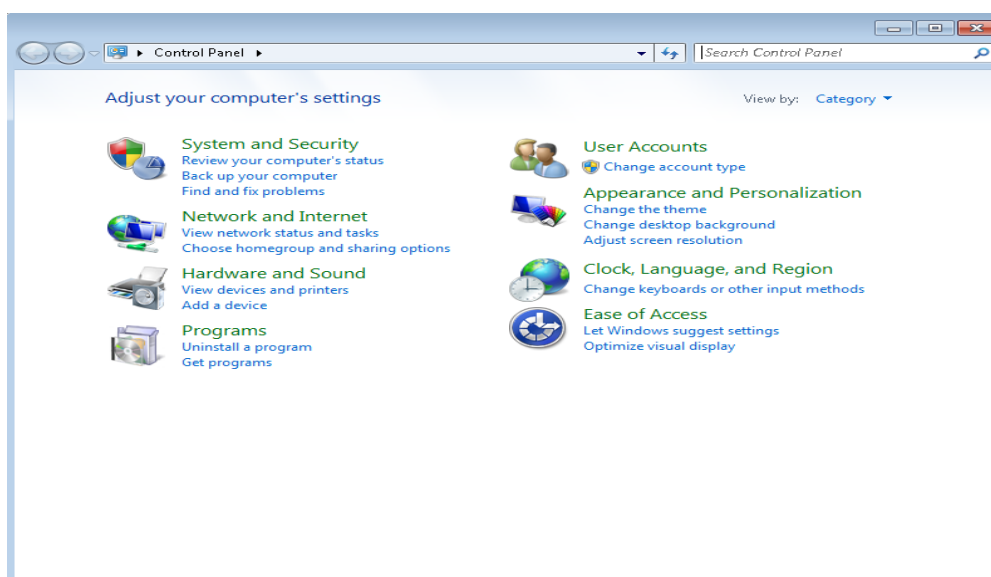
- what the Control Panel is
- changing or customizing the desktop display
- changing the date or time
- changing or customizing mouse settings
- changing or customizing multimedia devices
- working with printers installed on your system

What the Control Panel is:

The control panel is an area to access features to install or customize device settings.








To access Control Panel:

- Click Start, Control Panel
- In Explorer, click Computer in the Navigation pane, click  in Command bar
- In Explorer, click Control Panel in the Navigation pane



Using the control panel:

The control panel has a number of features that allow you to change the settings of your computer. Be sure you fully understand what each option can do and when you might want to use it before attempting any changes.

 <p>System and Security Review your computer's status Back up your computer Find and fix problems</p>	<p>Provides options for maintain system integrity and perform data backups. Also provides options for security purposes such as checking for antivirus updates and scanning downloads.</p>
 <p>Network and Internet View network status and tasks Choose homegroup and sharing options</p>	<p>Check network status and change settings, set preferences for sharing files and computers, configure Internet display and connection.</p>
 <p>Hardware and Sound View devices and printers Add a device</p>	<p>Used to add and remove printers and other hardware, change systems sounds and more.</p>
 <p>Programs Uninstall a program Get programs</p>	<p>Used to uninstall programs or Windows features, uninstall gadgets, get new programs from the network or online.</p>
 <p>User Accounts Change account type</p>	<p>Provides options for setting the computer up to be used by more than one person.</p>
 <p>Appearance and Personalization Change the theme Change desktop background Adjust screen resolution</p>	<p>Allow you to change the appearance of desktop items, apply a theme or screen saver to your computer, or customize the Start menu and taskbar.</p>
 <p>Clock, Language, and Region Change keyboards or other input methods</p>	<p>Provides option to change the date, time, and time zone, the language to use, and the way numbers, currencies, dates, and time are displayed.</p>



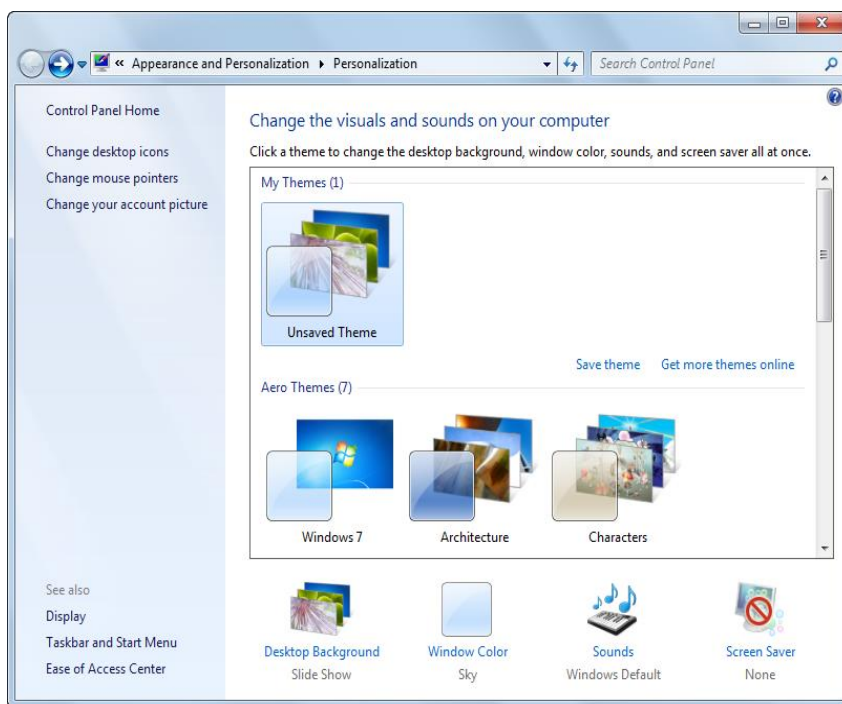
Ease of Access
Let Windows suggest settings
Optimize visual display

Allow you to adjust your computer settings for vision, hearing, and mobility, and use speech recognition to control your computer with voice commands.

Customizing the Desktop Display:

Customizing the desktop display includes changing the background, screen saver, desktop appearance, or screen resolution. To change the display, use one of the following options:

- Click Start, Control Panel, Appearance and Personalization, Personalization
- Right-click, click Personalize, click display option to change
- If in icon view, click Personalization



Changing the Date and Time:



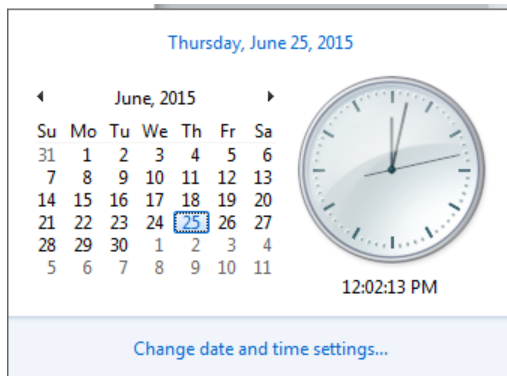
By default, the current time displays in the notification area.

The operating system uses the date and time settings to identify when you create or modify files. These date and time strings are obtained from

a battery –operated clock inside the computer (its internal clock), which should be current.

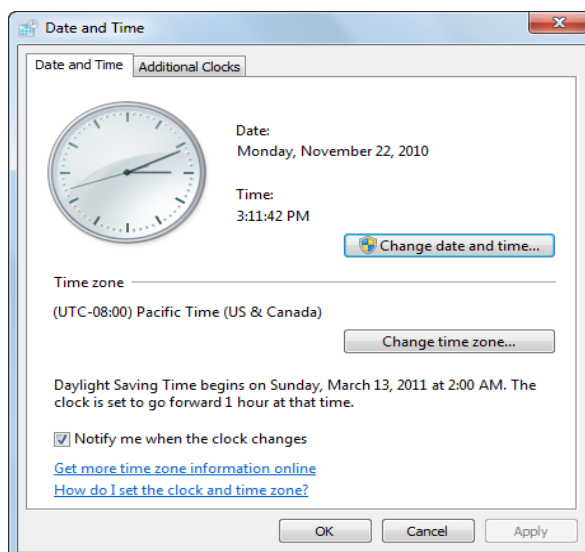
If you are connected to the network, the time may be determined by the sever and only the network administrator can change it permanently. If you are connected to the internet, it will also synchronize its clock with a time server on the internet. You can set this by selecting the Internet Time tab in the Date and Time window.

To view current date/time, click time in notification area:



You can change the date or time using control panel features:

- Click Start, Control Panel, Clock, Language, and Region, click Date and Time or Set the time and date
- If in icon view, click Start, Control Panel, Date and Time
- Click time in notification area, click Change date and time settings

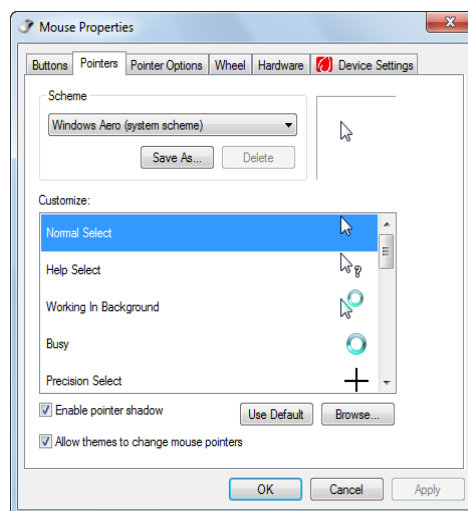


Date and Time	Change existing time and date, or time zone*.
Additional Clocks	Show clocks for additional areas in notification area.
Internet Time	Synchronize time with time showing for Internet.

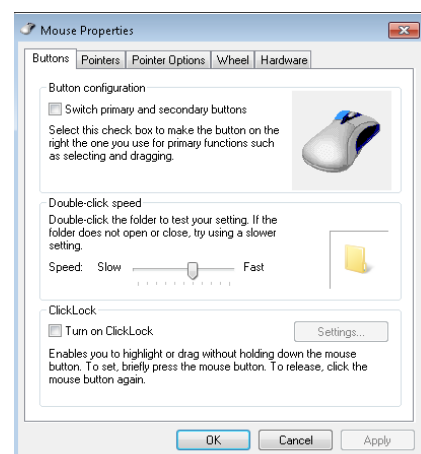
Customizing the Mouse:

To change settings:

- Click Start, Control Panel, Hardware and Sound, Mouse
- Right-click desktop and then click Personalize, Mouse Pointers



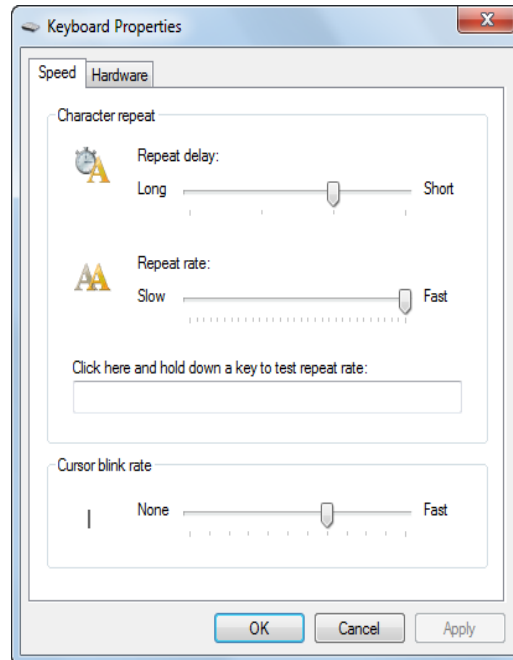
- If using notebook without mouse, may have additional tab to customize touchpad



Customizing the Keyboard:

To customize keyboard:


- Click Start, Control Panel, Hardware and Sound, Keyboard.



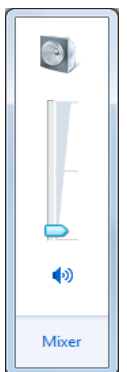
Changing the Volume:

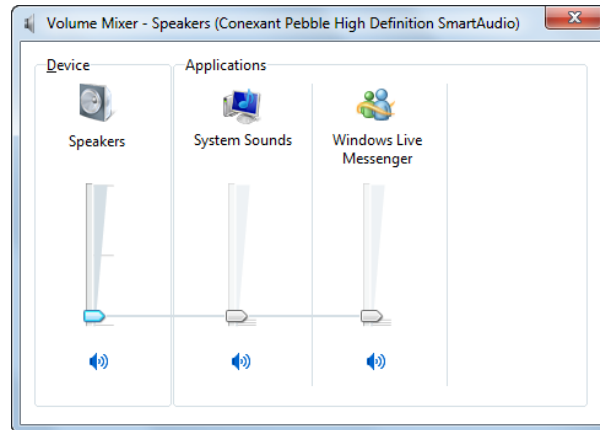
If your system has a sound card and speaker hooked up, a (speaker) icon appears in the notification area. If you point at this icon, it displays a screen indicating where the volume level is currently set.

To display volume window, click icon 

To adjust volume when playing sounds or to mute any sounds, click icon and drag slider up or down 

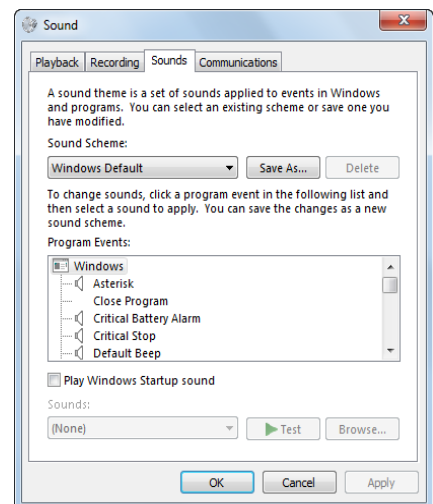
To change or set more options, click icon and click Mixer





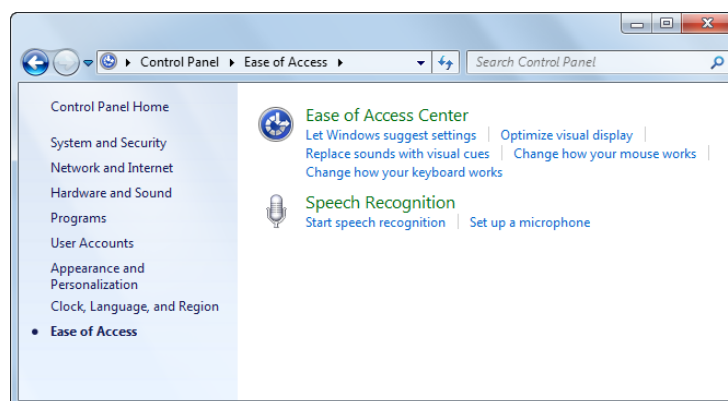
Also you can go to Sound feature in Hardware and Sound area of Control Panel to customize speaker options

- Depending on type of microphone, use **Recording** tab to set up how to record sounds on computer
- In **Sounds** tab, can apply sounds to certain Windows events
- In **Communications**, set volume for other types of communications



Accessibility Settings:

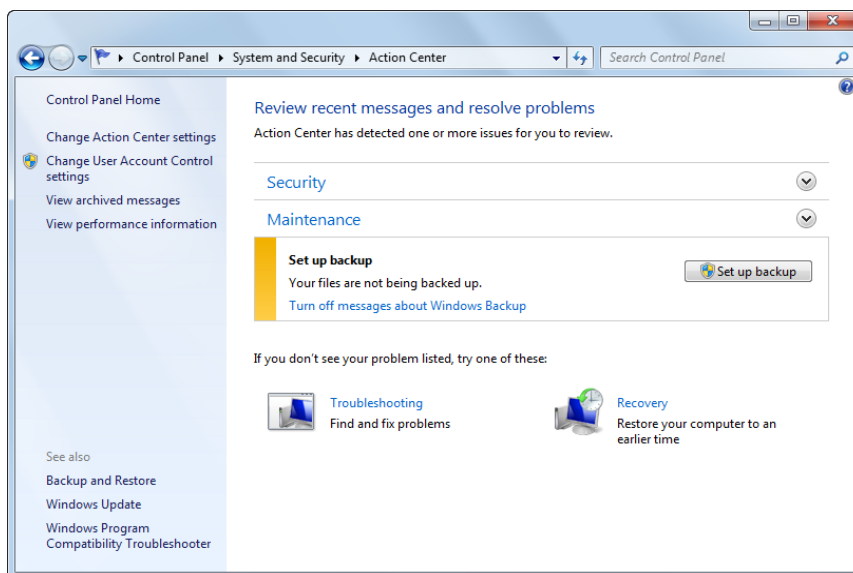
If you have devices installed on the computer to assist a person with physical disabilities, use the **Ease of Access** option to customize these devices.



Security Settings:

This option includes a number of settings for security purposes, such as firewall protection and program updates. You can make changes to each option as appropriate; if you are unsure about any of them, work with technical specialist or record the settings before making any changes so that you can revert to the original settings if your changes don't work.

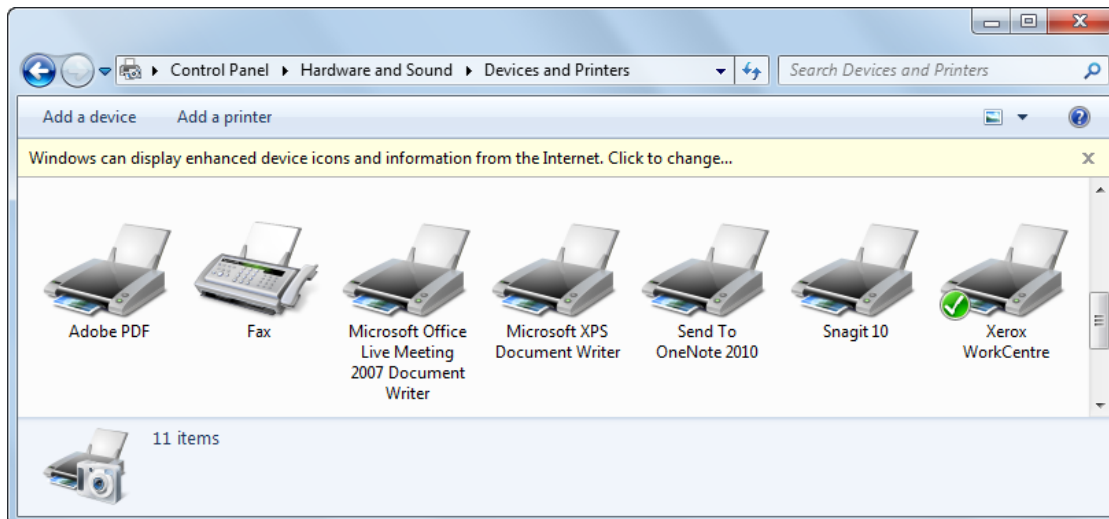
To activate security options, click Start, Control Panel, Security, and Security Center.



Looking at Printers:

When you print a document, Software program or Windows sends document to print in background so you can continue to work on that document. Once document sent to print, use print queue to check printing status of documents or to cancel print request.

To view printers available, click Start, Control Panel, in Hardware and Sound, click Printer



Printer with check mark is default printer; to change:

- Select printer and then on Command bar, click
- Right-click printer and then click **Set as Default Printer**

To see what is in queue to print:

- Select printer and then on Command bar, click
- Click printer to view status

Add printer using

- Displays prompts for each step required to add new printer

Each printer slightly different; to check features of printer:

- Select printer and then on Command bar, click
- Right-click selected printer and click **Printing Preferences**
- Right-click selected printer and click **Properties**

Review Questions

1. How can you access the Control Panel?
 - a) From the Start menu
 - b) From a file management tool
 - c) By pressing +
 - d) Any of the above
 - e) Only a or b

2. If you cannot access certain commands in Control Panel, what is the most likely cause?
 - a) You do not have access rights to these commands.
 - b) You have selected the wrong command.
 - c) Windows has restricted your access based on what you used last.
 - d) Any of the above

3. The date and time on a computer is determined by the internal clock of the computer, which can be controlled by the network.
 - a) True
 - b) False

4. Reasons why you might want to change the options for the mouse include:
 - a) You have a new mouse with customizable buttons.
 - b) You need to change or update the mouse driver.
 - c) You want to decrease the speed of the double-click action.
 - d) Any of the above
 - e) a or b

5. To view which options are available for your printer, which option would you use?
 - a) Printing Preferences
 - b) See what's printing
 - c) Properties
 - d) Default Printer
 - e) Any of the above
 - f) a or c

Unit 2: Using Microsoft Windows 7 Professional

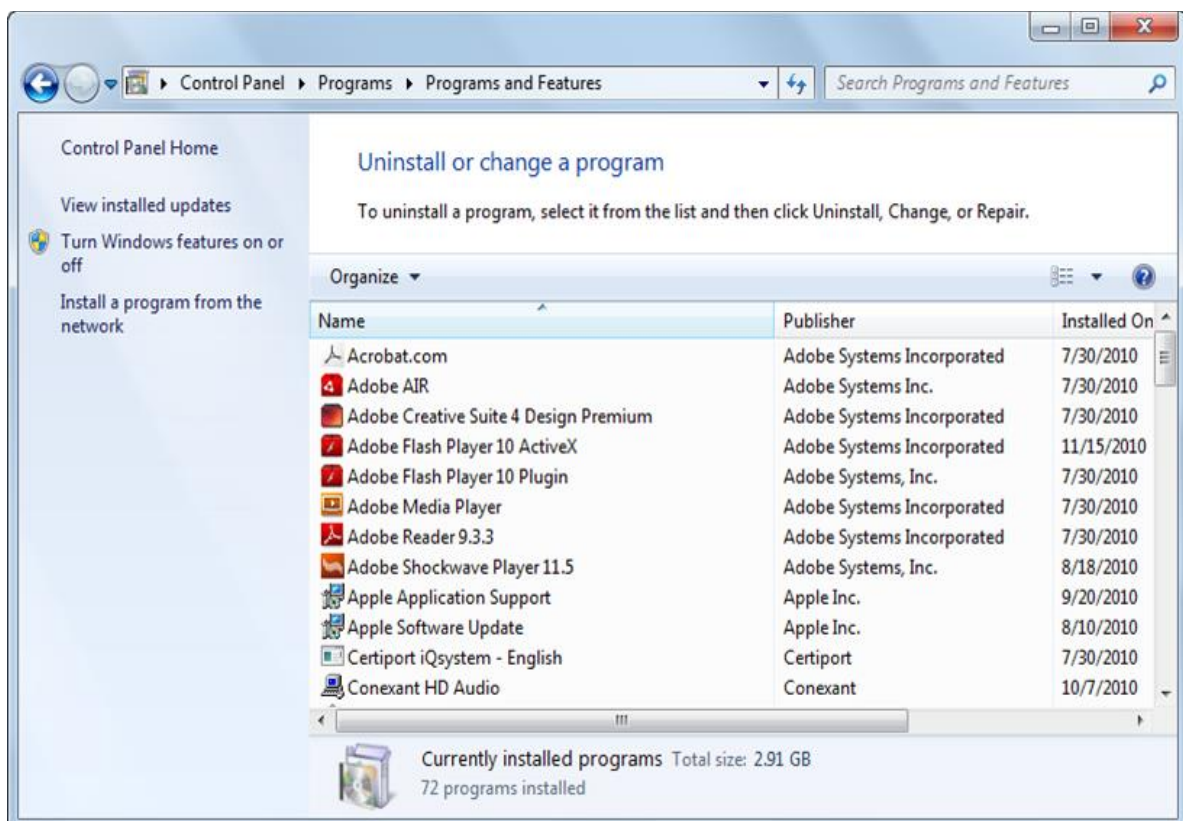
Lesson 14: Installing and Uninstalling Program

Objectives

- Managing Application Programs
- how to install a new program
- Why Isn't the Program Working?
- how to uninstall a program

Managing Application Programs

Windows guides process for installing and removing programs. If installed program does **not** appear in Start menu, could be result of how it was **installed** previously or **deleted** from Start menu. Use **Programs and Features** command in **Programs** category of **Control Panel** to check if program on list.



Installing a New Program

You can install programs from number of different sources such as hard drive, an optical drive, a USB drive, or the Internet.

Most of the program stored in the CD, **Auto run file** option is available on it and the installation process started just when you insert CD or DVD in CD/DVD drive. In this case just follow up the driven menu shown in the screen add the desired option for installing the program on your computer. In case the auto run is not available, and you want to install the program in your computer, you can follow the following steps:

- Browse the content of the CD or the folder where the program you want to install is stored.
- Look for a file name **Setup** or **Install** with the **.exe** extensions.
- Double click on this file name
- And, follow up the instruction which displayed on the setup window and select the suitable option until the in stallion process finish.

Programs from Internet fall into one of two categories:

- Download program file for installation
- Subscribe to SaaS² option with software vendor

Both entitle you to updates, so if you are downloading software from the internet, always save it and scan it for viruses prior to installing it. Also if you download software from site that not the vendor's official web site, there could be spyware or viruses include in the download file.

When software vendor notifies of updates to program, these updates usually are not critical to install immediately. Be sure to read notice to decide whether to install. Might receive notices from vendor in e-mail, media (e.g. CD), or link for update the program.

As the licensed owner of the software, you are allowed to make one copy for backup purpose.

² Software as a service

Why Isn't the Program Working?

Sometimes, a program may not work after installation, or problems may occur during installation. Following are some of the problems you may happen and what to do about them

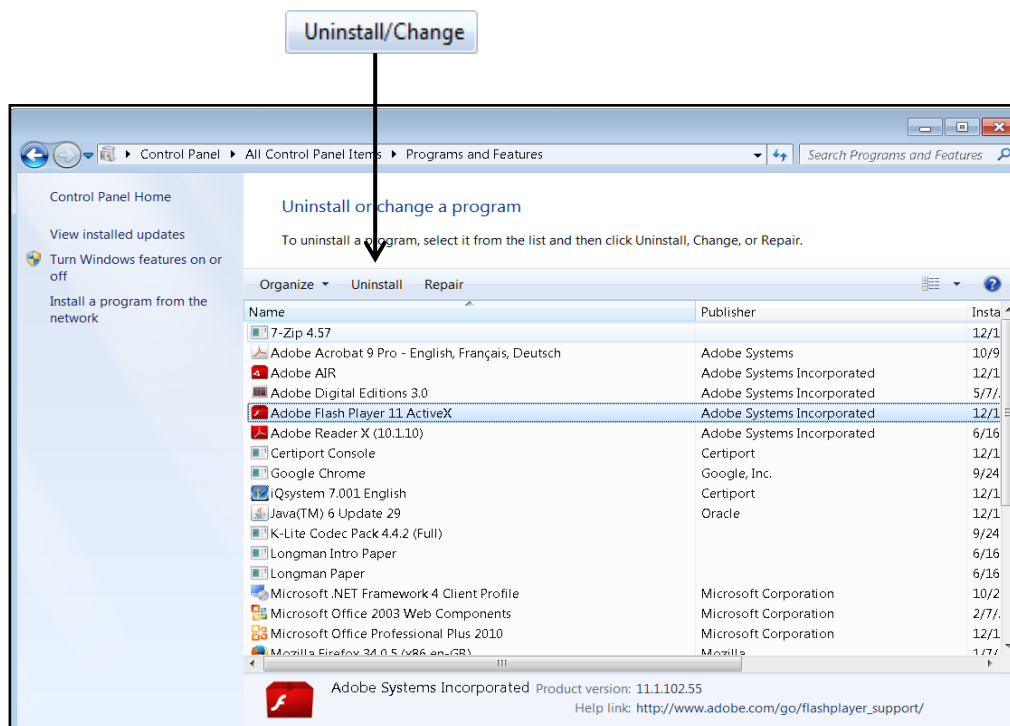
- If unable to install or download program, may not have rights with your user account. If this happens, contact your network administrator to have the rights changed or to request that the administrator install it for you.
- If have rights but installation stops and error message displays, there may be some kind of defect or damage to program copy, it could be a result of lack of space on hard drive, a missing file, or a conflict between software programs. Be sure to read the error message carefully to help with possible resolutions.
- If using backup copy and installation does not start, try installing from original media.
- Installation can also fail with hardware conflicts. If this is the case, it's likely that an error message would display indicating something is missing, such as a driver file, or that your computer cannot find the specified hardware
- Software conflicts also very common reason for installation to fail. Not all software programs are compatible with one another.
- If installation successful but you cannot access existing files in new program, check if new program has tools to convert files from an older format into new program. If this is not a solution, check what format the files are in and if there is another format you can use for these file
- If software installation was successful but having problems viewing different parts of the program, check system requirements to ensure your computer has everything necessary for the new program to run properly.
- If software installation successful but another program no longer works, this may not be compatible with version of other program, so Check system or driver files which may be overwritten when new software program installs.
- If unable to download software, check site not down for maintenance, or software or download key sent has not expired.

To resolve these type of issues, call the vendor’s technical support line or send them an e-mail clearly outlining the problem.

- ❖ To reduce chance problems will occur during installation:
 - Before purchasing and installing program, check system requirements
 - Check software is compatible with operating system(e.g. many older programs designed for previous versions of Windows do not work well Windows7 due to significant changes in the technology)
 - Close all programs before installing new program.
 - If installation program completes but program does not work correctly, uninstall the program using correct uninstall procedure
 - Before changing system settings, check with technical support

Uninstalling a program

Always uninstall program from system when no longer used. Always use **Uninstall a program** in **Control Panel** from **Start** menu as shown on the following windows.



Do not just delete program files using Windows Explorer. When you install a program, configuration information needs to be adjusted in Windows Registry. This can lead to problems with other software programs, if re-install, or if upgrade to new version.

Review Questions

1. Before installing a program onto your computer, check to ensure the program is not already installed.
 - a) True
 - b) False
2. If you are downloading a program from the Internet, what process should you take before installing the program?
 - a. Check that the purchase of the software is complete.
 - b. Save the file and run the installation from the Web site.
 - c. Save the file and run a virus/spyware scan on the file.
 - d. Any of the above
 - e. a or b
3. When you no longer use a program, you should remove it or uninstall it from the computer.
 - a) True
 - b) False
4. Before installing a new program, what steps should you take?
 - a) Check the system requirements to make sure you have more than the minimum suggested.
 - b) Close any programs currently open before starting the installation.
 - c) Check the version of software to make sure it is the latest to match the Windows version installed.
 - d) Any of the above
 - e) a or c
5. If the installation of the software fails, what could be the reason?
 - a) The optical media is defective.
 - b) You need more hard disk space than was suggested in the list of system requirements.
 - c) There is a software conflict, perhaps between Windows and the new program.
 - d) Any of the above
 - e) Only a or c

References:**Website References:**

1. <http://www.en.wikipedia.org>
2. <http://www.news.techgenie.com>
3. <http://www.old.harisheshadri.com>
4. <http://www.mybtechnology.com>
5. <http://www.bankinnovation.net>
6. <http://www.computerhope.com/jargon/f/file.htm>

Textbooks References:

1. Internet and Computing Core Certification, IC3 Textbook.
2. Basic Computing Skills, SQU, Collage of Science.
3. مبادي الحاسوب والإنترنت, Global Skills

Unit 3: Common Elements

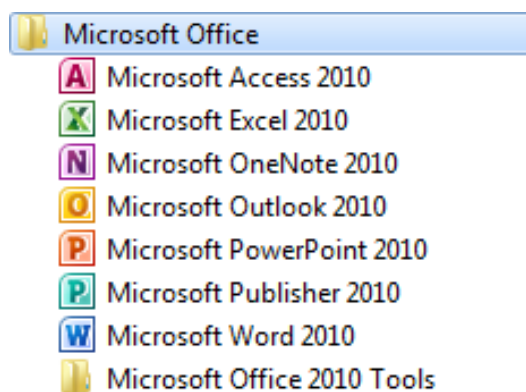
Lesson: Sharing Common Elements

Objectives


- start an application program
- recognize screen elements
- use the Ribbon
- use the Quick Access Toolbar
- obtain online Help
- change the program options
- recognize some common problems with files

Starting Word/Excel/PowerPoint:

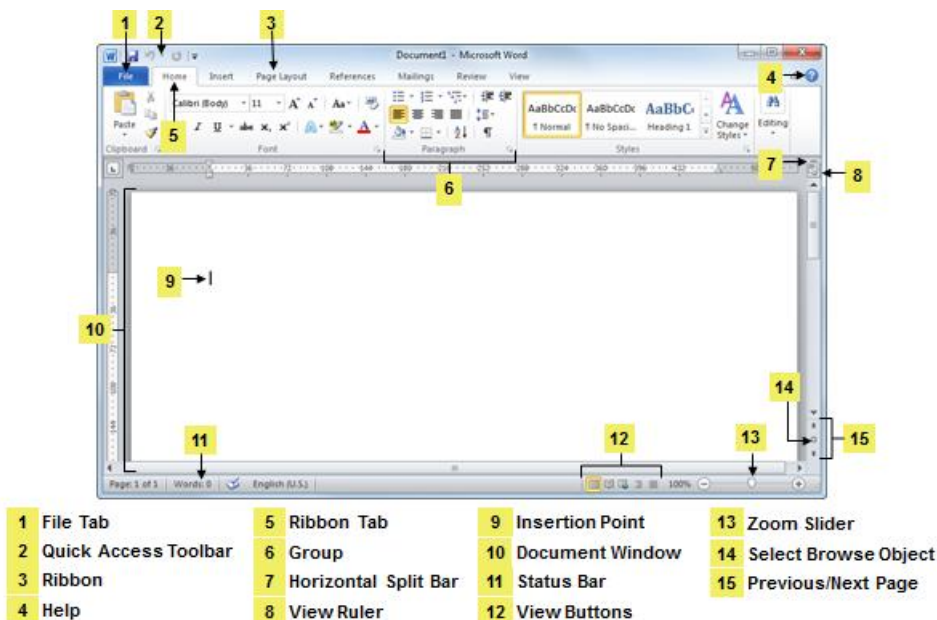
- To start one of these programs:
 - Click Start, All Programs, Microsoft Office, and then Microsoft Word 2010, Microsoft Excel 2010, or Microsoft PowerPoint 2010
 - If set up as icons on taskbar or desktop, click icon for program to use



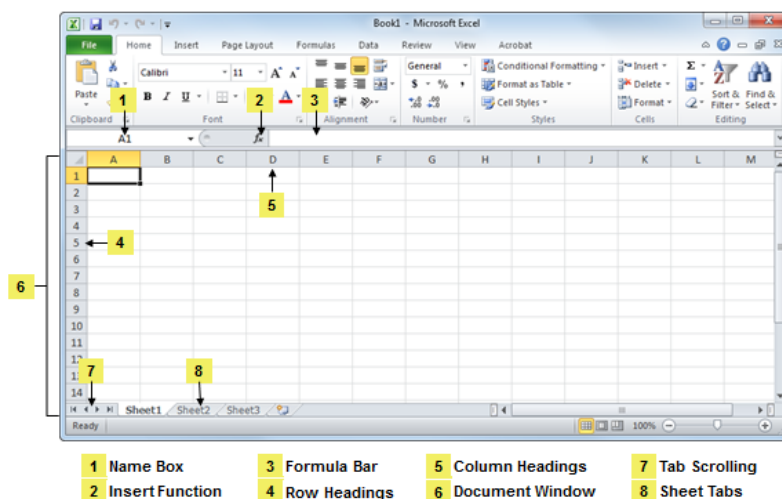
- When finished using program, always exit properly
- Prevents possible corruption of program files and frees up memory for another program

- To exit program:
- Click File and click Exit
- Click  (Close) at far right corner of title bar for application program
- Press **Alt** + **F4**
- If changes made but not saved, program asks for confirmation to save document or abandon changes

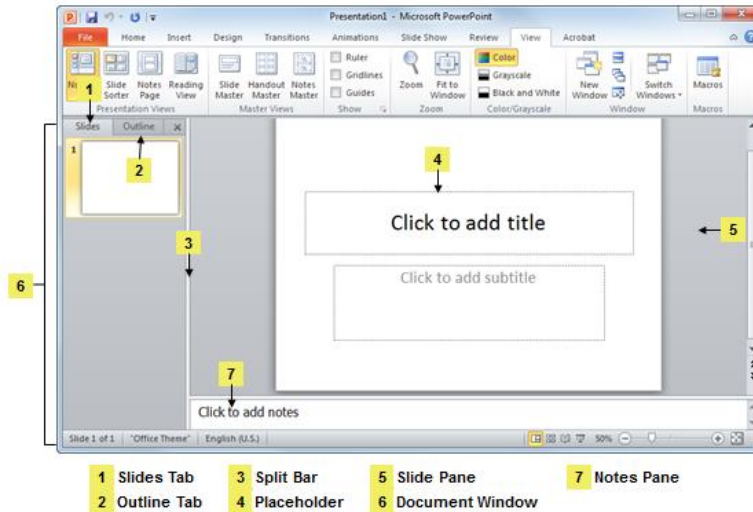
Microsoft Word 2010



Microsoft Excel 2010



Microsoft PowerPoint 2010



Most Common Elements

File Tab	Click to display Backstage and then commands for managing files.
Quick Access Toolbar	Access frequently used commands.
Title Bar	See what files or programs currently active.
Ribbon	Use tabs on Ribbon to access commands.
Microsoft [Program] Help	Get Help.
Status Bar	Displays general information about document.
View Buttons	Change to different views for document on screen.
Zoom Slider	Increase or decrease zoom level of document on screen.

Additional Elements for Word

Horizontal Split Bar	Drag to split screen into two screens to see two different parts of same document.
View Ruler	Use to help set or modify tabs, indents, and margins.
Insertion Point	See where cursor is in document.
Previous Page/ Next Page	Move from top of one page to another.
Select Browse Object	Choose what you want Word to find.

Additional Elements for Excel

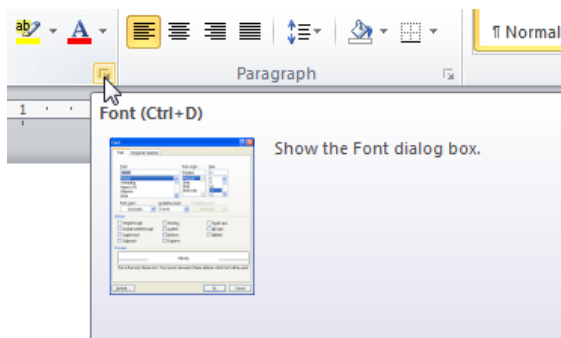
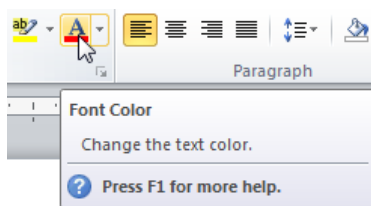
Name Box	Look here for address of active cell.
Insert Function	Open dialog box to help choose and insert built-in functions.
Formula Bar	See contents of active cell.
Column Headings	Sequential letters at top to identify columns.
Row Headings	Sequential numbers on left to identify rows.
Tab Scrolling Buttons	Move between worksheet tabs, or create new worksheet.
Horizontal and Vertical Split Bars	Split worksheet window into two or more panes.

Additional Elements for PowerPoint

Slides Tab	Thumbnail or miniature picture of slides in Slide pane to quickly view contents.
Outline Tab	Display outline of text on slides, or quick method to enter text.
Placeholder	Dash-lined boxes on slides with hints on type of content to insert onto slide.
Split Bar	Drag to increase or decrease size of Outline or Slides tab, or Slide or Notes pane.
Notes Pane	Type notes for presenter's use and are not visible to audience.
Slide Pane	Enter or view contents of slide.

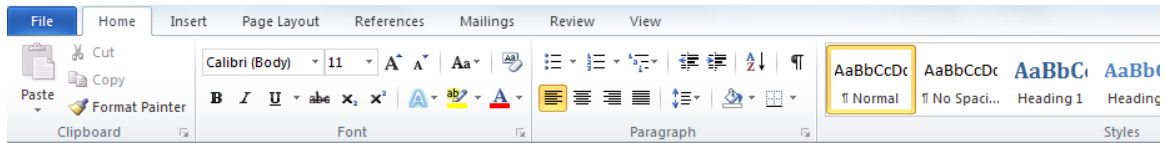
Looking at the Screen

- Can customize appearance of screen
- Use ScreenTips to help identify buttons or elements on Ribbon tabs and screen

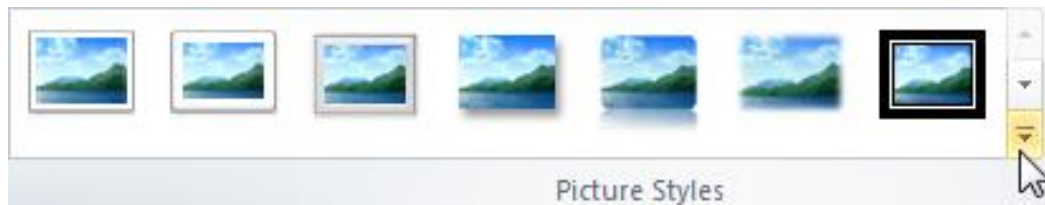


- To view ScreenTip, point at item
- Some elements can be set to show or hide
- Can set items by clicking File and then Options

Using the Ribbon



- **Helps find command buttons to complete task**
- **Command buttons grouped logically by activity type**
- **Buttons in different color or outline are active**
- **Many deactivate when click same button or another choice**
- **When Ribbon displays different options for feature, item with border is active**
- **Can preview effect by pointing at another option in list**
- **If group displays feature with scroll bar, click More to display full gallery of choices for feature**



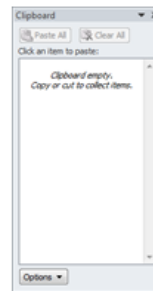
- **Point at option to see live preview of effect**
- **Can turn off preview option in Program Options**
- **Click Dialog box launcher to show corresponding dialog box or window with other options for feature**

Dialog Box

- Usually contains large selection of options

**Window/Task Pane**


- Usually contains options specific to feature

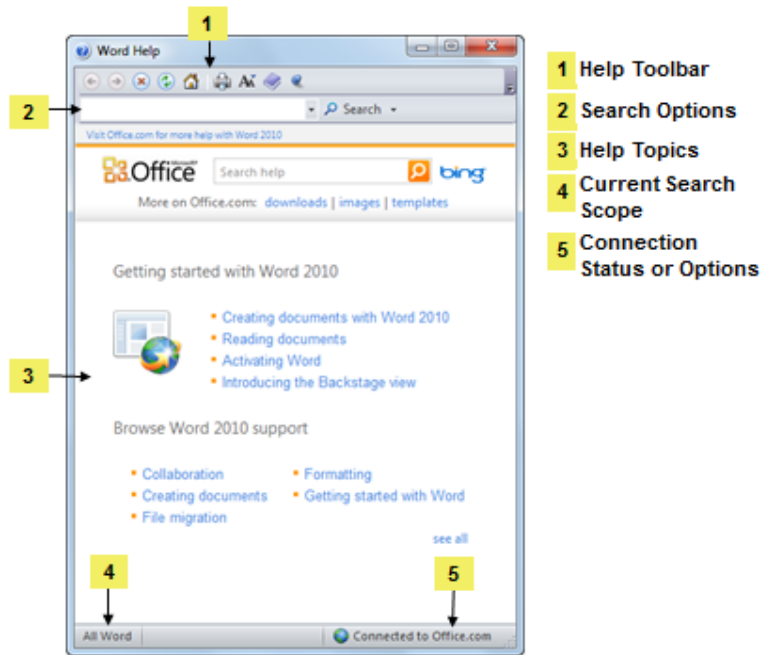
**Getting Help**

- User's Guide manual included with software generally provides same type of information as in Help feature of program
- Help feature very extensive and includes online contact link where you can submit questions or suggestions for new or improved features
 - **Can be set to search Microsoft's Web site, thereby always having access to latest help and support information**
- Online Web sites often offer tips and technical support information you may not find on software vendor's site
- Colleagues or friends proficient with program can provide specific training on how to accomplish task or use feature
- Help Desk department or person designated to provide technical support can answer questions and provide assistance with features specific to organization or server
- Contact online Help Desk or Support for application program vendor
 - **Navigate to vendor's Web site and click link for support option**

- Books developed by third-party publishers available through retail stores
- Courses offered online or classroom settings

Using Help in a Microsoft Office Program

- To access Help in Office:
 - Click  (Microsoft Word Help)
 - press **F1**



Using the Help Toolbar



Back	Move to previous page viewed.
Forward	Move to next page viewed.
Stop	Stop download or search for this Help page.
Refresh	Refresh contents of this Help page.
Home	Move to home page or main page for Word Help.
Print	Print contents of this Help page.
Change Font Size	Increase or decrease font size of displayed text.
Show Table of Contents	Display table of contents in separate pane to help navigate through different topics.
Not On Top/Keep On Top	Choose whether to keep Help window on top of any open window.

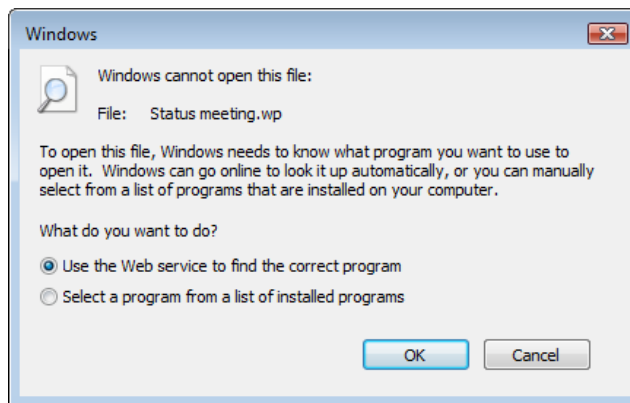
Working with Files

- Set up system to manage files so you and others can share documents easily
 - Can save files in variety of formats through the Save option
 - Can save files in any location on computer or network
 - Can open files from any location on computer or network.
 - Can use list of locations at left of Save or Open dialog boxes to go quickly to folder, or to list showing recently accessed files
 - Can open as many files as you need
 - Can view files at different magnifications or in different views
 - Can use variety of pre-designed files or templates to create new documents
- Editing and formatting tools similar between applications
 - Can use same tools to edit and format text

Identifying Problems with Files

- File can be corrupted due to problems with storage device where file saved, or damage to file during save process
- Compatibility error could be because file saved in newer version of application, or saved for different platform
- If cannot find file using Search function, could be file was deleted or moved to storage device you cannot access, if file renamed, or file not saved at all

- Cannot tell which file you want from file name
- Need password to open or edit file
- Cannot find file in location where last saved or opened
- File set for read-only or someone else is using it can occur if on network and sharing files
- Windows identified no program associated with this file type



- Renaming file without file type or changing file type can cause problems with opening file
- Program stops responding
 - May need to update software
 - AutoRecover may recover file contents on next startup of program

Review Questions

1. You can start Word, Excel, or PowerPoint using which method?
 - a. Start, All Programs
 - b. Desktop shortcut
 - c. Taskbar
 - d. Any of the above
 - e. a or b
2. To customize the Quick Access toolbar, you must use the File tab and then access the options for that program.
 - a. True
 - b. False
3. To minimize the Ribbon, which command would you use?
 - a. Right-click anywhere on the Ribbon tabs line and click Minimize the Ribbon.
 - b. Right-click the Quick Access toolbar and click Hide the Ribbon.
4. Some ways you can obtain help for an application program include:
 - a. Third-party books
 - b. Training courses
 - c. Software vendors
 - d. Software forums that specialize in this software
 - e. Any of the above
 - f. b or c
5. If you cannot open a file, it might be because:
 - a. The file no longer exists in that location.
 - b. The file name has been changed.
 - c. You do not have access rights to the file.
 - d. The file is corrupted and cannot be accessed until repaired.
 - e. Any of the above
 - f. a, b or c

Unit 4: Using Microsoft Word 2010

Lesson: Home Tab

Objectives

- Working with Text
- Using Cut, Copy and Paste
- Formatting Text Characters
- Working with Indents
- Aligning Text
- Working with Indents
- Setting the Paragraph Spacing
- Working with Styles
- Finding Items
- Replacing Items
- Selecting Items

Working with Text

Typing and Inserting Text

To insert the text, type from key board and as a result the text will appear on the screen, at the location of the blinking cursor. Right, left, up or down arrow keys (buttons) can be used to move the cursor or we can also use the left button of the mouse. Following shortcuts are helpful for the movement of cursor.

Move Action	Keystroke
Beginning of the line	Home
End of the line	END
Top of the document	CTRL+HOME
End of the document	CTRL+END

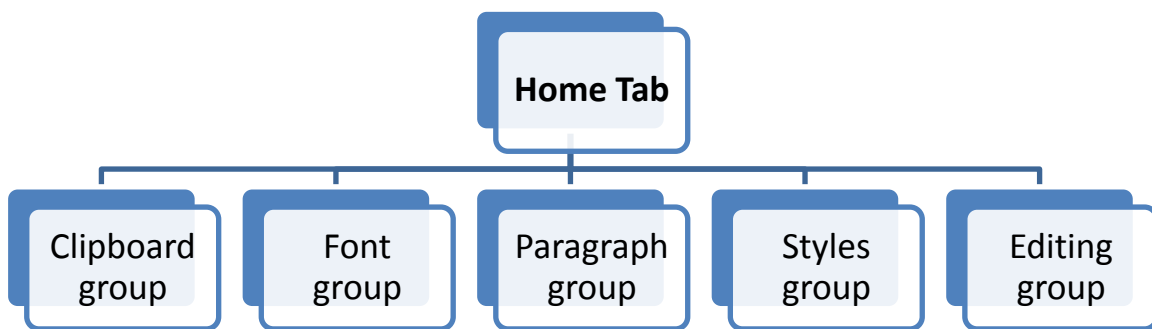
Selecting Text

If you want to change the attributes of the text, it should be highlighted. Drag the mouse over the required text and keep the left mouse button. Or hold down the **SHIFT** key from the key board and use the arrow key (left, right, up, down) to select the desired text. Following shortcuts are helpful for the selection of a portion of text:

Selection	Technique
Whole word	Double-click within word.
Whole paragraph	Triple-click within the paragraph.
Several word or lines	Drag the mouse over the words, or hold down SHIFT while using the arrow keys.
Entire document	Choose Home Tab → Editing group → Select → Select All or press CTRL+A .

Deleting Text

There are two keyboard keys **Delete** and **Backspace** to delete the text. **Backspace** key is used to delete the text to the left of the cursor and **Delete** is used to delete the text to the right of the cursor. If you want to delete a large amount of text, select text and press **Delete**



Clipboard group

- Using Cut, Copy, Paste and Format Painter



Paste the contents of the Clipboard (CTRL + V)

Cuts item from current location and places in Clipboard (CTRL + X)

Copies item from current location and places in Clipboard (CTRL + C)

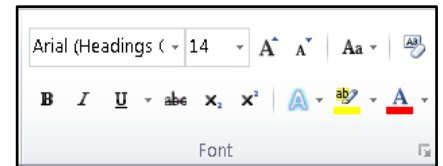
Copy formatting from one place and apply it to another

Double-click this button to apply the same formatting to multiple places in the document (CTRL +Shift+ C)

- To cut item, select item and then:
 - On **Home** tab, in **Clipboard** group, click 
 - Press **Ctrl** + **X**
 - right-click item and click **Cut**
- To copy item, select item and then:
 - On the **Home** tab, in the **Clipboard** group, click 
 - Press **Ctrl** + **C**
 - Right-click item and click **Copy**
 -
- To paste item, place insertion point where to paste item and then:
 - On the **Home** tab, in the **Clipboard** group, click **Paste**
 - Press **Ctrl** + **V**
 - Right-click the item and then click **Paste**

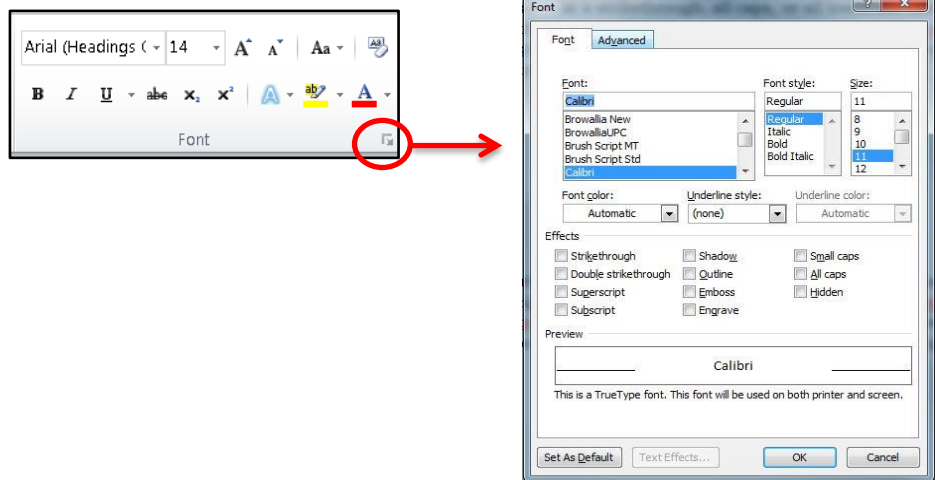
Font group

- **Font:** Describes typeface of characters on screen and in print or press (**CTRL +Shift+ F**).
- **Font Size:** Refers to height of characters or press (**CTRL +Shift+ P**)
- **Grow Font:** Increase the font size or press (**CTRL +Shift+ >**)
- **Shrink Font:** Decrease the font size or press(**CTRL +<**)
- **Change Case:** Change all the selected text to UPPEAR CASE, lowercase, or other common capitalization.
- **Clear formatting:** Clear all the formatting from the selection, leaving only the plain text.
- **Bold:** Make the selected text Bold or press (**CTRL +B**).
- **Italic:** Italicize the selected text or press (**CTRL +I**).
- **Underline:** underline the selected text or press (**CTRL +U**).
- **Strikethrough:** Draw a line through the middle of the selected text.
- **Subscript:** Create small letters below the text baseline (**CTRL +=**).



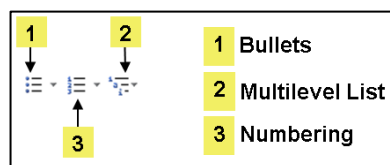
- **Superscript:** Create small letters above the text baseline (CTRL ++).
- **Text Effect:** Apply a visual effect to the selected text, such as a shadow, glow or reflection.
- **Text Highlight Colour:** Make text like look like it was marked with a highlighter pen.
- **Font colour:** change the text colour

To view more additional options to enhance the text, you can access **Font dialog box launcher**.

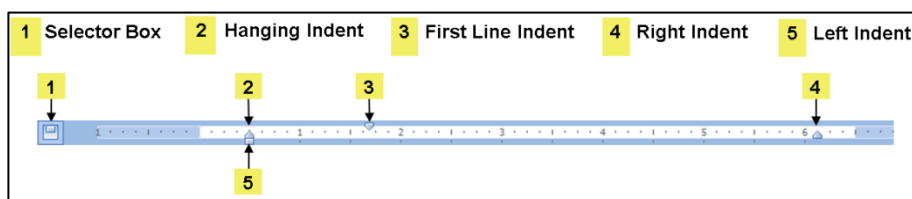


Paragraph group

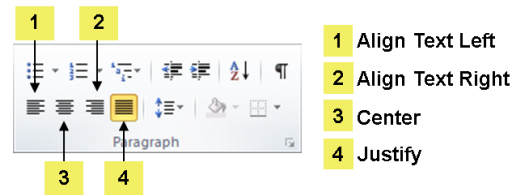
- **Bullets and Numbering:** Use bullets if no priority on list items, numbers to prioritize list, or Outline feature to show progression.



- **Decrease & Increase Indent:** Decrease & Increase Indent level of the paragraph.
 - You can set indents using indent markers on ruler



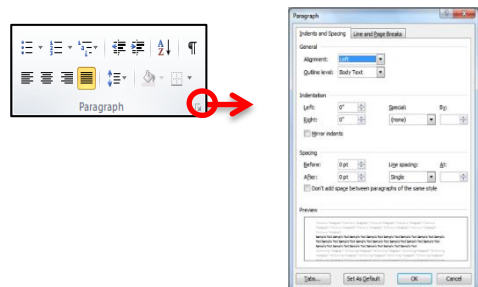
- **Sort:** Alphabetize the selected text or sort numerical data.
- **Show/Hide ¶:** Show paragraph marks and other hidden formatting symbol (**CTRL + ***). ¶
- **Aligning Text:** Align text to left, right, center.



Align Left	Aligns text to left margin with ragged or uneven edge on right side. (CTRL +L).
Center	Aligns text exactly between left and right margins (CTRL +L).
Align Right	Aligns text to right margin with ragged left edges (CTRL +R).
Justify	Aligns text so left and right edges of text flush with margins and each line of text evenly spaced between margins, except for last line.(CTRL +J).

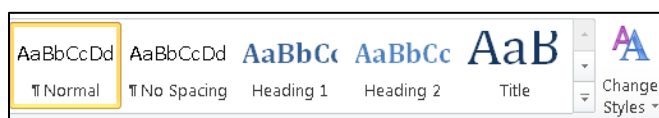
- **Line and paragraph Spacing:** Change the spacing between lines
- **Shading:** Colour the background behind the selected text or paragraph.
- **Border:** Customize the border of the selected cell or text.

To view more additional options to enhance the text, you can access **Paragraph dialog box launcher**.



Styles group

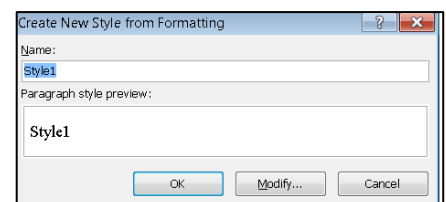
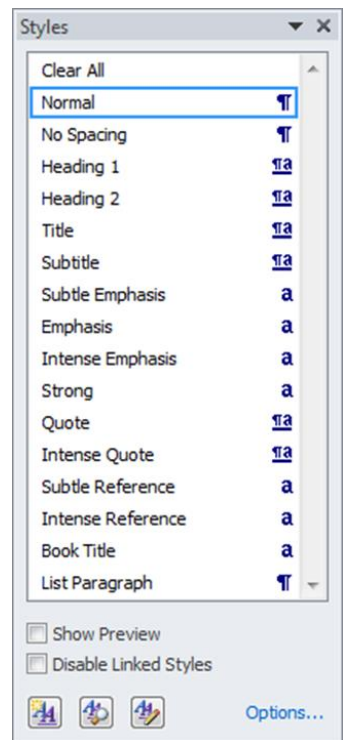
Combination of character and paragraph formatting you create and save with unique name



Two main types of styles:

- **Character Style:** Affects selected text only and can include any character formatting attributes found in Font dialog box.
- **Paragraph Style:** Affects appearance and position of entire paragraph and can include both paragraph and character formatting.

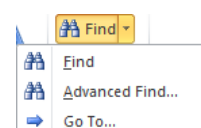
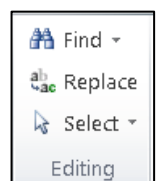
- **Show Preview**
 - Turns preview of style with its attributes on or off
- **Disable Linked Styles**
 - Disables styles set up in **Based on** field
- **New Style**
 - Creates new style using Create New Style from Formatting dialog box
- **Style Inspector**
 - Review attributes for style to customize or manage it
- **Manage Styles**
 - Sets default options for styles, or edit styles in this dialog box
- **Options**
 - Select options for how Styles pane appears when active
- **When naming style:**
 - Can use any combination of characters and spaces for style name
 - Cannot use \ ; { }
 - Style names are case sensitive
 - Each style name within document must be unique



Editing group

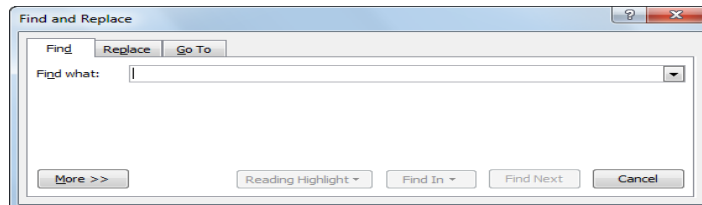
• **Finding Items**

Can locate occurrences of specific words, phrases, symbols,



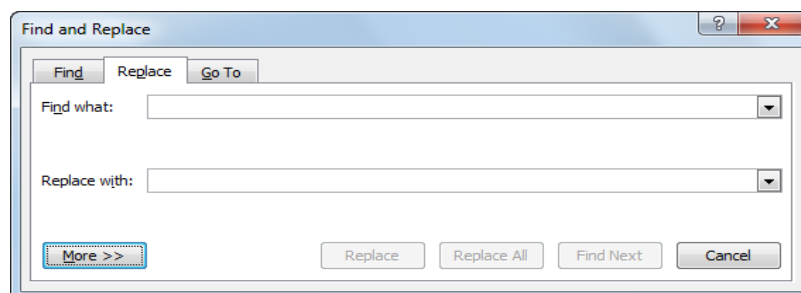
codes, or any combination of items

- To activate the Find feature:
 - On the **Home** tab, in the **Editing** group, click **Find**; or
 - click the page number box on the status bar and click the **Find** tab; or press **(CTRL+F)**



• **Replacing Items**

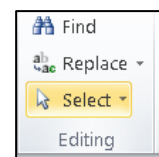
- Find item to replace with something you specify
- Can apply same search criteria as for Find feature
- To activate Replace feature:
 - On **Home** tab, in **Editing** group, click **Replace**
 - Press **(CTRL + H)**
 - If Find and Replace dialog box open, click **Replace** tab



• **Selecting Items**

Select text or objects in the document.

- To activate Select feature:
 - On **Home** tab, in **Editing** group, click **Select**
 - Press **(Ctrl+ A)**
 - Press **(CTRL+A)**.



Reference:

1. **Model A:Computing Fundamentals and Using Microsoft Windows 7, Approved by Certiport.**
2. **<http://afis.ucc.ie/gkiely/IS6132/Lecture10.html>.**
3. **Basic Computing Skills, Approved by SQU, Collage of Science.**
4. **GLOBAL SKILLS ,عربي أنجليزي , IC3مبادي الحاسوب والإنترنت**

Unit 4: Using Microsoft Word

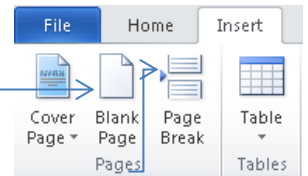
Lesson: Insert Tab

Objectives

- Insert blank page
- Insert Table
- Inserting Pictures
- Inserting Clip Art
- Drawing Objects
- Using Hyperlinks
- Inserting Headers and Footers
- Adding Page Numbering
- Adding Date & Time

Insert blank page:

To insert a new blank page at the cursor position: Click Blank page.



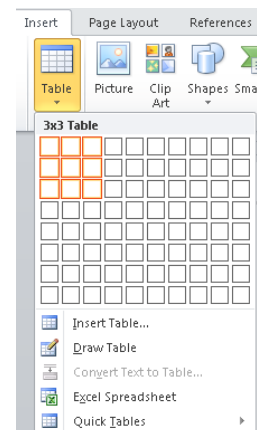
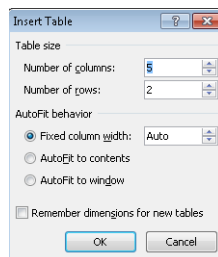
To start the next page at the current position: Click Page Break (Ctrl + Return).

Insert Table: To insert a table, use the following methods:

On the **insert tab**, in the **Tables** group, click **Table**.

In the drop-down menu by dragging you can specify the number of columns and rows you want.

If you need table larger than 8 x 10, use the **Insert Table** feature. You can enter the number of columns and rows by typing the number into the box or using the incremental buttons.



Working with Text:

Insertion point in first cell of table for data entry

To move within table to enter text:

- Press **Enter** to add more lines of text in same cell; increases row height
- Use arrow keys to move through the text in the cell
- Use **Tab** to jump to next cell
- Use **Shift** + **Tab** to jump to previous cell

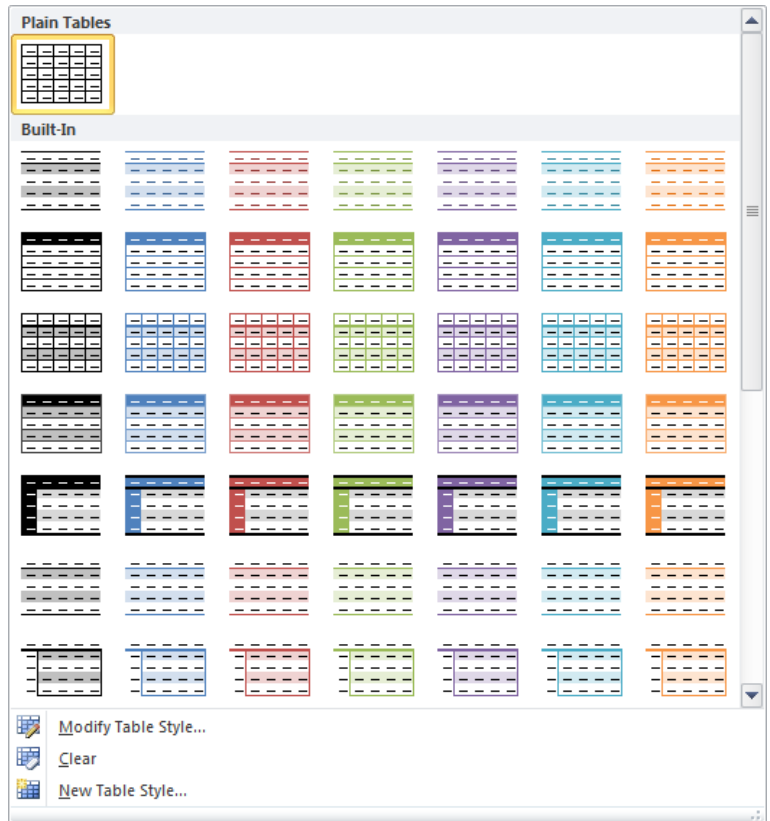
Selecting items in the Table

Entire Column	Move to top of column and click when you see ↓
Entire Row	Move cursor to selection bar and click at left of row
Multiple Columns or Rows	Click and drag across columns or rows
One Cell	Move cursor to lower left corner of cell and click when you see ↘
Multiple Adjacent Cells	Click and drag across those cells

Formatting the Table:

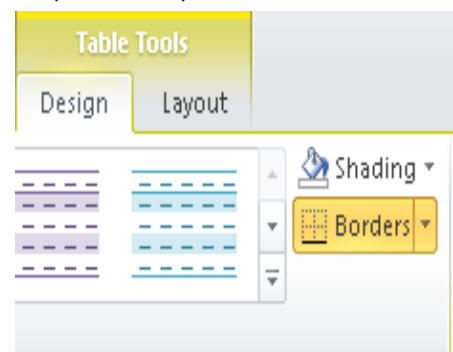
Using Table Styles

- To view Table Styles gallery, under Table Tools, on Design tab, in Table Styles group, click More
- Point at style to preview formatting

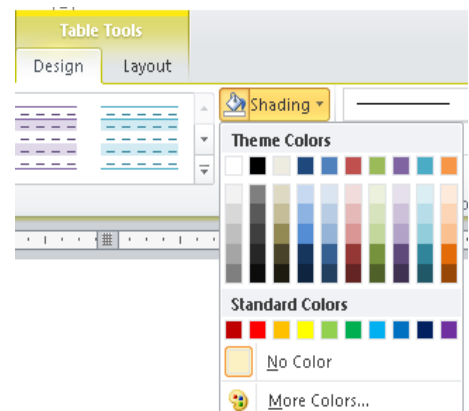


Modifying the Borders and Shading:

- Tables appear with single line borders around cells
 - Can display different colours, styles, widths, or not at all
- Under **Table Tools**, on **Design tab**, in **Table Styles group**, click arrow for **Borders**

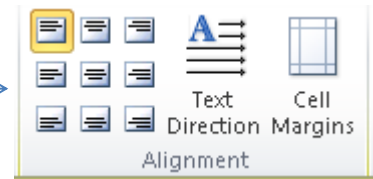


- Under **Table Tools**, on **Design tab**, in **Table Styles group**, click arrow for **Shading**



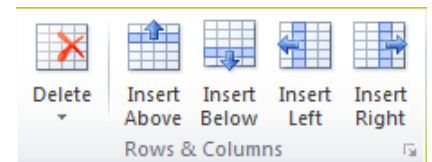
Changing the Alignment:

- To change vertical alignment of text, select cells and:
- Under **Table Tools**, on **Layout** tab, in **Alignment** group, click alignment option
- To change the text direction within the selected cells:
 - Under Table Tools, on Layout tab, click Alignment group, click Text Direction.

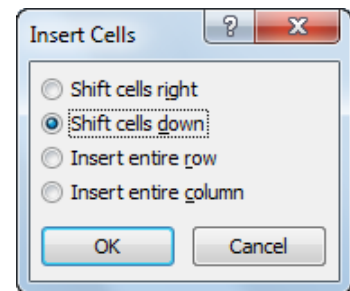


Inserting & Deleting Rows/Columns:

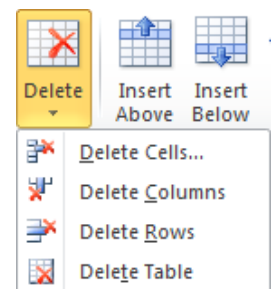
- To insert row or column, click where new row or column to go, then under **Table Tools**, on **Layout** tab, in **Rows & Columns** group, click option



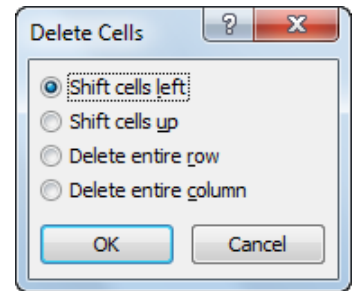
- To insert cells, under **Table Tools**, on **Layout** tab, in **Rows & Columns** group, click **Dialog box launcher**



- To delete cells, rows, columns, or entire table, under **Table Tools**, on **Layout** tab, in **Rows & Columns** group, click **arrow for Delete**, click option

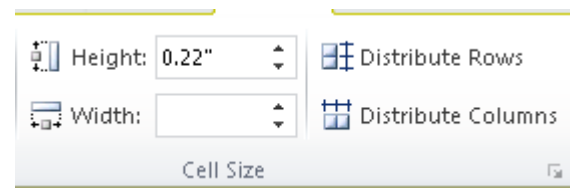


- To delete specific cells, under **Table Tools**, on **Layout** tab, in **Rows & Columns** group, click **arrow for Delete**, click **Delete Cells**, click option

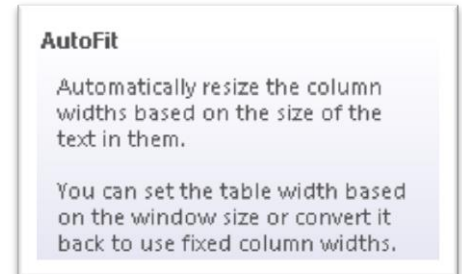
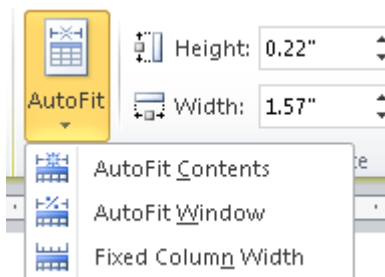
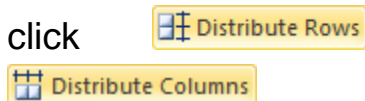


Adjusting the Width or Height:

- To adjust column width or row height:
 - Under **Table Tools**, on **Layout** tab, in **Cell Size** group, click incremental buttons or type measurement to change Height or Width

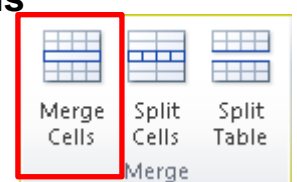


- To distribute width for columns or height of rows evenly:
 - Under **Table Tools**, on **Layout** tab, in **Cell Size** group, click **Distribute Rows** or **Distribute Columns**
 - Under **Table Tools**, on **Layout** tab, in **Cell Size** group, click **AutoFit**



Merging and Splitting Cells:

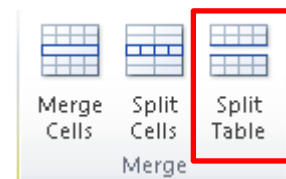
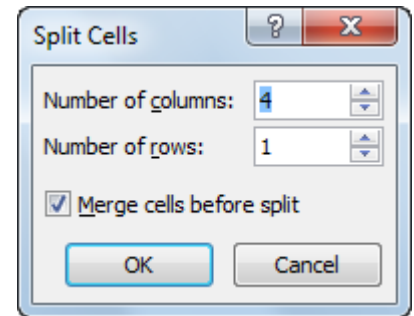
- Can merge cells to create single cell, or be split into multiple columns or rows
- To merge cells, select cells and then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Merge Cells**



- To split cell into multiple cells, select cell and then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Split Cells**

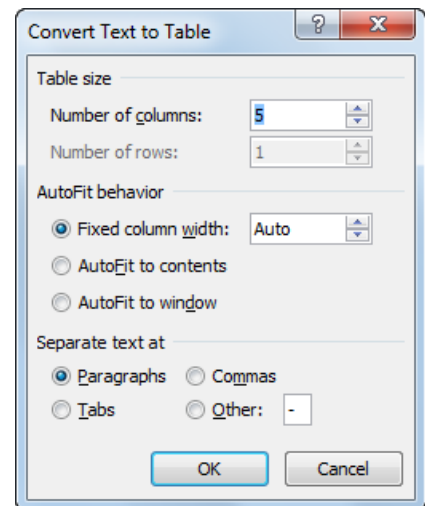
Splitting a Table

- Select cell in table row where you want to split table, then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Split Table**
- Tables can only be split horizontally

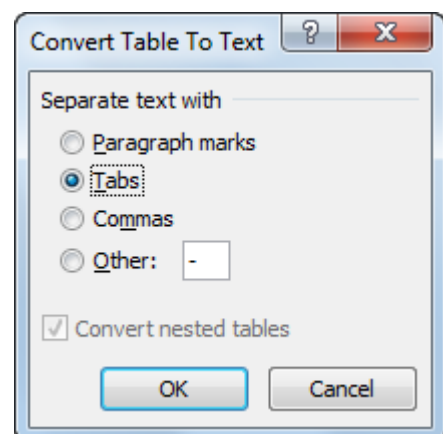


Converting Text or Tables:

- To convert text to table, select text and:
 - On **Insert** tab, in **Tables** group, click **Table**, click **Convert Text to Table**



- To convert table into text format, click in table, then under **Table Tools**, on **Layout** tab, in **Data** group, click **Convert to Text**



Sorting Information in a Table:

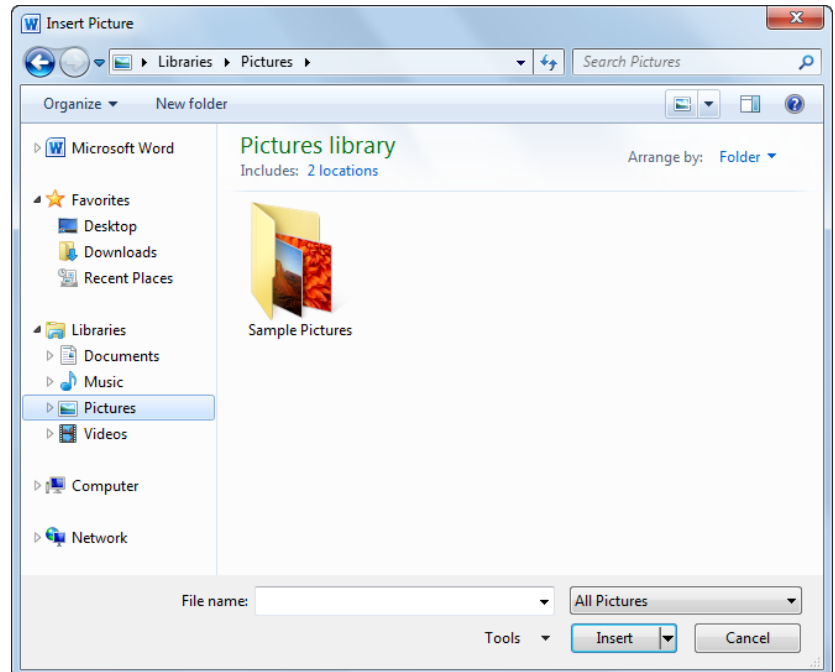
- Can sort in ascending or descending order
- Type of data determines sort type in table and how many columns of information

- To activate Sort, select cells and:
 - Under **Table Tools**, on **Layout** tab, in **Data** group, click **Sort**
 - On **Home** tab, in **Paragraph** group, click **(Sort)**



Inserting Pictures:

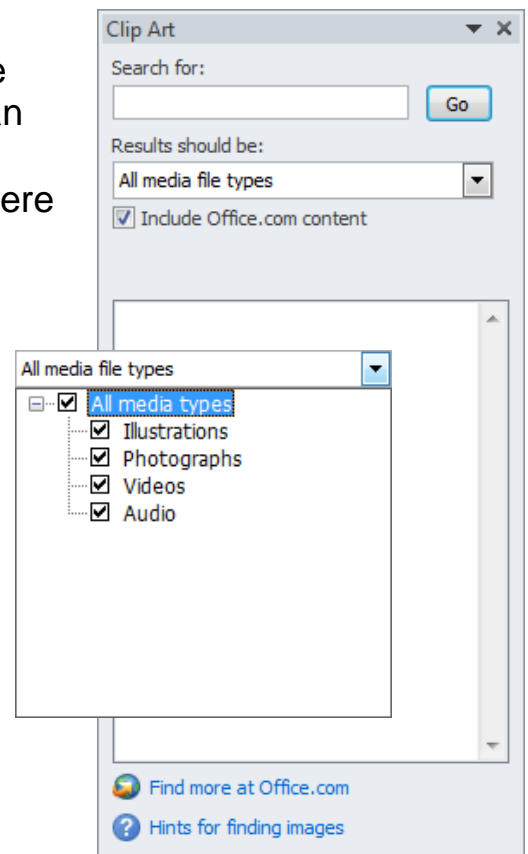
- Can add pictures to document from sources
- To insert picture, position pointer where you want picture to be, and on **Insert** tab, in **Illustrations** group, click **Picture**



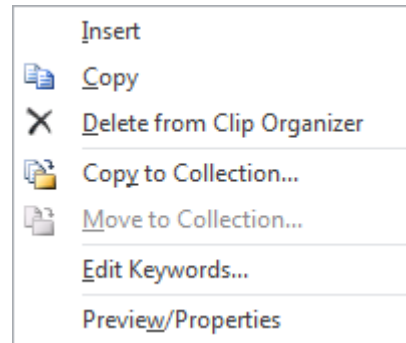
Inserting Clip Art:

- Available online from Microsoft Office Online Web site with graphics you can download
- To insert Clip Art, position pointer where you want graphic to be, and on **Insert** tab, in **Illustrations** group, click **Clip Art**

- Search for**
 - Enter text for Word to search for specific clip art images.



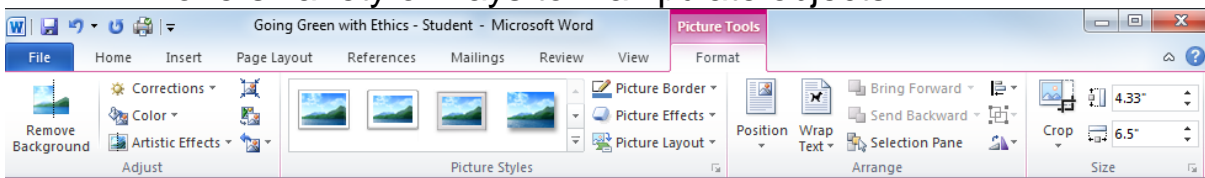
- Results should be
 - Specifies media type to display.



- To insert picture from results of search, position pointer over image and:
 - Click image in list
 - point at graphic and click arrow beside it

Manipulating Pictures:

- Once you insert picture, **Picture Tools** ribbon appears and offers variety of ways to manipulate objects



To add picture style:

- Select **Picture Tools** , **Picture style** and select any option



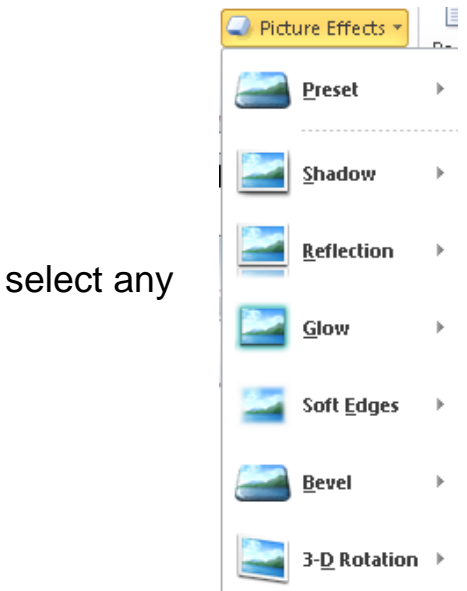
To add border to the picture:

- Select **Picture Tools**, **Picture Border** select any option



To apply effects to the picture:

- Select **Picture Tools**, **Picture Effects** and select any option



Sizing a Picture:

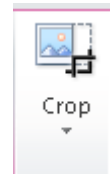
- To size picture: Select **Picture Tools, Size Group**



Cropping a Picture:

Refers to ability to “cut” certain portions of picture.

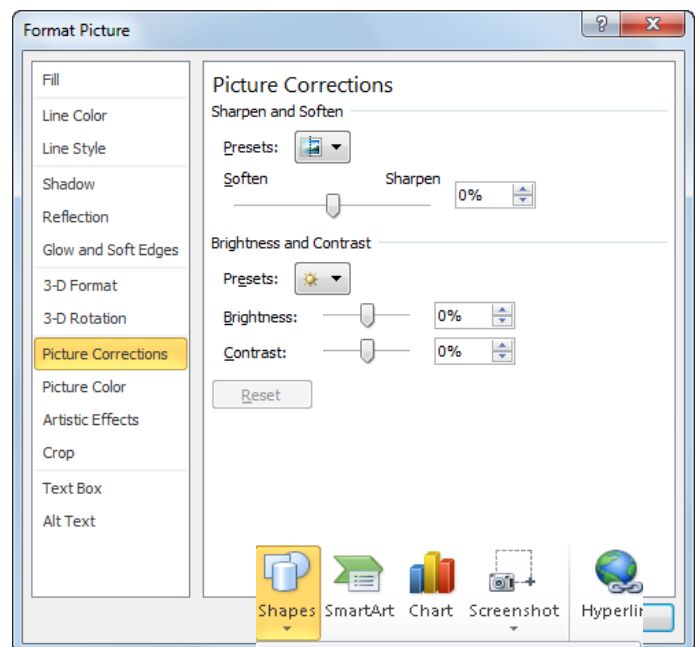
- To crop picture: Select **Picture Tools, Size Group**, select **crop**





Changing the Properties for a Picture:

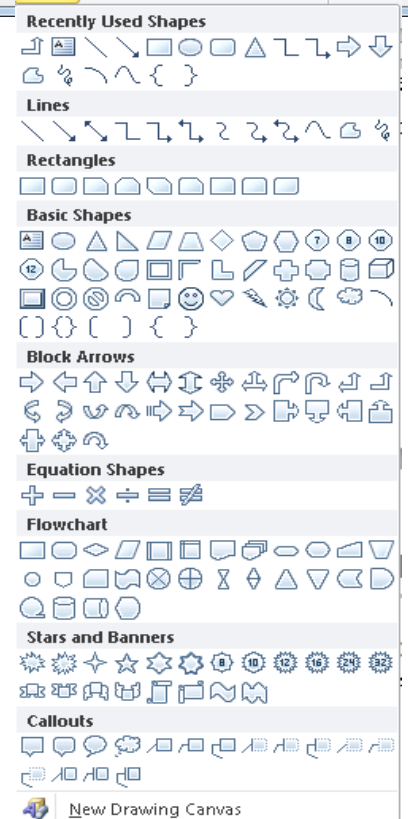
- Way picture inserts depends on properties set for picture
- To change properties for selected picture:

- Click appropriate feature from **Picture Tools Format** ribbon
- Under **Picture Tools**, on **Format** tab, click **Dialog box launcher** for group properties to adjust
- Right-click picture and click **Format Picture**



Moving a Picture:

- Drag-and-drop method easiest way to move picture
- If inline object, mouse pointer displays  as you drag
- If floating object, mouse pointer displays  as you drag



Drawing Objects:

To insert shape: In **Insert Tab, Illustration Group**, select **shape**

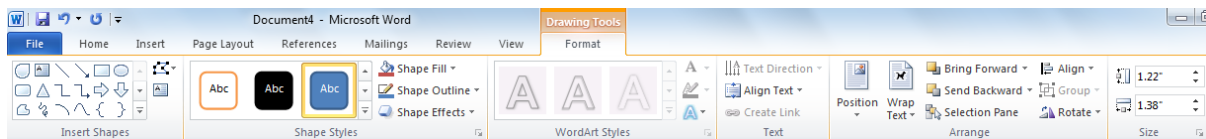
To insert text into object or edit text already there:

- Select object to display **Drawing Tools** ribbon, and then on **Format** tab, in **Insert Shapes** group, click **(Draw Text Box)**
- On **Insert** tab, in **Text** group, select **Text Box**



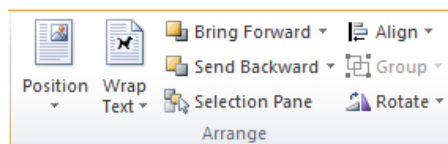
Editing Shapes:

- Refers to sizing, moving, or enhancing object and its properties
- Select object before making changes



Arranging Objects:

Under **Drawing Tools**, on **Format** tab, in **Arrange** group:



Group

Groups selected objects into single object, reverts to separate objects, or regroups objects ungrouped originally.

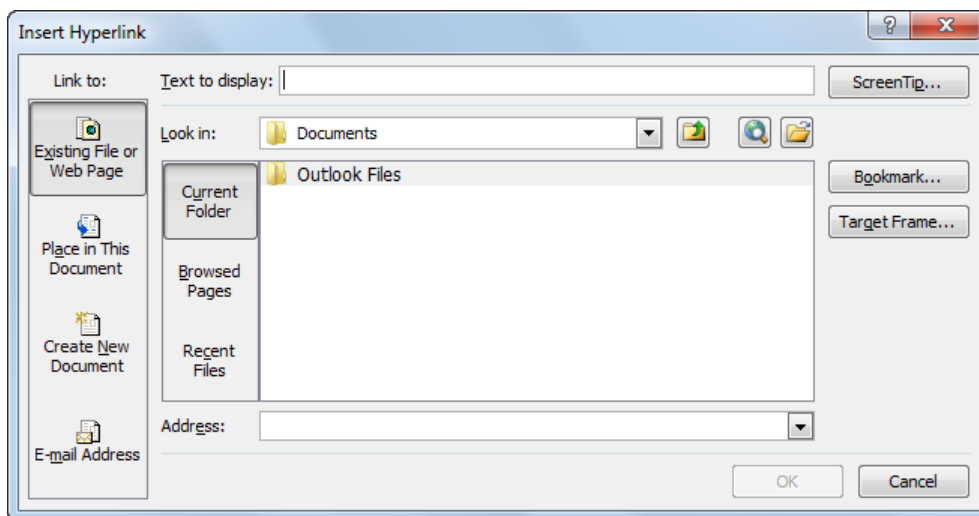
Bring Forward

Brings selected shape forward one layer, or to top layer.

Send Backward	Sends selected shape back one layer, or to last layer.
Align	Aligns edges of multiple objects along single line, or distributes objects evenly across page horizontally or vertically. Can view gridlines or set features of grid.
Rotate	Rotates or flips object in different directions.

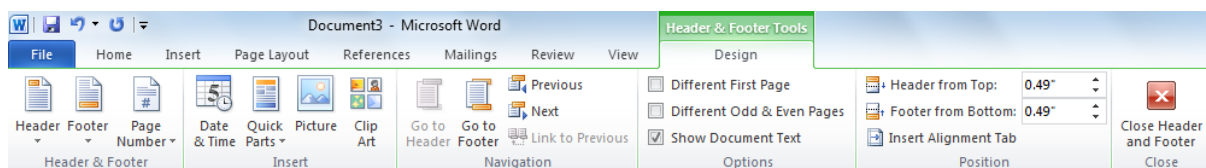
Using Hyperlinks:

- Help navigate to different locations in document, to another document, to Web site, or to e-mail program
- Can set up hyperlinks anywhere in document
- To create hyperlink:
 - On **Insert** tab, in **Links** group, click **Hyperlink**
 - Press **Ctrl** + **K**



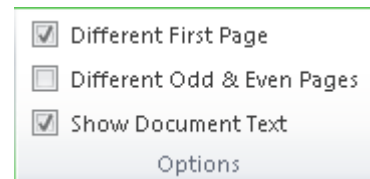
Inserting Headers and Footers:

- Text or graphics that appear at top or bottom of every page
- Can create headers and footers using the **Insert** tab and **Header & Footer** group
 - **Header & Footer Design** tab appears for modifications



-To edit existing header or footer, double-click header or footer

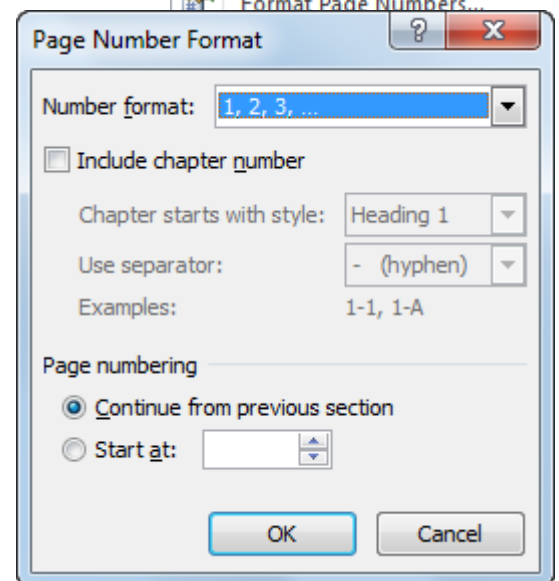
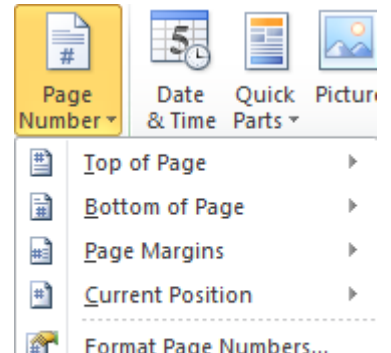
-To use different header or footer for first page, under **Header & Footer Tools**, in **Design** tab, in **Options** group, click **Different First Page**



Adding Page Numbering:

To insert page numbers, on **Insert** tab, in **Header & Footer** group, click **Page Number**:

- **Top of Page:** Displays gallery of top-of-page numbering options.
- **Bottom of Page:** Displays gallery of bottom-of-page numbering options.
- **Page Margins:** Displays gallery of margin numbering options.
- **Current Position:** Displays numbering options to apply to current page number location.
- **Format Page Numbers:** Displays various numbering styles and option to start numbering other than at 1



Adding Date & Time:

Refer to insert current date or time into the current document.

To insert Date & Time, on **Insert** tab, in **Text** group, click **Date & Time**.

Unit 8: Using Microsoft Word

Lesson: Page layout Tab

Objectives

- Changing Margins
- Changing the Orientation
- Changing the Paper Size
- Splitting text to columns
- Inserting page and section breaks.
- Inserting water mark.
- Inserting page colour.
- Inserting page border.

Page layout Tab: Page setup Group

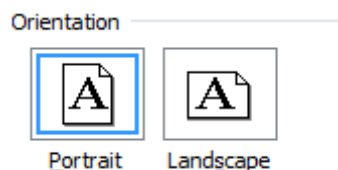
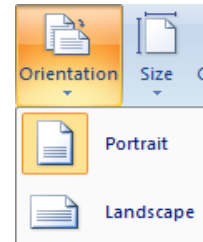
Is related to page setup, page background and paragraph tools.

Orientation:

Switch the pages between portrait (vertical orientation) and landscape layouts (horizontal orientation).

To change orientation for document:

- On **Page Layout** tab, in **Page Setup** group, click **Orientation**.
- Double-click darker area of ruler, click **Margins** tab, and then select orientation to use.

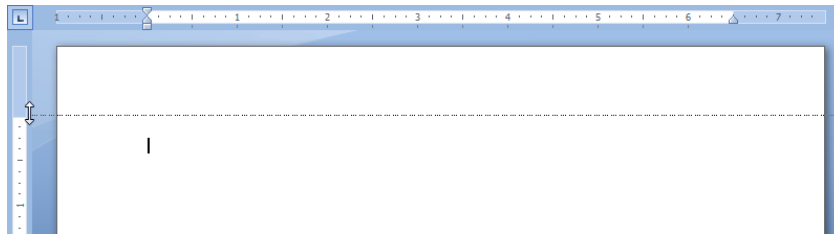


Margin:

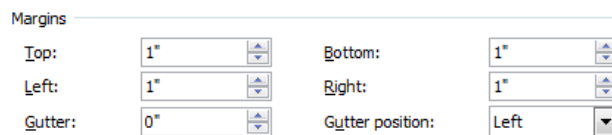
Determines amount of space between paper edge and area where text prints. It must be in Print Layout view for arrows to adjust margins to appear on horizontal or vertical rulers. Boundaries are divider lines between light and dark shades on ruler.

To change margins:

- On **Page Layout** tab, in **Page Setup** group, click **Margins**
- To adjust margins using the ruler, point at margin and drag to measurement for margin



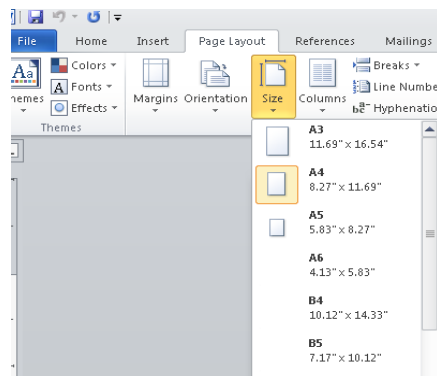
- Double-click one dark area of horizontal or vertical ruler



Changing the Paper Size:

To change paper size of document:

- On **Page Layout** tab, in **Page Setup** group, click **Size**
- Double-click in darker area of ruler, and click **Paper** tab



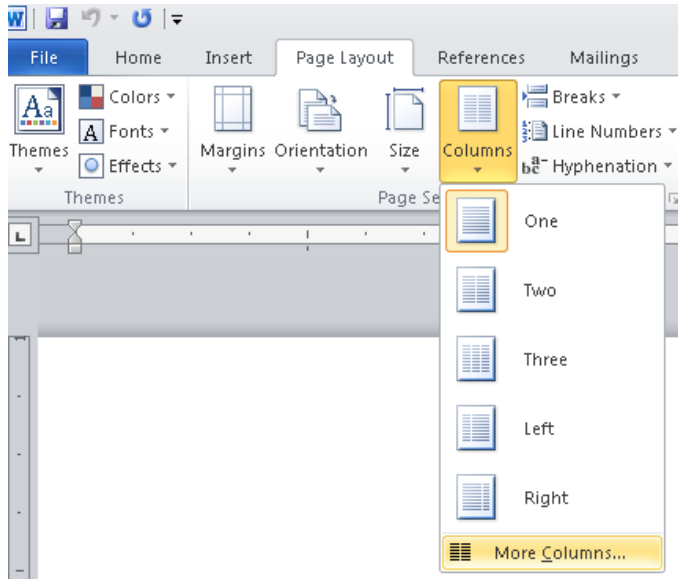
Columns

It is used to split text into two or more columns.

-To create columns:

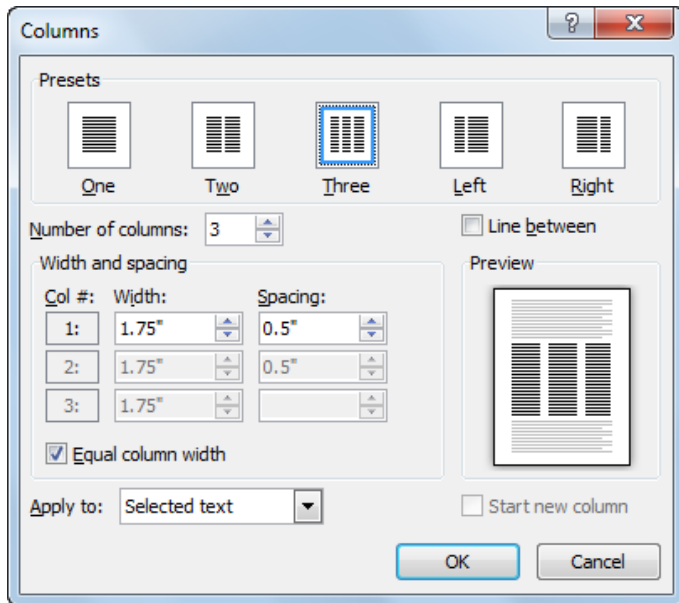
On **Page Layout** tab, in **Page Setup** group, click **Columns**.

-To set additional options for columns, click **More Columns**



Applying Columns

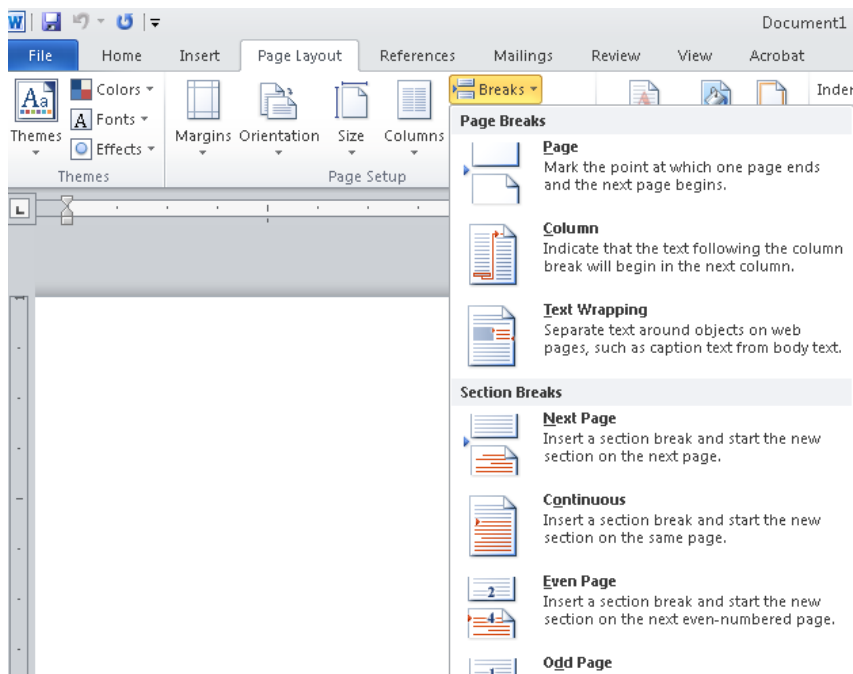
Presets	Offers options for number of different column layouts.
Number of columns	Use incremental buttons to set number of columns you want.
Width and spacing	Alters width and spacing between one column and next.
Apply to	Identifies which text you want to apply column structure.
Line between	Inserts vertical line between each column.
Start new column	Works similar to inserting section break in text not in column format.



Insert page and section breaks

To break page at specific location:

-On **Page Layout** tab, in **Page Setup** group, click **Breaks**, click Page



Using Section Breaks:

Insert break when something about page layout has to change

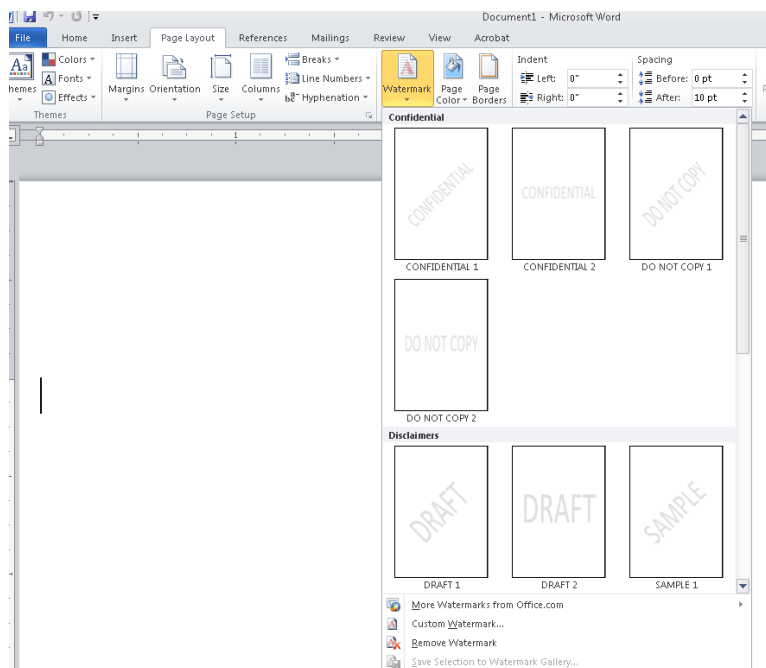
- **Next Page**
 - Starts new section on next page
- **Continuous**
 - Starts new section on same page
- **Even Page**
 - Starts new section on next even page
- **Odd Page**
 - Starts new section on next odd page

Page layout Tab: Page background Group

Watermark:

To insert ghosted text behind the content on the page:

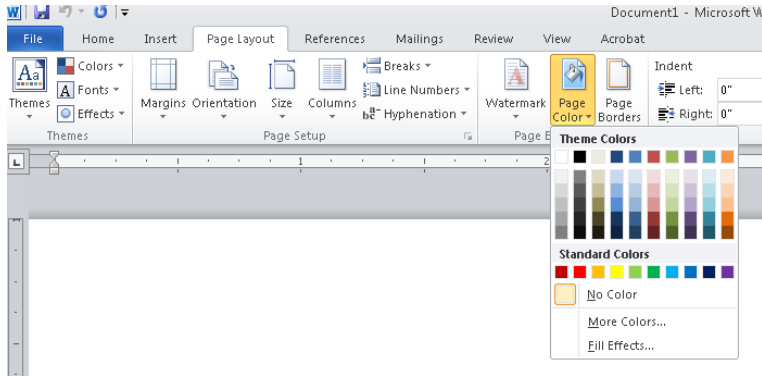
-On **Page Layout** tab, in **Page background** group, click **water mark**



Page colour

To choose a colour for your background:

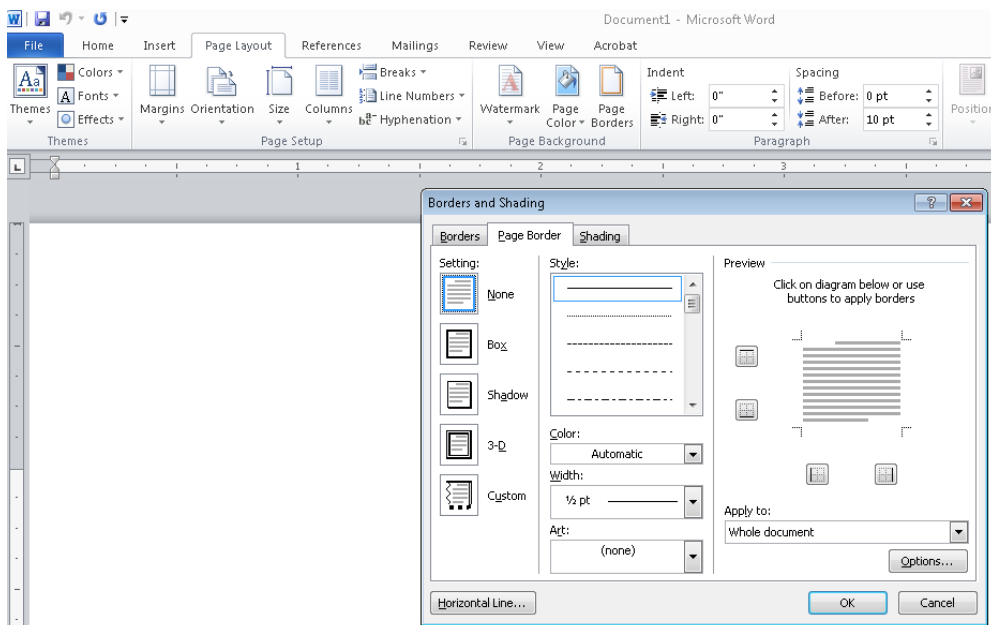
-On **Page Layout** tab, in **Page background** group, click **page color**



Page border

To add or change the border around the page:

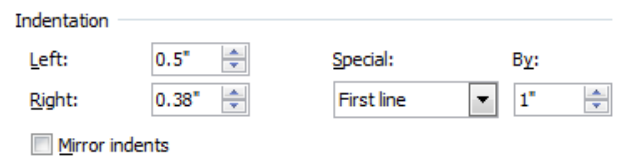
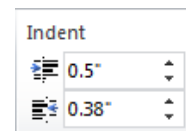
-On **Page Layout** tab, in **Page background** group, click **page border**



Page layout Tab: paragraph Group

Indent

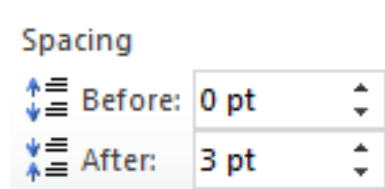
- To set precise paragraph indents:
 - On Page Layout tab, in Paragraph group, set measurement from Left or Right margin
 - On Home tab, in Paragraph group, click Paragraph Dialog box launcher, in Indentation area, select indents to set



Paragraph Spacing

To set or change paragraph spacing:

-On **Page Layout** tab, in **Paragraph** group, set spacing



Exercise:

In Page layout Tab:

- Insert a **confidential2** water mark to your page.
- Change your top page margin to 2 points.
- Change the page orientation to portrait.
- Change paper size to A3.
- Fill the paper colour with light blue colour.
- Insert box, red and 3pt width border to your page.

Unit 8: Using Microsoft Word

Lesson: References Tab

Objectives

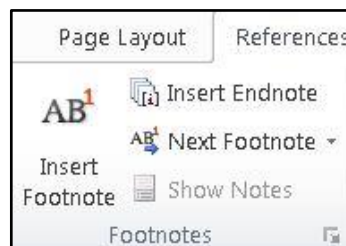
- Using Footnotes and Endnotes.
- Creating Footnotes and Endnotes.

Using Footnotes and Endnotes

Footnotes located at bottom of each page containing reference, whereas endnotes located at end of section or document.

Consider the following regarding footnotes and endnotes:

- Automatically renumber when you add, delete, move, or copy them.
- Consist of reference mark in text and corresponding note at bottom of page or end of section or document.
- Can be any length and formatted as regular text.
- Reference marks usually numbers, but can be letters or characters.
- Numbering consecutive from beginning to end of document.
- Inserting in Print Layout view to see reference mark in body text and footnote or endnote area.
- Draft view displays separate pane at bottom of screen for entering footnote or endnote text.



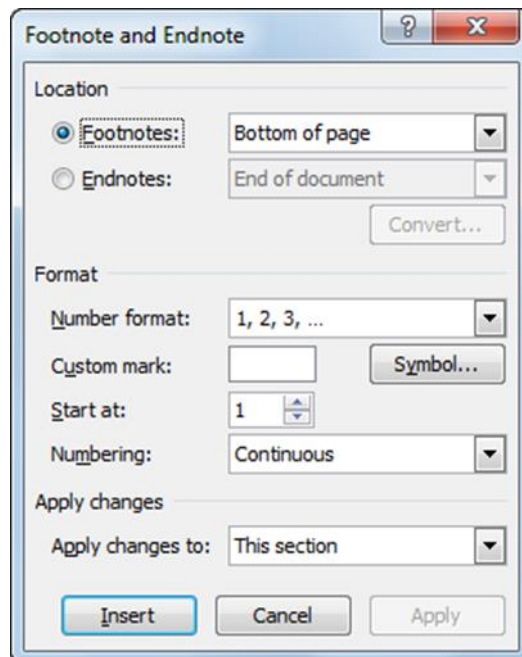
Creating Footnotes and Endnotes

To view content of footnotes or endnotes, point at note reference in main text. To display note text in separate pane at bottom of screen, double-click note reference mark.

To insert footnote or endnote, on **References** tab, in **Footnotes** group, click Insert Footnote

To change default settings or choose endnote, on **References** tab, in **Footnotes** group, click **Dialog box launcher**.

To delete or move footnote or endnote, use note reference mark in document window.



Exercise

1. Open **Ms .Word**, and save it as **Endnote or Footnote Exercise**.
2. Type following text:
“Footnotes located at bottom of each page containing reference, whereas endnotes located at end of section or document.
www.google.com”
3. **Select** www.google.com and then click **Cut** from **Home** tab, in **Clipboard** group.
4. On **Reference** tab, in the **Footnotes** group, click **Insert Endnote**.
5. Click **Paste**, from **Home** tab, in the **Clipboard** group.
6. Save the document.

Unit 2: Using Microsoft Word 2010

Lesson: Review Tab

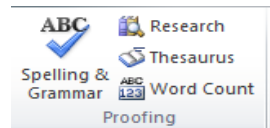
Objectives

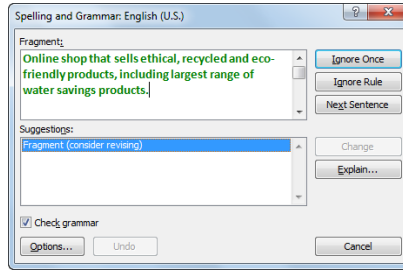
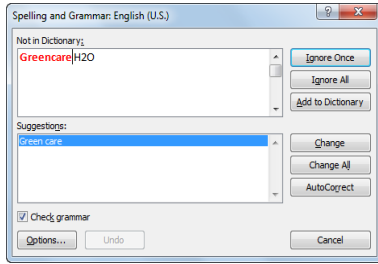
- Checking the Spelling and Grammar
- use the thesaurus
- research items
- display document statistics
- insert and delete comments
- track changes made in documents
- accept or decline changes made in a document
- protect documents

Checking the spelling and Grammar

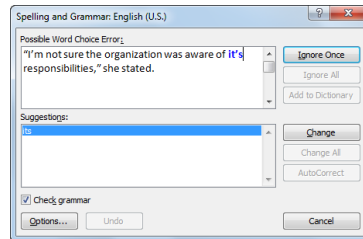
Check the spelling and grammar of text in the document.

- **Spelling checks for:**
 - Incorrect spelling
 - Repeated words
 - Occurrences of incorrect capitalization
- **Grammar uses natural language grammar to detect errors.**
- **Works in background to check for mistakes**
 - Spelling mistakes have wavy red line
 - Grammatical errors have wavy green line
 - Blue dotted lines refer to a contextual error
- To activate automatic Spelling and Grammar:
 - On **Review** tab, in **Proofing** group, click **Spelling & Grammar**
 - Press **F7**
- First error displays in Spelling and Grammar dialog box with same color as error type.





Refers to words with same sound but different spellings and meanings

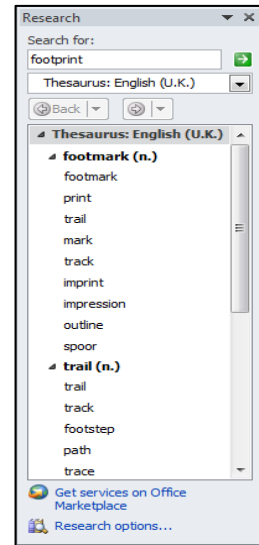


Not in Dictionary	Displays misspelled word in text box with surrounding text for reference.
Suggestions	Displays list of alternatives for misspelled word. If correct word in list, click it and then click Change , or double-click word.
Ignore Once	Ignores this occurrence of this spelling but continues to search for other occurrences of this spelling.
Ignore All	Ignores all occurrences of this spelling.
Add to Dictionary	Adds this spelling to custom dictionary.
Change	Changes this occurrence with selected word in Suggestions box.
Change All	Changes all words with this spelling with selected word in Suggestions box.
AutoCorrect	Adds this item to AutoCorrect list so it is automatically corrected every time you misspell it.
Check grammar	Choose to check grammar at the same time as spelling.
Options	Choose how spelling and grammar options should work.
Undo	Reverses spelling or grammar changes made recently in reverse order made.

Using the Thesaurus

Searches for and displays synonyms and antonyms

- To activate Thesaurus:
 - On **Review** tab, in **Proofing** group, click **Thesaurus**
 - press **Shift** + **F7**
 - Press **Alt** as you click the word
 - Right-click word, click **Synonyms**, click **Thesaurus**



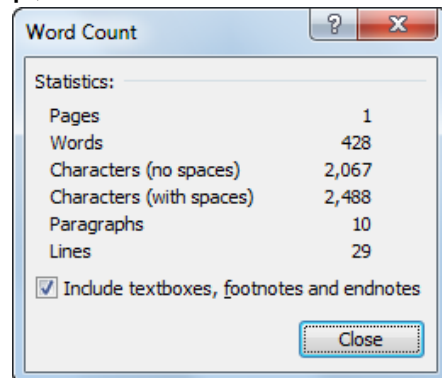
Using Research Tools

- To activate Research option:
 - On **Review** tab, in **Proofing** group, click **Research**
 - press **Alt** and click

Search for	Enter search criteria.
Reference	List of sources to find matches for search criteria.
Get services on Office Marketplace	Go online to Microsoft Office Marketplace Web site to find more research services.
Research options	Display list of sources to find matches for search criteria.

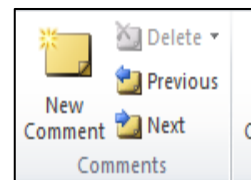
Using Document Statistics

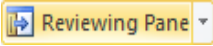
- To retrieve statistics:
 - On **Review** tab, in **Proofing** group, click **Word Count**
 - Click **Words: 428** on status bar

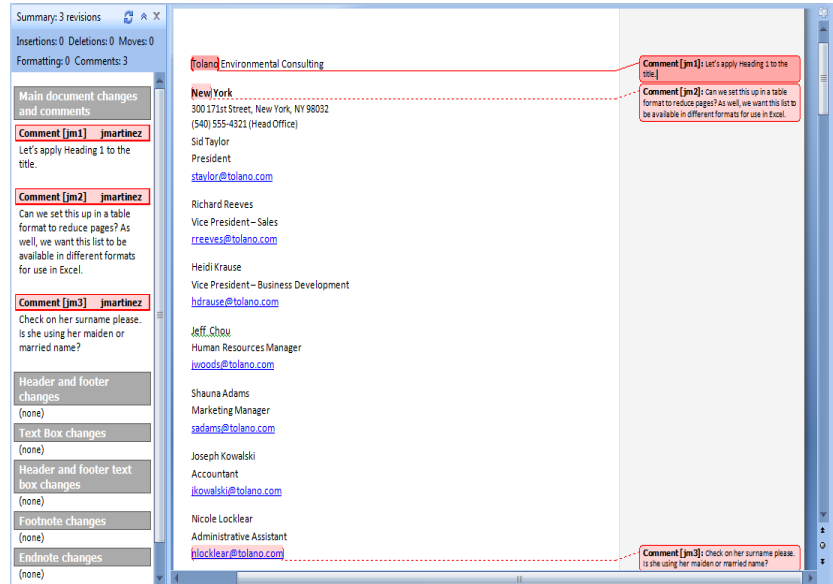


Working with Comments

- Can display in balloon objects, in document, or in Reviewing Pane
- Can hide or display comments on screen
- Can also record own audio comment and insert into document
- To insert comment, on **Review** tab, in **Comments** group, click **New Comment**
- To navigate backward and forward through comments, on **Review** tab, in **Comments** group, click **Previous** (**Previous Comment**) or **Next** (**Next Comment**)
- To delete comment:
 - On the **Review** tab, in the **Comments** group, click **Delete** (**Delete Comment**)
 - On **Review** tab, in the **Changes** group, click **Reject and Move to Next**
 - Right-click comment and click **Delete Comment**.






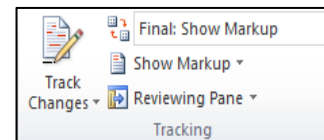
- To see all comments or changes in separate window, on **Review** tab, in **Tracking** group, click  , and then:
 - Click **Reviewing Pane Vertical** to open window at left side of screen

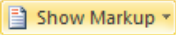



Tracking Changes

For others to review document with control over final changes, distribute copies to others using **Track Changes**

- To turn on Track Changes:
 - On **Review** tab, in **Tracking** group, click **Track Changes**
 - Press   
- To accept change, click change and then on **Review** tab, in **Changes** group, click **Accept**
- To accept all changes in document, click arrow for **Accept** and then **Accept All Changes Shown** or **Accept All Changes in Document**
- To reject change, click change and then **Reject**
- To reject all changes, click arrow for **Reject** and then **Reject All Changes Shown** or **Reject All Changes in Document**



- To show all marked items, on **Review** tab, in **Tracking** group, click 
 - Use Reviewing Pane if balloon items too distracting on screen
 - Make changes or insertions as if Reviewing Pane not there
 - Click arrow for  (**Display for Review**) to change view for tracked document
 - To delete item in Reviewing Pane, click heading for item and then click **Reject Change/Delete Comment**
- Turn off Track Changes option when no longer need it

Protecting Documents

- Use **Security Options** to:
 - Prevent unauthorized users from opening document
 - Control sharing options
 - Control privacy
 - Increase macro security to reduce virus attacks
- To restrict document, on **Review** tab, in **Protect** group, click **Protect Document**
 - **Formatting restrictions**
 - Prevents others from making formatting changes, or specific types of formatting using *Settings* link
 - **Editing restrictions**
 - Limits others from making changes to document for tracked changes, comments, or fill-in



forms, and sets

up exceptions for those who have access to shared document

- **Start enforcement**
 - Becomes active only after selecting previous restriction types

Unit 8: Using Microsoft Word

Lesson: View Tab

Objectives

- Change document’s layout views
- Set the zoom level to the document
- Switching between Documents

Change document’s layout views

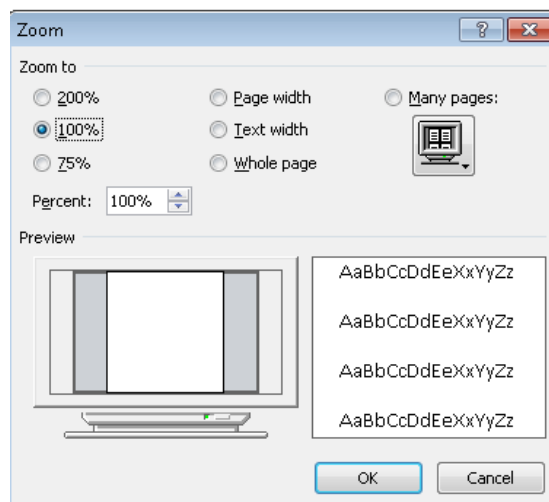
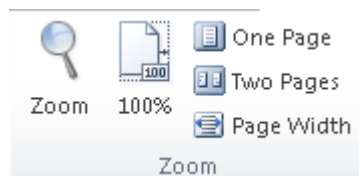
The document Views contain different views:

- Print layout: View the document as it will appear on the printed document
- Full Screen Reading: View the document in full screen reading
- Web layout: View the document as it would look as a web page
- Outline: View the document as an outline
- Draft: View the document as a draft to quickly edit text

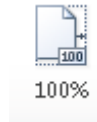


Set the zoom level to the document

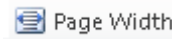
On view tab select zoom to specify the zoom level of the document



To zoom the document to 100% of the normal size on view tab select

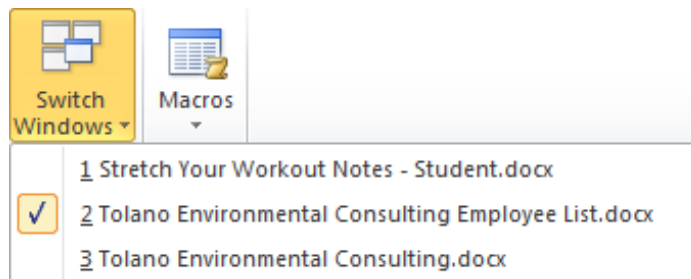


To zoom the document so that the width of the page matches the width of the window on view tab select page width



Switching between Documents

- Can switch between multiple documents:
 - On **View** tab, in **Window** group, click **Switch Windows**



- Click button for document on taskbar



Exercise

7. Open **Ms .Word**, and save it as Review tab.
8. Type the following text:
9. Correct the words spellings using Spell-check.
10. Find the Thesaurus to the word “**manner**” and replace it.
11. Add new comment for the title and write (Machine).
12. Apply track change for the word “**specific**” and write “exact”.
13. Save your file again.



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University of Nizwa

DIGITAL LITERACY II

COMP-B



First Edition 2015-2016

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Unit 5: Using Microsoft Excel

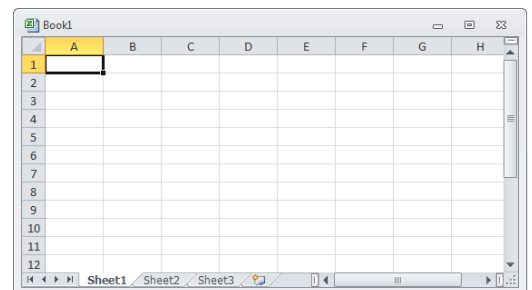
Lesson 1: Home Tab

Objectives

- Using clipboard group
- Using font group
- Using Alignment group
- Using Number group
- Using Styles group
- Using Cells group
- Using Editing group

Understanding Basic Terminology

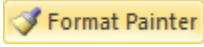
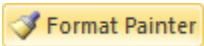
- **Workbook**
 - Single Excel file containing one or more worksheets
- **Worksheet**
 - A single report or tab in workbook
 - Cell
 - Intersection of row and column; can contain one single value or formula
- **Cell Address**
 - Column-by-row intersection designated by column letter and row number
- **Active Cell**
 - Cell currently displayed with thick border



Home Tab: clipboard Group

Using the Format Painter

Duplicate formatting options on other parts of worksheet

- Select cell with source formatting and then:
 - On **Home** tab, in **Clipboard** group, click  once, then click cell to format with same features
 - On **Home** tab, in **Clipboard** group, double-click  to turn on to apply formatting to several cells
 - When finished, click button to turn Format Painter off, or press **ESC**

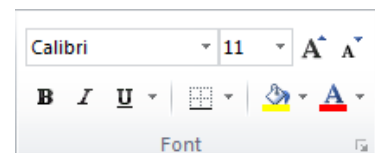
Home Tab: Font Group (Formatting)

To apply formatting and change appearance of cell:

-On Home tab, click command for formatting from font group

- Changing Fonts and Sizes:

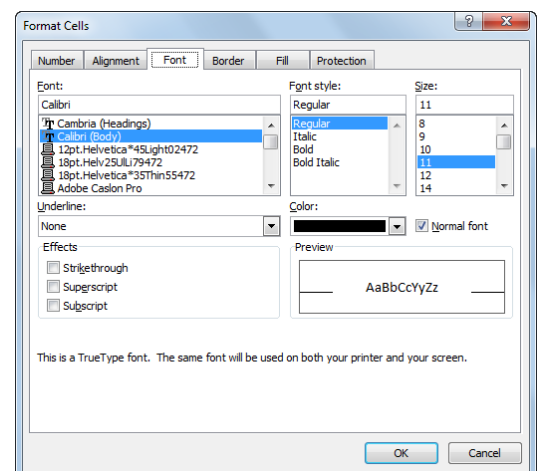
Font is typeface or text style. To format selected cells:



-On **Home** tab, in **Font** group, click **format**.

-On **Home** tab, in **Font** group, click Dialog box launcher, choose option from Font tab.


-Press **CTRL + SHIFT + F** to choose option from Font tab.



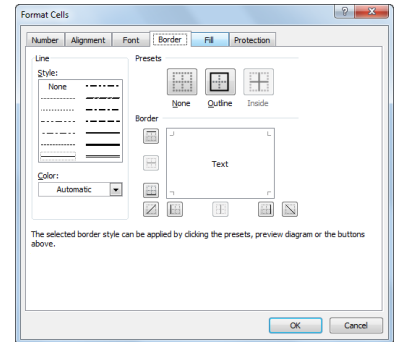
- Applying Cell Borders:

Separate groups of data to improve legibility, especially if large volume of numbers.

To apply border to cell:

-On **Home** tab, in **Font** group, click arrow for  (**Borders**)

-On **Home** tab, in **Font** group, click **Dialog box launcher**, click **Border** tab, and choose option.

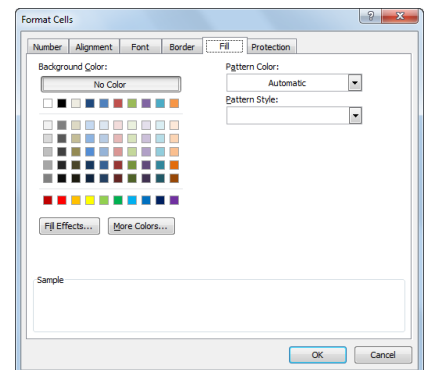


- Applying Colors and Patterns:

Sets background color and pattern for cell

To apply color or pattern to cell:

-On **Home** tab, in **Font** group, click Dialog box launcher, click **Fill** tab.



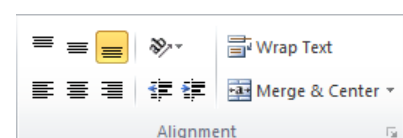
-On **Home** tab, in **Font** group, click arrow for  (**Fill Color**)

Alignment Group

- Changing Cell Alignment:

Can align cell contents horizontally or vertically, merge and center across several cells, wrap text in cell, or rotate it.

To change alignment for selected cells:

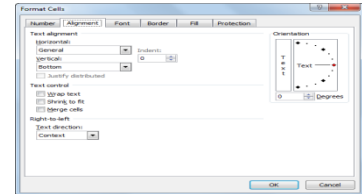


-On **Home** tab, in **Alignment** group, click alignment.

-On **Home** tab, in **Alignment** group, click **Dialog box launcher**, choose alignment from **Alignment** tab.

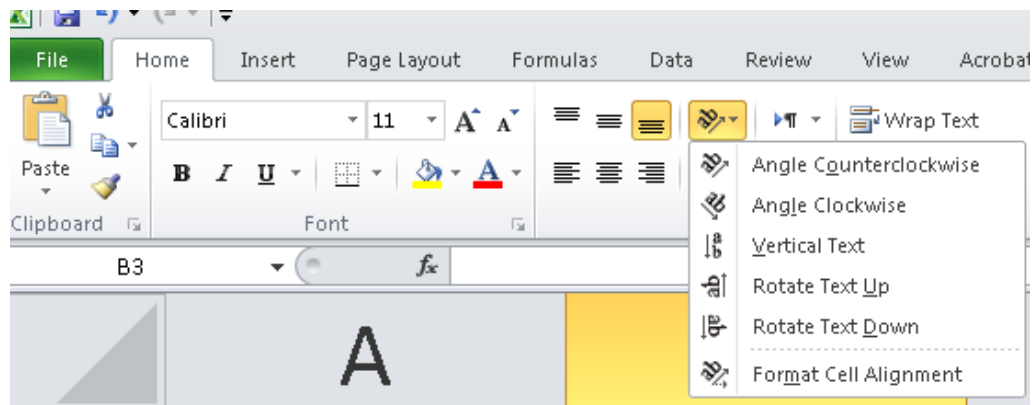
Orientation

Rotate text to diagonal angle or vertical orientation.



To change text orientation:

-On home tab, in alignment group, click orientation.

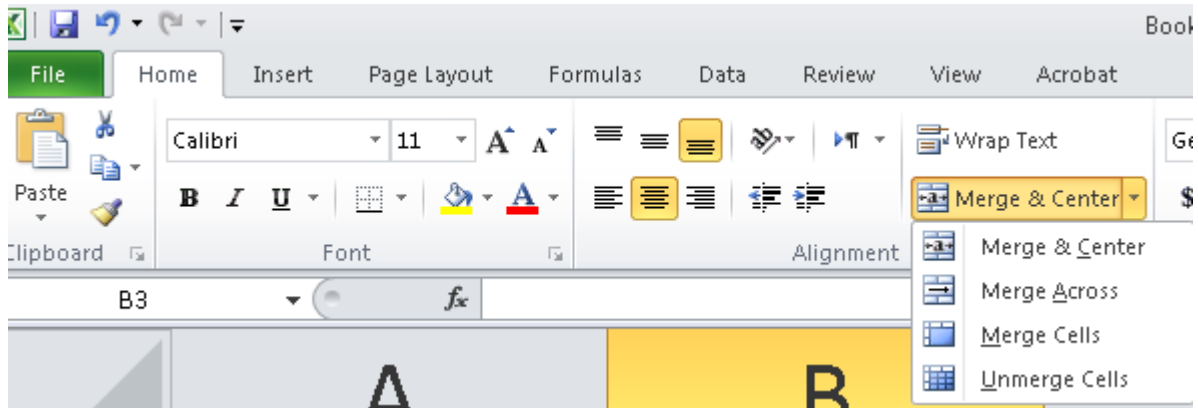


- Merge and centre:

Join the selected cells into one larger cell and center the contents in the new cell.

To merge and center cells:

- On home tab, in alignment group, click merge and center.



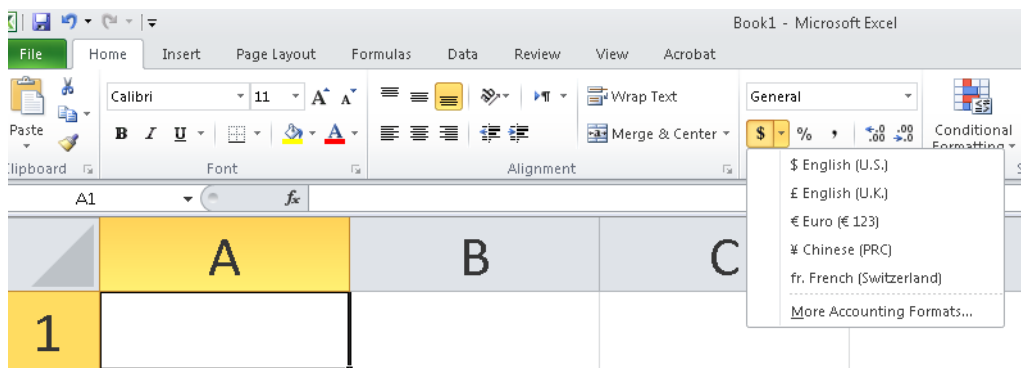
- Number Group:

Show the number tab of the format cells dialog box.

- **Accounting number format**

To choose an alternate currency format for selected cells:

- On **home** tab, in **number** group, click **accounting number format**.



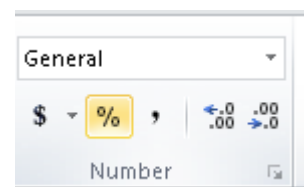
- Percent style:

Display the value of the cell as a percentage.

To display values as percentage:

- On **home** tab, in **number** group, click **percent style**.

-CTRL+SHIFT+%

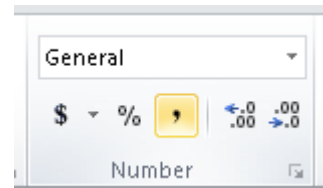


- Comma Style:

Display the value of the cell with A thousand separators.

To display values as with thousand separators:

- On **home** tab, in **number** group, click **comma style**.

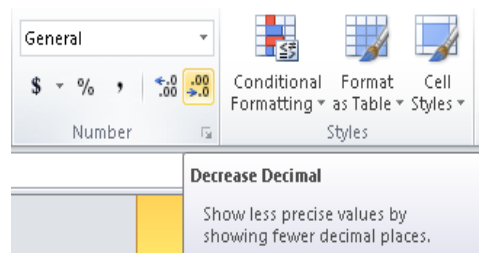
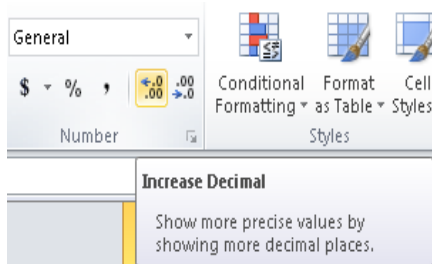


- Increase and decrease decimal places

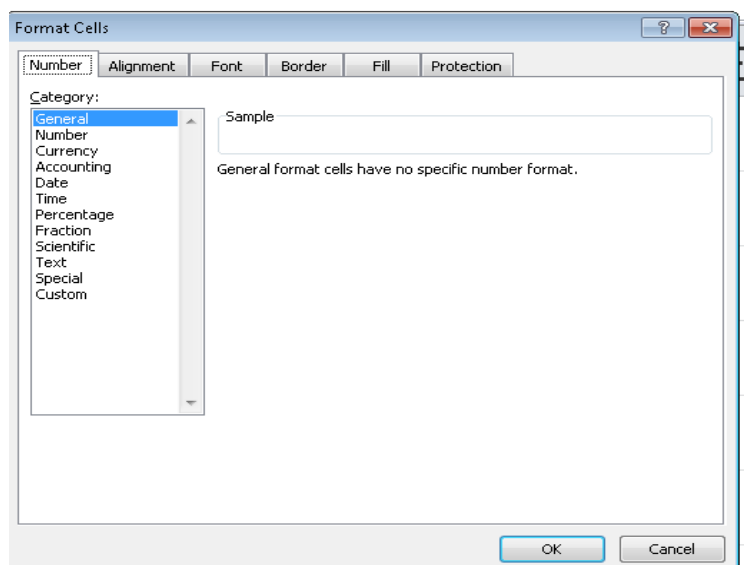
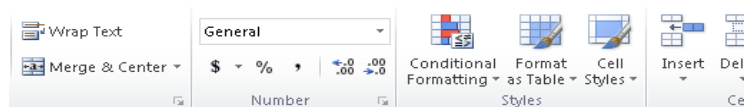
Show more precise values by showing more decimal places/ Show less precise values by showing fewer decimal places.

To show more or less decimal places:

On **home** tab, in **number** group, click **Increase or decrease decimal places**.



You can show more options inside the dialog box of number group divided to many categories.

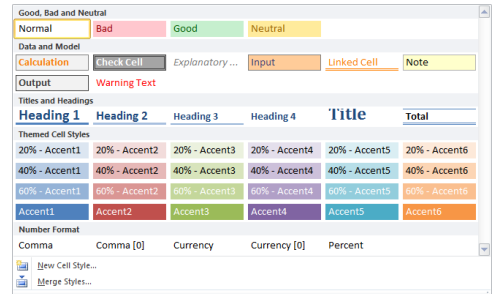


- Style Group

Add a quick format for a cell or a range of cells.

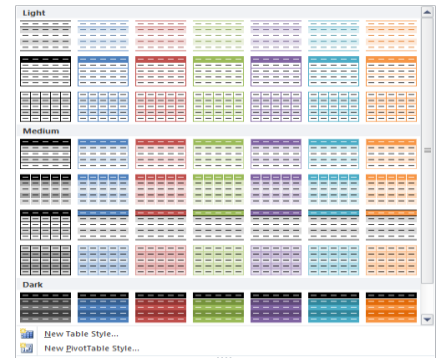
- Cell Styles

- Applies chosen style to selected cells only
- To apply cell style, select cells, on **Home** tab, in **Styles** group, click **Cell Styles**



- Table Styles


- Applies chosen style to specified range of cells
- To apply table style, click in range, on **Home** tab, in **Styles** group, click **Format as Table**



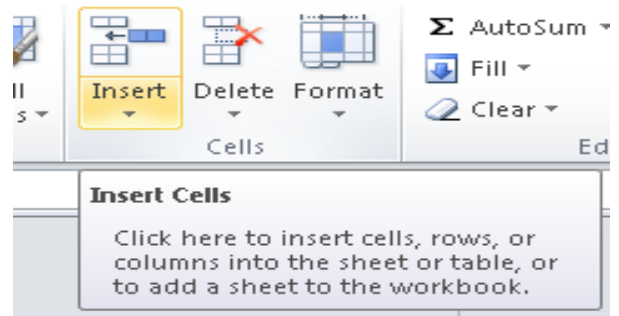
- Cells Group

- Insert cells, columns ,rows and sheets

You can **insert** new row above current row, new column to left of current column, or cells in specific areas of worksheet

- To insert column to left of selected column:
 - On **Home** tab, in **Cells** group, click arrow for Insert, click **Insert Sheet Columns**
 - Press **CTRL** +  on numeric keyboard, select Entire column
 - Right-click selected column and click Insert, select Entire column
- To insert row above selected row:

- On **Home** tab, in **Cells** group, click arrow for Insert, click Insert **Sheet Rows**
- Press **CTRL + +** on numeric keyboard, select Entire row
- Right-click selected row and click Insert, select Entire row
- To insert one or more cells, on **Home** tab, in **Cells** group, click arrow for Insert, click Insert Cells

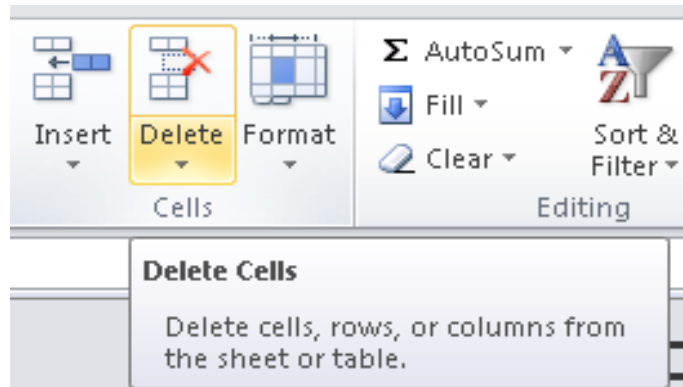


- Delete cells, columns ,rows and sheets

You can delete one or more rows or columns, or shift cells over in place of deleted cells

- To delete selected column:
 - On **Home** tab, in **Cells** group, click arrow for **Delete**, click **Delete Sheet Columns**
 - Press **CTRL + -** on numeric keyboard, select **Entire column**
 - Right-click selected column, click **Delete**, select **Entire column**
- To delete selected row:
 - On **Home** tab, in **Cells** group, click arrow for **Delete**, click **Delete Sheet Rows**
 - Press **CTRL + -** on numeric keyboard, select **Entire row**
 - Right-click selected row, click **Delete**, select **Entire row**

- To delete one or more cells in current location, on **Home** tab, in **Cells** group, click arrow for **Delete**, click **Delete Cells**.



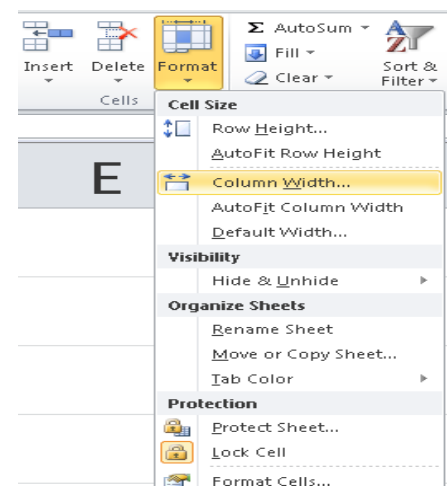
Manipulating the Information

- Style Group

Change column widths and row heights and organize the worksheets.

- Changing the Column Widths
 - If entry longer than standard column width, data flows into next cell
 - If entries exist in adjoining cells, data truncates at column boundary
 - If values exceed column width, Excel stores data but displays in scientific format
 - To change column width:
 - On **Home** tab, in **Cells** group, click **Format**, click **Column Width**
 - Position pointer on line at right edge of column header and drag to required width

	A	B	C	D	E
1	Tolano Employees' Salaries - Confidential				
2	First Name	Last Name	SSN	Position	Salary
3	Sid	Taylor	1.23E+08	President	#####
4	Richard	Reeves	3.22E+08	Vice Presi	#####
5	Heidi	Krause	9.88E+08	Vice Presi	#####
6	Jeff	Chou	1.47E+08	Human Re	#####
7	Shauna	Adams	7.42E+08	Marketing	#####
8	Joseph	Kowalski	6.59E+08	Accountar	#####

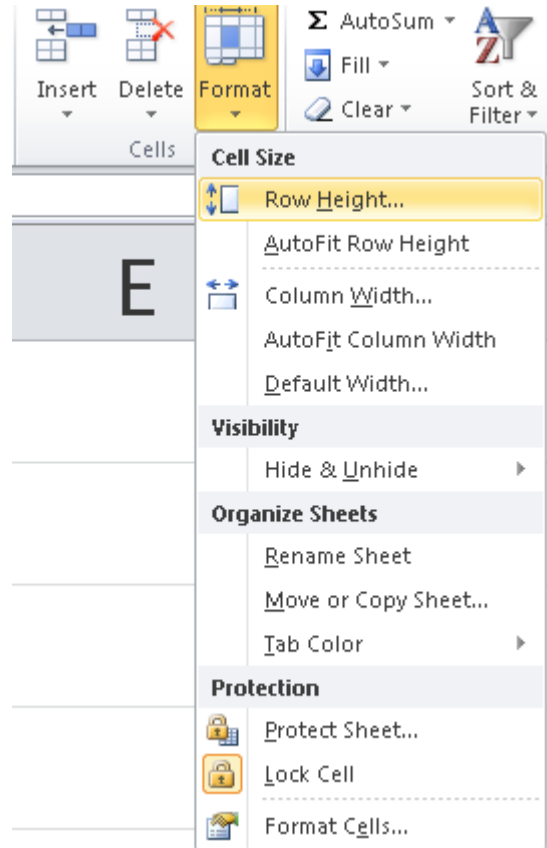


- To check column width, click right edge of column header.

- Adjusting the Row Height

To adjust row height:

- On **Home** tab, in **Cells** group, click **Format**, click **Row Height**
- Place pointer at bottom edge of row header to adjust and drag to required height.

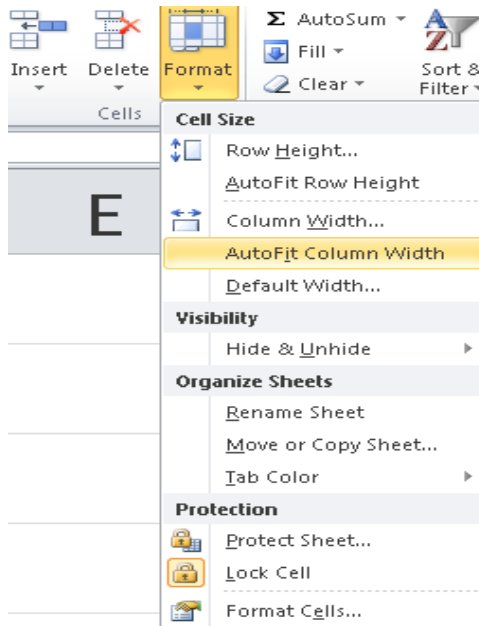
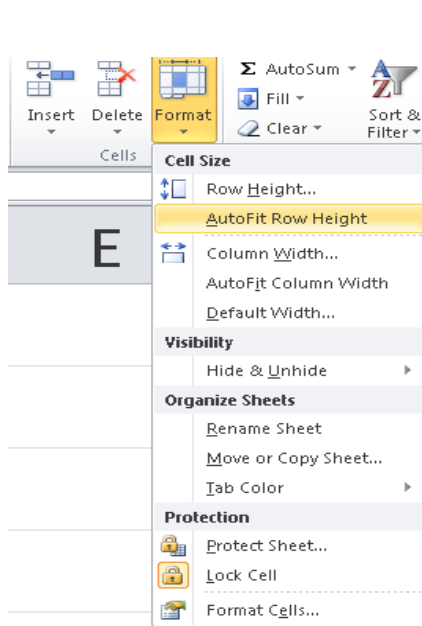


- Using AutoFit

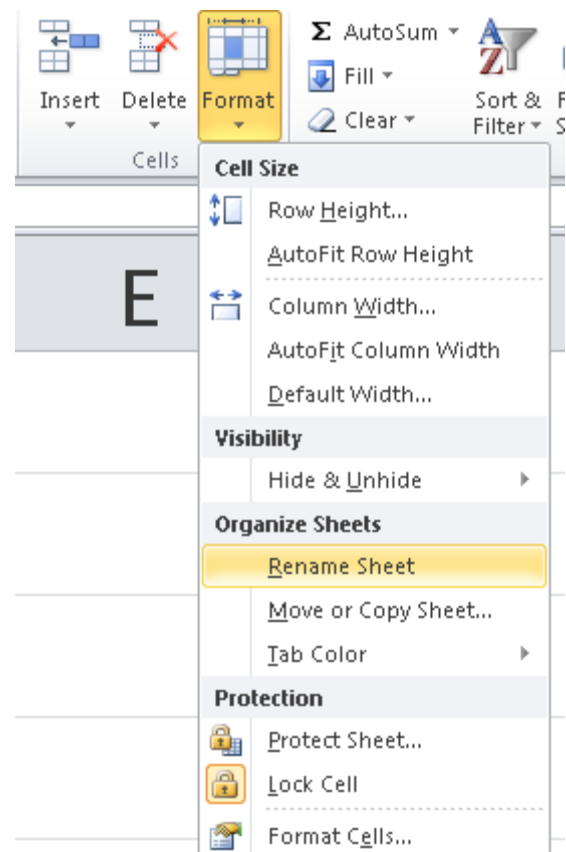
Automatically adjusts column width or row height to accommodate longest value in column or row

- To adjust column width using AutoFit:
 - On **Home** tab, in **Cells** group, click **Format**, click **AutoFit Column Width**
 - Double-click line at right edge of column header to adjust
- To adjust row height using AutoFit:

- On **Home** tab, in **Cells** group, click **Format**, click **AutoFit Row Height**
- Double-click line at bottom edge of row header to adjust



- **Naming Worksheets**
 - Sheet# help identify different sheets but not descriptive of contents
 - Can be up to 31 characters long
 - To rename worksheet tab:
 - On **Home** tab, in **Cells** group, click **Format**, click **Rename Sheet**

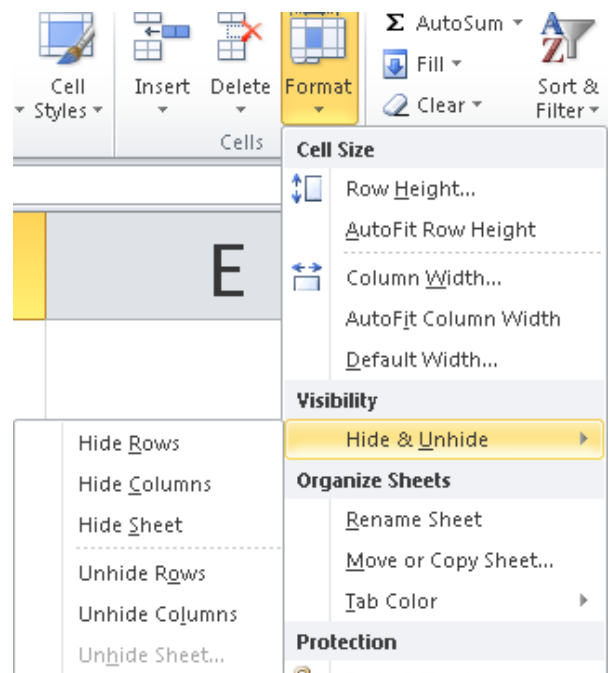


- Double-click sheet tab and type new name.

- Tab colour

To tab a sheet with colour:

- On **Home** tab, in **Cells** group, click **Format**, click **Tab colour**
- **Right-click** sheet tab **Tab colour**.



- Hide & unhide sheet

To hide or unhide sheet or column or row:

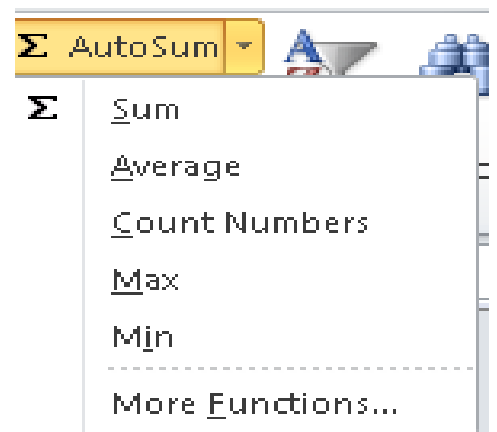
- On **Home** tab, in **Cells** group, click **Format**, click **hide & unhide**

Home Tab:

- Editing Group

- SUM (ALT+=)

Display result of simple calculations such as Average, Maximum, Minimum, or Sum after the selected cells.

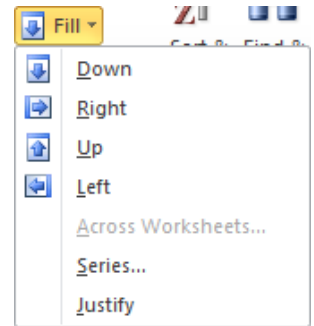


- Using Fill

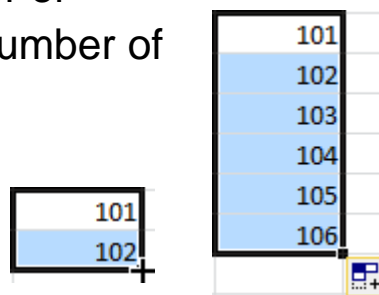
Automatically fill in data based on original contents

- To use Fill option:

On **Home** tab, in **editing** group, click  **(Fill)**



- Select cell range with data to fill, position pointer at lower right corner of required number of range, and drag to cells.

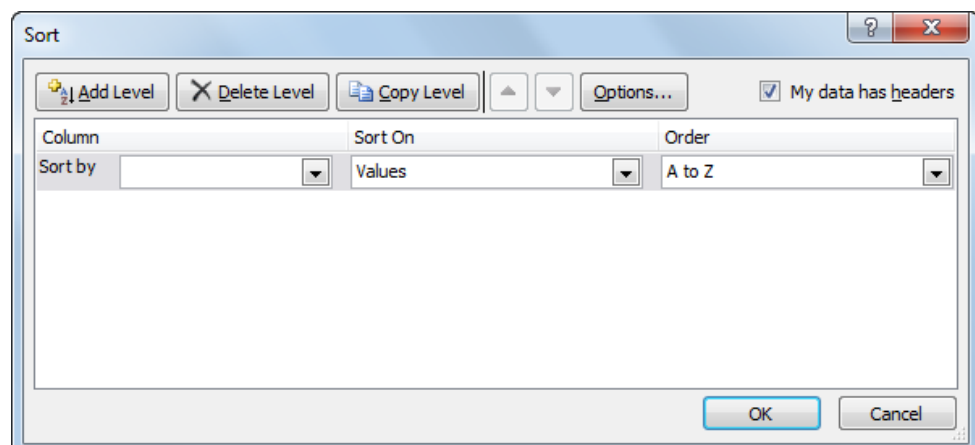


- Sorting Data

Organize data in worksheet based on values in selected columns or rows

- To sort data:
 - On **Data** tab, in **Sort & Filter** group, click **Sort A to Z** or **Sort Z to A**
 - On **Home** tab, in **Editing** group, click **Sort & Filter**

To sort by more than one option, on **Data** tab, in **Sort & Filter** group, click **Sort**



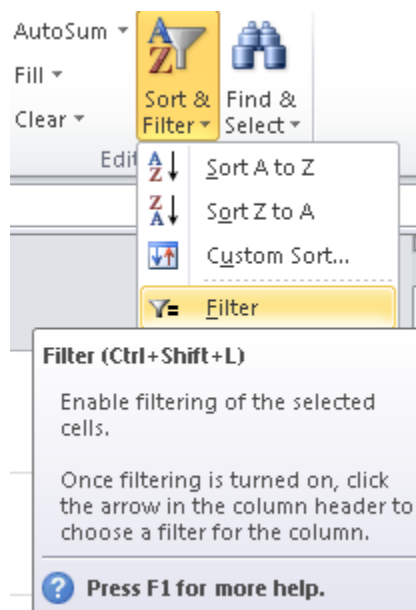
- Filtering Information

Locate information quickly using filter to hide records not interested in viewing

- **AutoFilter** tool places icons on right side of each column or field name
 - Use these to select conditions for records to display
 - Can set conditions

Excel tables automatically include AutoFilter feature

- To activate filter command, **on Data tab, in Sort & Filter group, click Filter.**



Exercise 1 :

	A	B	C
1	Student ID	Student Name	Group
2	35695	Zainab Ahmed	A
3	23654	Salim Ali	B
4	17855	Aisha Mohammed	B
5	89456	Noor Bader	A
6	03256	Ahmed Said	C

Question1

- 1-Sort students Name from Z to A
- 2-Filter student Name who are in group B
- 3-Add double line border with green color the table
- 4-Rename sheet1 as Students Group
- 5-Add tab color to the sheets

Exercise 2:

1-By using simple calculation tool, Calculate the following: total, average, minimum and maximum

	A	B	C	D	E	F	G
1	subjects						
2	Name	IC3	Math	English	Life	Computer Skills	Total
3	Mohammed	23	18	15	26		11
4	Ahmed	26	28	23	30		25
5	Abdullah	9	13	21	20		19
6	Hamed	19	12	19	30		30
7	Sultan	10	17	20	23		8
8	Minimum Mark						
9	Maximum Mark						
10	Marks Average						

Unit 5: Using Microsoft Excel

Lesson 2: Insert Tab

Objectives

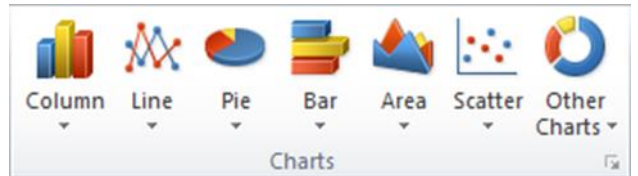
- Working with Charts
 - Understanding Charts
 - Selecting Chart Types
 - Changing the Chart Layout
- Working with Header/Footer

Working with Charts

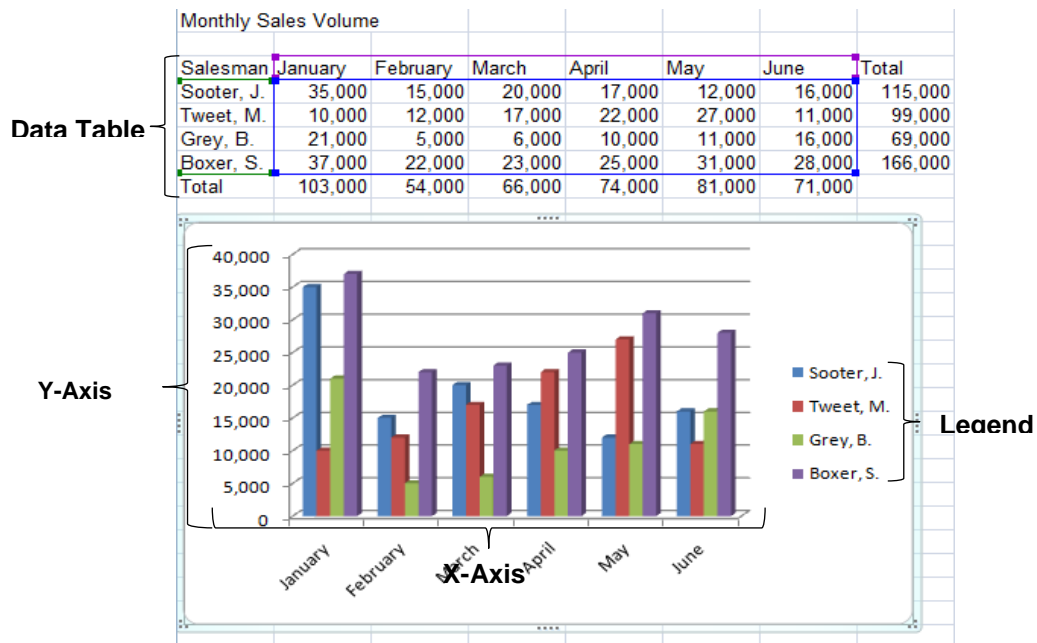
Understanding Charts:

A chart is a pictorial representation of data in worksheet. A chart can be more descriptive way of representing data, illustrating trends or patterns in data.

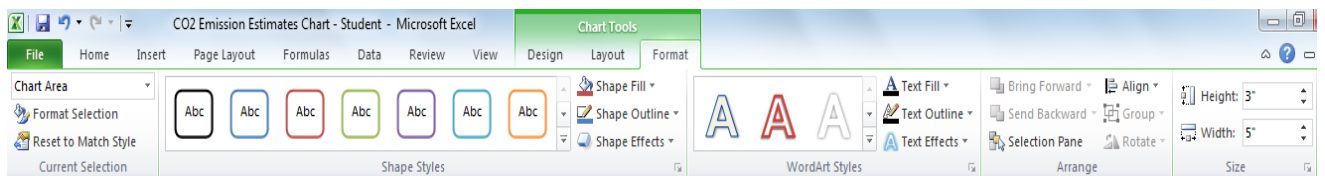
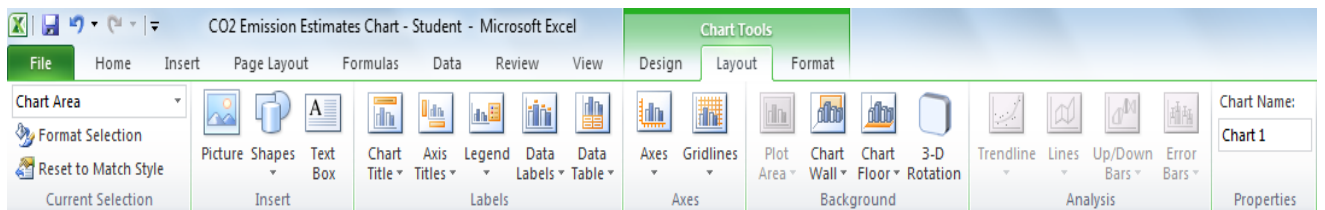
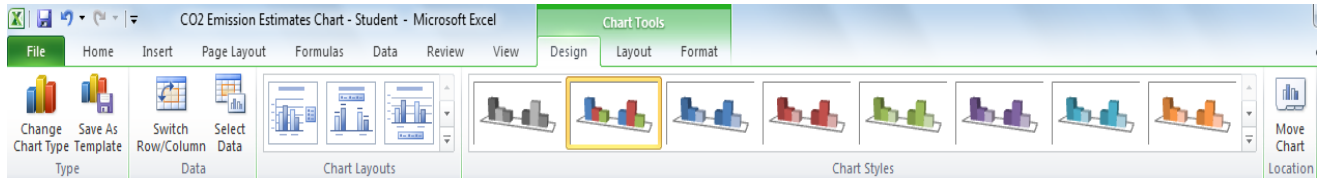
Each set of data in chart is series. The chart's horizontal line is **X-Axis**, and vertical line is **Y-Axis**. You can add a legend to explain the meaning of each series.



To create chart, select **cells** and then on **Insert** tab, in **Charts** group, click **chart type**.



Once chart created, should accurately reflect patterns or trends from selected data. When a chart is on screen, you can select it to display the **Chart Tools** ribbon to modify or customize chart.



Selecting Chart Types

Column	Compares values over time or categories vertically.
Bar	Compares values over time or categories horizontally.
Line	Compares continuous trends.
Pie	Compares series that make up whole.
XY (Scatter)	Determines data patterns.
Area	Compares continuous change in volume.
Doughnut	Similar to pie chart, but for more than one set of data points.

Radar	Determines patterns or trends with points matched up by lines.
Surface	Displays trends in values with three-dimensional presentation and continuous surface.
Bubble	Compares three values displayed like scatter chart, but represented by bubbles.
Stock	Displays high-low-close data.
Cylinder	Similar to bar and column charts, but cylinder shape.
Cone	Similar to bar and column charts, but cone shape.
Pyramid	Similar to bar and column charts, but pyramid shape.

Changing the Chart Layout

Modify the layout to create exactly the look you want. Use command on **chart Tools** ribbon to manipulate items on the chart.

The following are layout of chart:

Chart Titles	Add title.
Axis Titles	Add titles to horizontal and vertical axes.

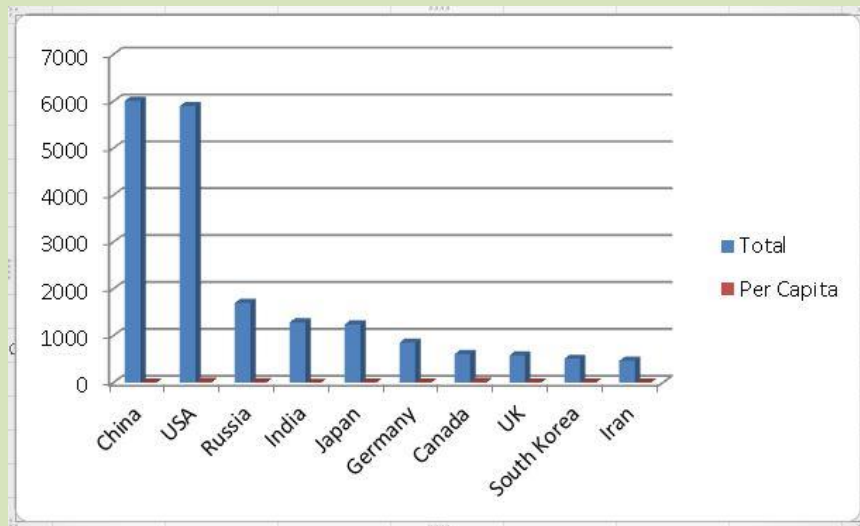
Legend	Include legend and position with chart.
Data Labels	Include data labels.
Data Table	Display chart data beneath chart.
Axes	Include labels on horizontal and vertical axes.
Gridlines	Include gridlines.

Exercise

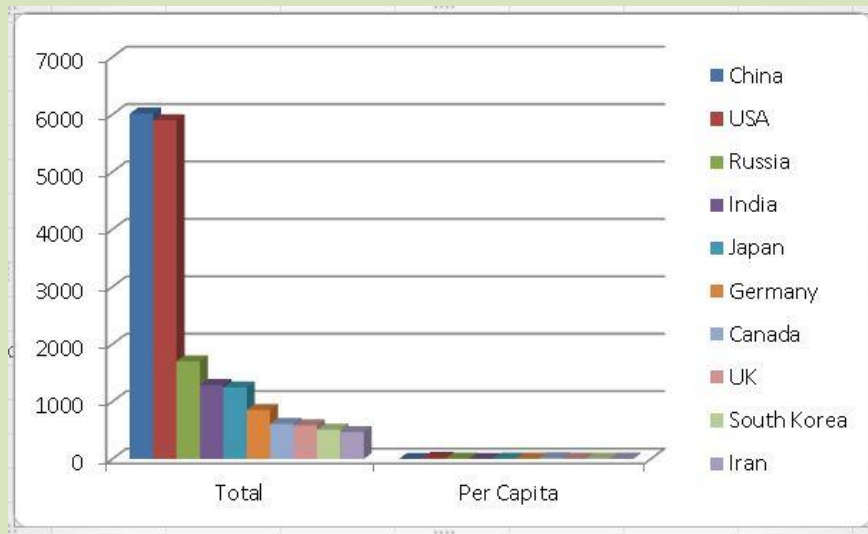
1. Open **Ms .Word**, and save it as **CO3 Emission Workbook**
2. Type following text:

	A	B	C	D	E	F
1	CO2 Emission Estimates					
2	Top 10 by Country (million metric ton)					
3		Emissions				
4	Country	Total	Per Capita			
5	China	6017.69	4.58			
6	USA	5902.75	19.78			
7	Russia	1704.36	12			
8	India	1293.17	1.16			
9	Japan	1246.76	9.78			
10	Germany	857.6	10.4			
11	Canada	614.33	18.81			
12	UK	585.71	9.66			
13	South Korea	514.53	10.53			
14	Iran	471.48	7.25			
15						
16						
17						
18	* Data from www.ucsusa.org , Union of Concerned Scientists					
19						
20						

3. Select cells **A4 to C14**, Then on **Insert Tab**, in **Chart** group, click **Column**.
4. Click **3-D Clustered Column** from list.



5. Under **Chart Tools**, on the **Design** tab, in the **Data** group, click **Switch Row/Column**.



6. Under **Chart Tools** on the **Design** tab, in the **Data** group, click **Select Data**

4	Country	Total	Per Capita
5	China	6017.69	4.58
6	USA	5902.75	19.78
7	Russia	1704.36	12
8	India	1293.17	1.16
9	Japan	1246.76	9.78
10	Germany	857.6	10.4
11	Canada	614.33	18.81
12	UK	585.71	9.66
13	South Korea	514.53	10.53
14	Iran	471.48	7.25
15			
16			
17			
18	* Data from www.ucusa.org, Union of		
19			

Select Data Source

Chart data range: =Sheet1!\$A\$4:\$C\$14

Switch Row/Column

Legend Entries (Series): Total, Per Capita

Horizontal (Category) Axis Labels: China, USA, Russia, India, Japan

Buttons: Add, Edit, Remove, Edit

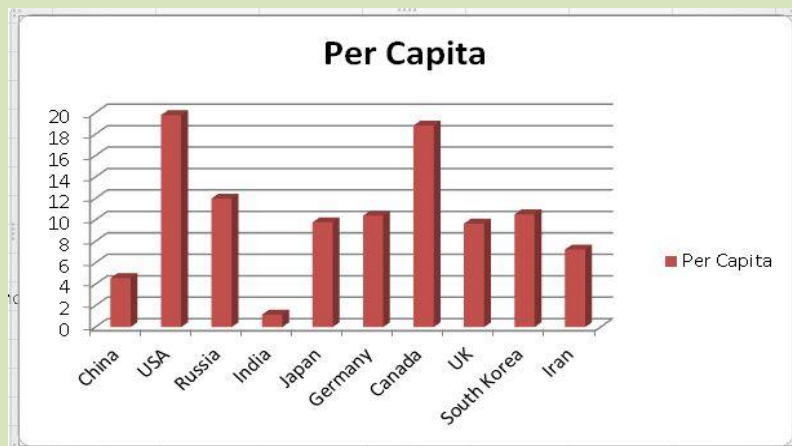
Hidden and Empty Cells

OK Cancel

First, switch the data back to showing the countries on the horizontal axis.

7. Click **Switch Row/Column**.

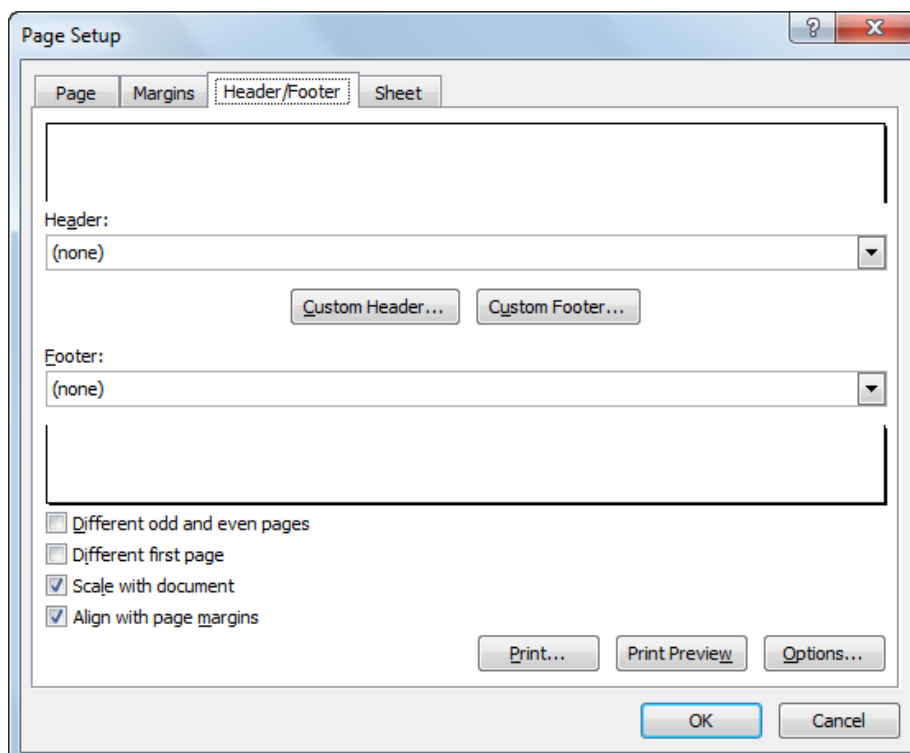
8. In the **Legend Entries(Series)** area, select **Total** and click **Remove**. Then click **OK**.



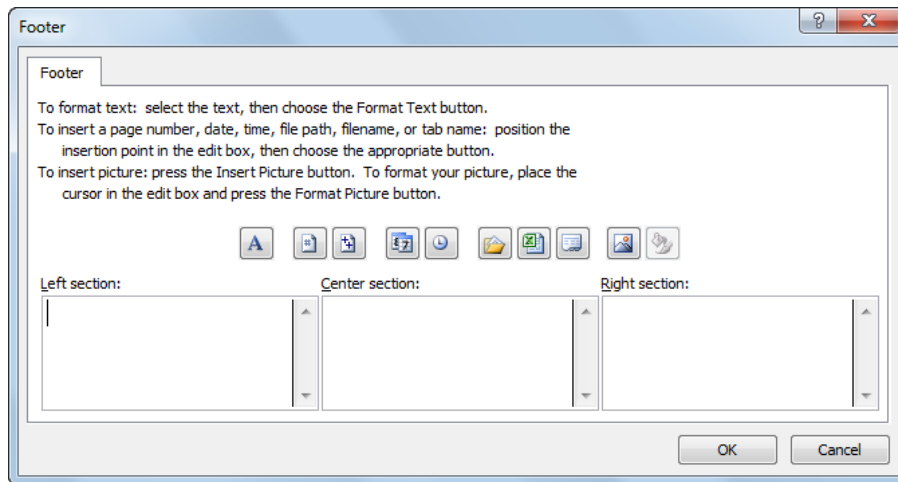
11. Under **Chart Tools**, on the **Layout** tab, in the **Labels** group, click **Show**.
12. Under **Chart Tools**, on the **Design** tab, in the **Location** group, click **Move Chart** to sheet 2.
13. Save and close the workbook.

Working with Header/Footer

A header is text printed at top of every page. A footer is text printed at bottom of every page. **Header/Footer** tab in Page Setup dialog box.



Excel provides several standard header or footer options, or creates your own. When you access **Custom Header** or **Custom Footer** to see:



Each header or footer consists of Left, Center, and Right areas header or footer. Use buttons to insert commonly used variables for header or footer.

Exercise

1. Open **Ms. Excel**, and save it as **Header and footers Exercise**.
2. Type following text:

	A	B	C	D	E	F
1	CO2 Emission Estimates					
2	Top 10 by Country (million metric ton)					
3		Emissions				
4	Country	Total	Per Capita			
5	China	6017.69	4.58			
6	USA	5902.75	19.78			
7	Russia	1704.36	12			
8	India	1293.17	1.16			
9	Japan	1246.76	9.78			
10	Germany	857.6	10.4			
11	Canada	614.33	18.81			
12	UK	585.71	9.66			
13	South Korea	514.53	10.53			
14	Iran	471.48	7.25			
15						
16						
17						
18	* Data from www.ucsusa.org , Union of Concerned Scientists					
19						
20						

3. Click **File tab**, and click **Print**.
4. At the bottom of the Print options area, click **Page Setup**.
5. Click the **Header/Footer** tab and then click **Custom Footer**.
6. In the **Left section**, type your name.
7. Click the **Center section** and then click **(Insert File Name)**.
8. Click the **Right section** and then click **(Insert Page Number)**. Click **Ok**
9. Save and close the workbook.

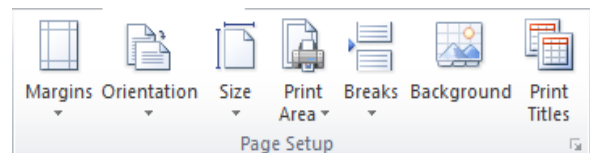
Unit 5: Using Microsoft Excel 2010

Lesson 3: Page layout Tab

Objectives

- Changing Margins
- Changing the Orientation
- Changing the Paper Size
- Inserting page breaks.
- Inserting page Background.
- Changing scaling

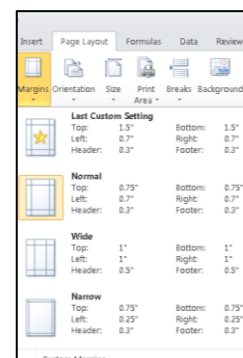
Page setup Group



- **Margin**

Determines amount of space between sheet edge and area where text prints. It must be in Print Layout view for arrows to adjust margins to appear on horizontal or vertical rulers.

- To change margins:
 - On **Page Layout** tab, in **Page Setup** group, click **Margins**.

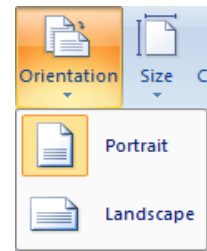


- **Orientation:**

Switch the sheet between portrait (vertical orientation) and landscape layouts (horizontal orientation).

- To change orientation for sheet:

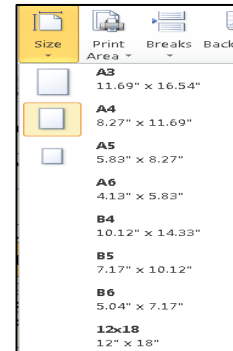
- On **Page Layout** tab, in **Page Setup** group, click **Orientation**.



- **Paper Size**

- To change paper size of sheet:

- On **Page Layout** tab, in **Page Setup** group, click **Size**

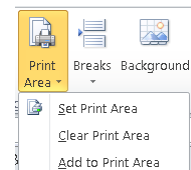


- **Print area**

Selects portion of worksheet to print

- To change paper area of sheet:

- On **Page Layout** tab, in **Page Setup** group, click **Print area**



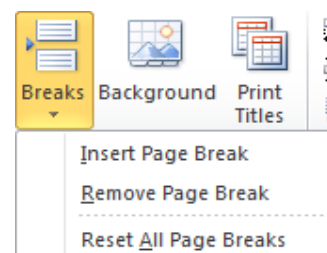
- **Page Breaks**

Excel determines where breaks are for output

- To add or remove page break, select cell, and on **Page Layout** tab, in **Page Setup** group, click **Breaks**, click **Remove Page Break**

- To remove all page breaks at same time, use **Reset All Page Breaks**

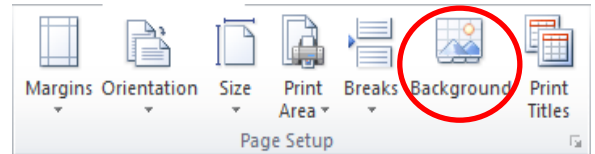
- Excel ignores page breaks if use **Fit to** in **Page** tab of **Page Setup**



- **Page background**

Choose an image to display as the background of the sheet

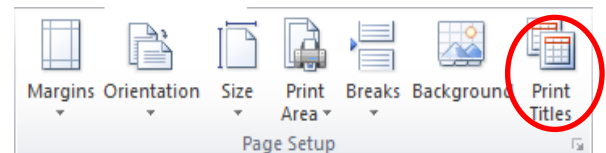
- To change paper background of the sheet:
 - On **Page Layout** tab, in **Page Setup** group, click **Page background**



- **Print Titles**

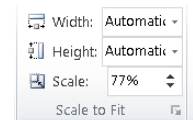
Repeats column or row titles on each printed page

- To change Print Titles of the sheet:
 - On **Page Layout** tab, in **Page Setup** group, click **Print Titles**

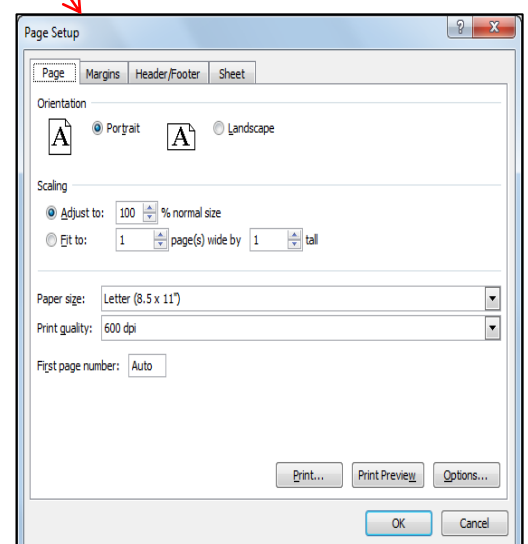
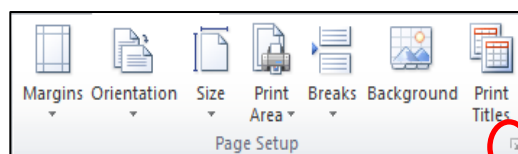


- **Scaling**

Enlarge or shrink size of worksheet proportionally, or use automatic scaling to fit on specified number of pages.



To view more additional options to enhance the page setup of the sheet, you can access **page setup dialog box launcher**



Exercise

10. Open **Ms .Excel**, and save it as **Page layout Tab Workbook**

11. Type following text:

	A	B	C	D
1	Country	Total	Per Capita	
2	China	6017.69	4.58	
3	USA	5902.75	19.78	
4	Russia	1704.36	12	
5	Indiaa	1293.17	1.16	
6	Japan	1246.76	9.78	
7	Germany	857.6	10.4	
8	Canada	614.33	18.81	
9	UK	585.71	9.66	
10	South Korea	514.53	10.53	
11	Iran	471.48	7.25	
12				

12. Chang **the paper size** to **A3**.

13. Change the paper **orientation** to **landscape**.

14. Change the **top and bottom margin** to **1.5"**

Unit 5: Using Microsoft Excel

Lesson 4: (Formulas Tab)

Objectives

- identify formulas
- structure formulas
- use some common built-in functions
- understand what absolute and relative formulas are
- use formulas correctly
- Using if function

Working With Formulas:

- Formulas is simply calculation using numbers (or other types of data) using cell references
 - Can be single cell or more complex with many cell references plus built in functions
 - To begin formula in any cell, must type =
 - Enter cell address into formula by typing it directly into cell, or point to cells.
 - Calculates in “natural order”
- * Multiplication + Addition
 / Division - Subtraction

	A	B	C	D	E
1					
2	Overtime Calculations				
3	Name Of Employee	Rate/Hr	Work Hours	Overtime Hours	Overtime Pay
4	Jone	16.75	42.0	2.0	=B4*(D4*1.5)
5					
6					
7					
8	overtime Pay= Rate/Hr *(overtime Hours*1.5)				
9					

	A	B	C	D	E	F	G	H	I
1	subjects								
2	Name	IC3	Math	English	Life	Computer Skills	Total	Percent	
3	Mohammed	23	18	15	26	11	93	=(G3/150)*100	

Some Comments (Notes) can display in a worksheet:

- **#NAME:** The text has been entered in a formula which is not allowed
- **#DIV#/0!:** Formula contains reference divided by 0
- **#VALUE! :** Formula contains incorrect data reference.
- **#####:** The column is not wide enough to display the number
- **#N/A:** The value is not available

Common Built-In Function:

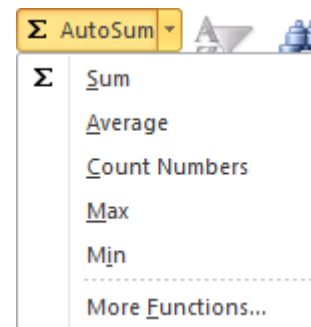
=SUM Sums range of specified cells.

=AVERAGE Averages specified cells (totals range and divides total by number of entries)

=MIN Display minimum value of specified cells

=MAX Display maximum value of specified cells

=COUNT Counts number of non-blank cells in specified range



	A	B	C	D	E	F	G	H	
1	subjects								
2	Name	IC3	Math	English	Life	Computer Skills	Total		
3	Mohammed	23	18	15	26	11	=SUM(B3:F3)		
4	Ahmed	26	28	23	30	25	132		
5	Abdullah	9	13	21	20	19	82		
6	Hamed	19	12	19	30	30	110		
7	Sultan	10	17	20	23	8	78		
8	Minimum Mark								
9	Maximum Mark								
10	Marks Average								

*Calculate the total using Sum from Auto Sum option

	A	B	C	D	E	F	G	
1								
			subjects					
2	Name	IC3	Math	English	Life	Computer Skills	Total	
3	Mohammed	23	18	15	26	11	93	
4	Ahmed	26	28	23	30	25	132	
5	Abdullah	9	13	21	20	19	82	
6	Hamed	19	12	19	30	30	110	
7	Sultan	10	17	20	23	8	78	
8	Minimum Mark	=MIN(B3:B7)		15	20	8	78	
9	Maximum Mark							
10	Marks Average							

*Calculate the Minimum Mark Using Min function from Auto Sum option.

	A	B	C	D	E	F	G	
1								
			subjects					
2	Name	IC3	Math	English	Life	Computer Skills	Total	
3	Mohammed	23	18	15	26	11	93	
4	Ahmed	26	28	23	30	25	132	
5	Abdullah	9	13	21	20	19	82	
6	Hamed	19	12	19	30	30	110	
7	Sultan	10	17	20	23	8		
8	Minimum Mark	9	12	15	20	8		
9	Maximum Mark	=MAX(B3:B7)		23	30	30		
10	Marks Average							

*Calculate the Maximum Mark Using Max function from Auto Sum option.

	A	B	C	D	E	F	G	
1								
			subjects					
2	Name	IC3	Math	English	Life	Computer Skills	Total	
3	Mohammed	23	18	15	26	11	93	
4	Ahmed	26	28	23	30	25	132	
5	Abdullah	9	13	21	20	19	82	
6	Hamed	19	12	19	30	30	110	
7	Sultan	10	17	20	23	8		
8	Minimum Mark	9	12	15	20	8		
9	Maximum Mark	26	28	23	30	30		
10	Marks Average	=AVERAGE(B3:B7)			25.8	18.6		

*Calculate the Average Mark Using Average function from Auto Sum option.

Using Absolute & Relative Addresses:

- Most formulas entered are relative, which means if you copy formula with relative cell address and paste to another cell, Excel automatically adjusts address to reflect new location
- Absolute cell address is exact or fixed location on worksheet
- To change relative cell address to absolute cell address:
 - Enter dollar sign before row number and column letter
 - press **F4** once you enter cell address
- **F4** is toggle that changes from full absolute to absolute column or row references each time you press key

Examples:

Cost Tracker- Manufacturing Materials		
Tax Rate:		7%
Calculate the Tax Rate.		
Tax on Item = Cost * Tax Rate		
Item	Cost	Tax on Item
Motherboard	215	=B5*\$B\$2
Video card	98	
Case	75	
Modem	124	
Memory	136	
Processor	145	
Hard Drive	265	
Floppy Drive	50	

Absolute Address

Using if analyses:



To use if function on Formula Tab select

To calculate the student's total grade that his grade greater than 95 passes otherwise he is fail follows the steps:

	A	B	C	D	E	F	G	H	I
1	subjects								
2	Name	IC3	Math	English	Life	Computer Skills	Total	Pass/fail	
3	Mohammed	23	18	15	26	11	93	=	
4	Ahmed	26	28	23	20	25	132		
5	Abdullah	9	13	21					
6	Hamed	19	12	19					
7	Sultan	10	17	20					
8	Minimum Mark	9	12	15					
9	Maximum Mark	26	28	23					
10	Marks Average	17.4	17.6	19.6					
11									
12									
13									
14									
15									
16									
17									

Insert Function

Search for a function:

Type a brief description of what you want to do and then click Go

Or select a category: Most Recently Used

Select a function:

- CONCATENATE
- IF**
- DATE
- SUM
- AGGREGATE
- AVERAGE
- MIN

IF(logical_test,value_if_true,value_if_false)

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

[Help on this function](#)

OK Cancel

	A	B	C	D	E	F	G	H	I	J
1	subjects									
2	Name	IC3	Math	English	Life	Computer Skills	Total	Pass/fail		
3	Mohammed	23	18	15	26	11	93	=IF()		
4	Ahmed	26	28	23	30	25	132			
5	Abdullah	9	13	21	20	19	82			
6	Hamed	19	12	21						
7	Sultan	10	17	21						
8	Minimum Mark	9	12	19						
9	Maximum Mark	26	28	23						
10	Marks Average	17.4	17.6	19.6						
11										
12										
13										
14										
15										
16										

Function Arguments

IF

Logical_test | = logical

Value_if_true | = any

Value_if_false | = any

=

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

Logical_test is any value or expression that can be evaluated to TRUE or FALSE.

Formula result =

[Help on this function](#)

OK Cancel

IF x ✓ f_x =IF(G3>95,"pass",fail)

	A	B	C	D	E	F	G	H	I
1	subjects								
2	Name	IC3	Math	English	Life	Computer Skills	Total	Pass/fail	
3	Mohammed	23	18	15	26	11	93	pass",fail)	
4	Ahmed	26	28	23	30	25	132		
5	Abdullah	9	13	21	20	19	82		
6	Hamed	19	12	19	30	30	110		
7	Sultan	10	17						
8	Minimum Mark	9	12						
9	Maximum Mark	26	28						
10	Marks Average	17.4	17.6	1					
11									
12									
13									
14									
15									
16									

Function Arguments

IF

Logical_test G3>95 = FALSE

Value_if_true "pass" = "pass"

Value_if_false fail =

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

Value_if_false is the value that is returned if Logical_test is FALSE. If omitted, FALSE is returned.

Formula result =

[Help on this function](#)

Then use the fill to calculate the rest of the cells

	subjects								
	Name	IC3	Math	English	Life	Computer Skills	Total	Pass/fail	
3	Mohammed	23	18	15	26	11	93	fail	
4	Ahmed	26	28	23	30	25	132		
5	Abdullah	9	13	21	20	19	82		
6	Hamed	19	12	19	30	30	110		
7	Sultan	10	17	20	23	8			
8	Minimum Mark	9	12	15	20	8			
9	Maximum Mark	26	28	23	30	30			
10	Marks Average	17.4	17.6	19.6	25.8	18.6			
11									

The final Result

1	subjects							
2	Name	IC3	Math	English	Life	Computer Skills	Total	Pass/fail
3	Mohammed	23	18	15	26	11	93	fail
4	Ahmed	26	28	23	30	25	132	pass
5	Abdullah	9	13	21	20	19	82	fail
6	Hamed	19	12	19	30	30	110	pass
7	Sultan	10	17	20	23	8		
8	Minimum Mark	9	12	15	20	8		
9	Maximum Mark	26	28	23	30	30		
10	Marks Average	17.4	17.6	19.6	25.8	18.6		

Exercise

15. Open Ms .Excel, and save it as Formula Tab Workbook

16. Type following table and answer the question:

	A	B	C	D
1	Deduction Calculation For Employee			
2		Deduction Rate	0.06	
3	Last Name	Gross Salary	Deduction	Net Salary
4	James D.	\$ 39,876.00		
5	Smith B.	\$ 45,789.00		
6	Wilisom C.	\$ 41,245.00		
7				
8				
9	a. Calculate the "Deduction"	Note: Deduction= Gross Salary*Deduction Rate		
10	b. Calculate the "Net Salary"	Note: Net Salary= Gross Salary+Deduction		
11				

3. By using Auto Sum Option calculate the following:

	A	B	C	D	E	F
1	Area Sales Data					
2	Area	Jul	Aug	Sep	Oct	Total
3	London	5000	4500	600	5400	
4	Brighton	4500	4550	3800	4000	
5	Epsom	3000	2950	4500	4700	
6	Portsmouth	4800	3300	3800	3800	
7	Max					
8	Min					
9	Average					

4. Calculate the following:

	A	B	C	D	E
1					
2	Overtime Calculations				
3	Name Of Employee	Rate/Hr	Work Hours	Overtime Hours	Overtime Pay
4	Jone	16.75	42.0	2.0	
5	Sam	15.75	36.5	0.0	
6	Rola	17.75	43.0	3.0	
7					
8	overtime Pay= Rate/Hr *(overtime Hours*1.5)				
9					

5. By using IF Function fill the Judgement column with (Match or Unmatched) comment

(Note: use the following formula: =if(Target Price= Actual Price, "Match", "Unmatched")

	A	B	C	D	E
1	NO	Parts	Target Price	Actual Price	Judgement
2		1 PCB	1,50	1,50	
3		2 connector	0,30	0,20	
4		3 Spring	0,40	0,40	
5		4 Sensor	0,01	0,01	
6		5 Hexagon	3,40	3,50	

Unit 5: Using Microsoft Excel

Lesson 5: Review Tab

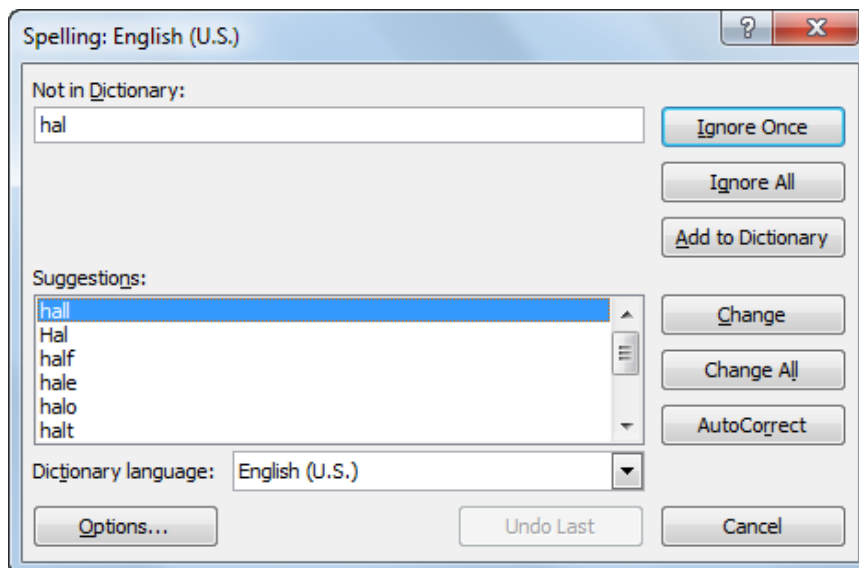
Objectives

- Using Spell Checker.

Using Spell Checker

Use the spell check features on text labels only – still need to proof values and formulas in your worksheet!. When the spell checker runs, it displays words not found in dictionary. To activate Spelling feature:

- On **Review** tab, in **Proofing** group, click **Spelling**
- Press **F7**



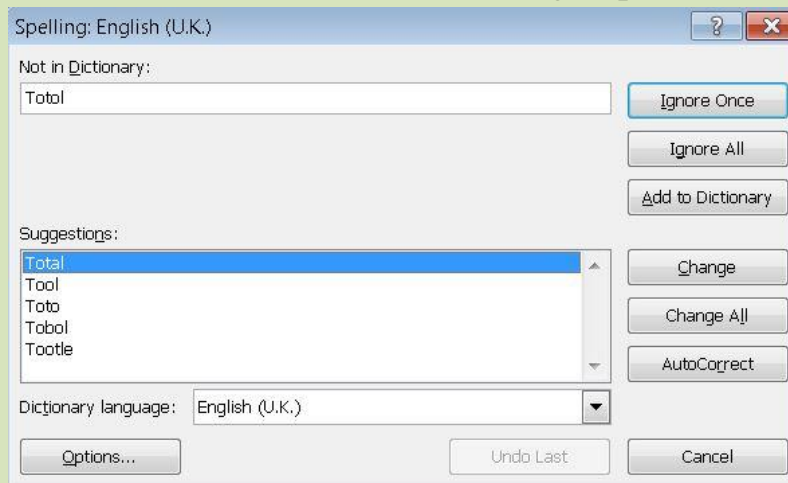
Exercise

17. Open **Ms .Excel**, and save it as **CO3 Emission Workbook**

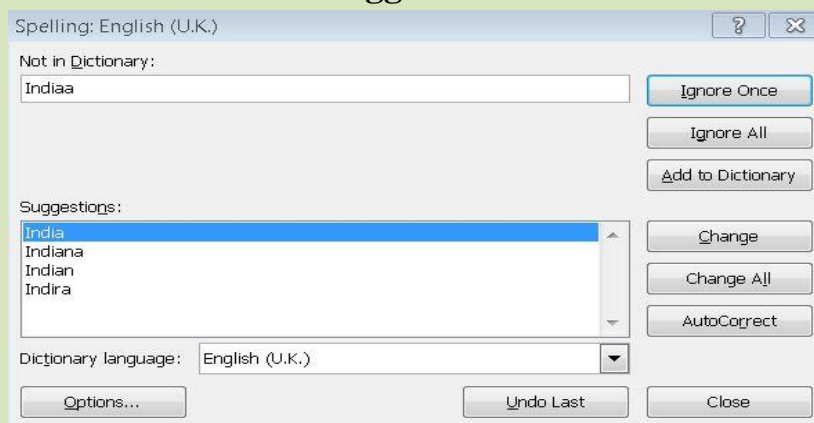
18. Type following text:

	A	B	C	D
1	Country	Total	Per Capita	
2	China	6017.69	4.58	
3	USA	5902.75	19.78	
4	Russia	1704.36	12	
5	Indiaa	1293.17	1.16	
6	Japan	1246.76	9.78	
7	Germany	857.6	10.4	
8	Canada	614.33	18.81	
9	UK	585.71	9.66	
10	South Korea	514.53	10.53	
11	Iran	471.48	7.25	
12				

19. On the **Review** tab, in the **Proofing** group, click **Spelling**.



20. Select **“Total”** in the **Suggestions** list and then click **Change**.



5. Click **Ignore Once** as this is the name of Country.



6. Click **OK**.
7. **Save** and **close** the document.

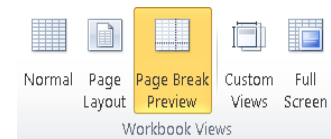
Unit 5: Using Microsoft Excel 2010

Lesson 6: View Tab

Objectives

- Change Workbook views
- Change Show
- Set the zoom level to the document
- Change Freeze Pane
- Split, Hide and Unhide worksheet
- Switching between Documents

Change Workbook views

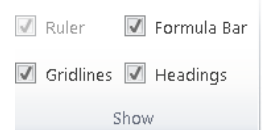


The worksheet Views contain different views:

- **Normal layout:** View the document in normal view
- **Page layout:** View the document as it will appear on the printed document
- **Page Break Preview:** View a preview of where page will break when this document is printed.
- **Custom Views:** Save a set of display and print settings as custom view.
- **Full Screen:** View the document in full screen mode.

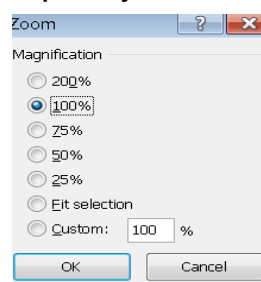
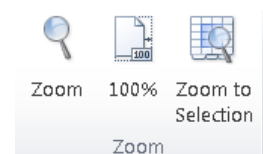
Change Show

- **Formula Bar:** View the formula bar, in which you can enter text and formulas into cells.
- **Gridlines:** Show the lines between rows and columns in the sheet to make editing and reading easier.
- **Heading:** Show row and columns heading.

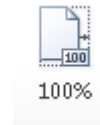


Set the zoom level to the document

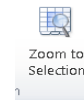
On view tab select zoom to specify the zoom level of the document



To zoom the document to 100% of the normal size on view tab select

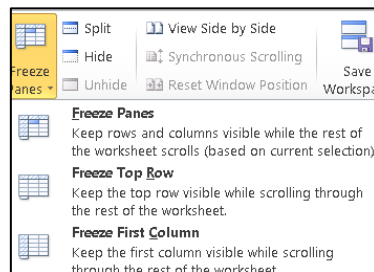


On view tab select **zoom to selection**, to zoom the work sheet to that currently selected range of cells fills the entire windows



Change Freeze Pane

Keep a portion of the sheet visible while the rest of the sheet scrolled.



Split, Hide and Unhide worksheet

- **Spilt worksheet**

Spilt the windows into multiple resizable pane containing views of your worksheet



- **Hide worksheet**

Hide the current window so that cannot be seen.



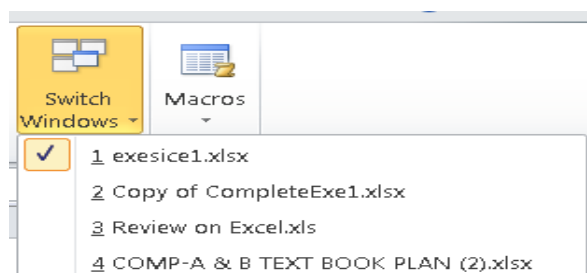
- **Unhide worksheet**

Unhide any windows hidden by the hide windows feature

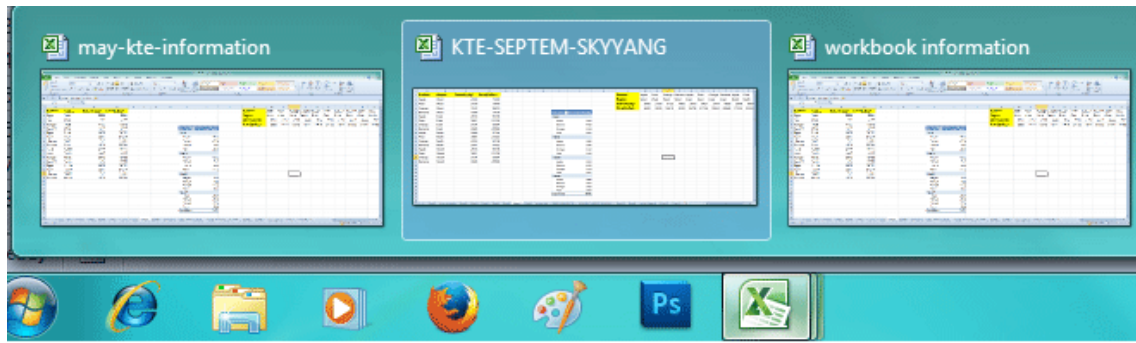


Switching between Documents

- Can switch between multiple documents:
- On **View** tab, in **Window** group, click **Switch Windows**



- Click button for document on taskbar



Exercise

21. Open Ms .Excel, and save it as **view tab Exercise.**

22. Type following :

	A	B	C	D
1	Country	Total	Per Capita	
2	China	6017.69	4.58	
3	USA	5902.75	19.78	
4	Russia	1704.36	12	
5	Indiaa	1293.17	1.16	
6	Japan	1246.76	9.78	
7	Germany	857.6	10.4	
8	Canada	614.33	18.81	
9	UK	585.71	9.66	
10	South Korea	514.53	10.53	
11	Iran	471.48	7.25	
12				

23. Show the **Gridlines** and **Headings** in the print page

24. Freeze the **heading** row

25. **Hide** sheet2.

Unit 6: Using Microsoft PowerPoint

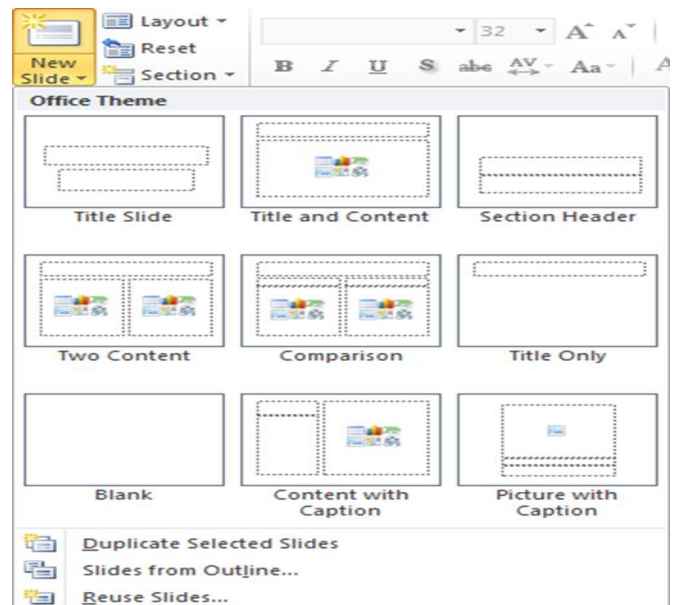
Lesson 1: Home Tab

Objectives

- Creating new slide
- Changing the slide layout
- Duplicating/Deleting Slides
- Working with Text
- Using Cut, Copy and Paste
- Formatting Text Characters
- Working with Indents
- Aligning Text
- Working with Indents
- Setting the Paragraph Spacing
- Working with Styles
- Finding Items
- Replacing Items
- Selecting Items

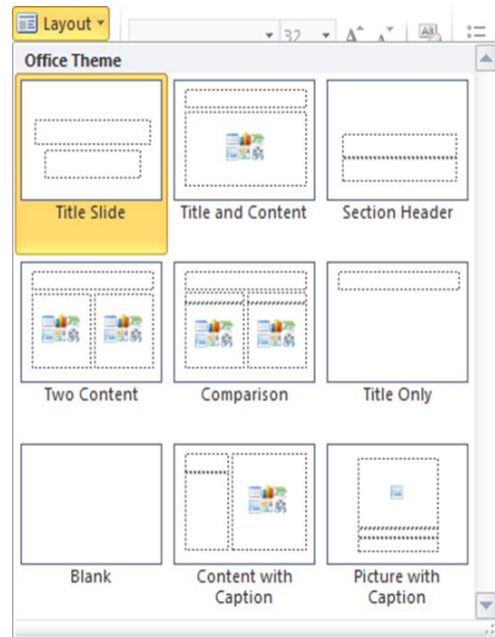
Creating new slide

- To insert new slide:
 - On Home tab, in Slides group, click New Slide
 - For specific layout, on Home tab, in Slides group, click arrow for New Slide, and click layout
 - Press **Ctrl** + **M**
 - If in last placeholder, press **Ctrl** + **Enter**
 - Right-click slide in Outline or Slides tab and click New Slide.



Changing the Slide Layout

- By default, new presentation starts with Title Slide layout, followed by Title and Content
- Can change layout of any slide any time
- To change slide layout:
- On Home tab, in Slides group, click Layout
- Right-click slide in Slides tab or Slide pane and click Layout



Duplicating/Deleting Slides

- To duplicate slide, select it in Slides tab or Outline tab and then:
- On Home tab, in Slides group, click arrow for New Slide, click Duplicate Selected Slides
- In Slides or Outline tab, right-click slide and click duplicate Slide
- In Slides or Outline tab, press **Ctrl** + **D**
- To delete slide, select it and then:
- Press **Delete**
- In Slides or Outline tab, right-click slide and click delete Slide

Working with Text

• Typing and Inserting Text

To insert the text, type from key board and as a result the text will appear on the screen, at the location of the blinking cursor. Right, left, up or down arrow keys (buttons) can be used to move the cursor or we can

also use the left button of the mouse. Following shortcuts are helpful for the movement of cursor.

Move Action	Keystroke
Beginning of the line	Home
End of the line	END
Top of the document	CTRL+HOME
End of the document	CTRL+END

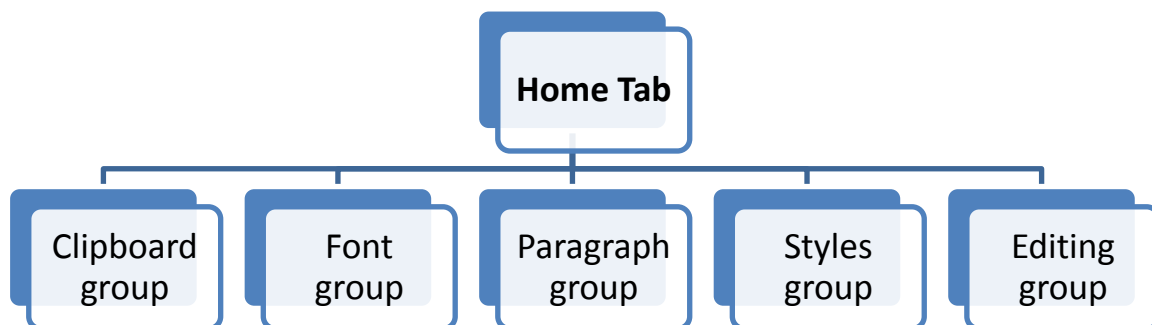
• **Selecting Text**

If you want to change the attributes of the text, it should be highlighted. Drag the mouse over the required text and keep the left mouse button. Or hold down the **SHIFT** key from the key board and use the arrow key (left, right, up, down) to select the desired text. Following shortcuts are helpful for the selection of a portion of text:

Selection	Technique
Whole word	Double-click within word.
Whole paragraph	Triple-click within the paragraph.
Several word or lines	Drag the mouse over the words, or hold down SHIFT while using the arrow keys.
Entire document	Choose Home Tab → Editing group → Select → Select All or press CTRL+A .


• **Deleting Text**

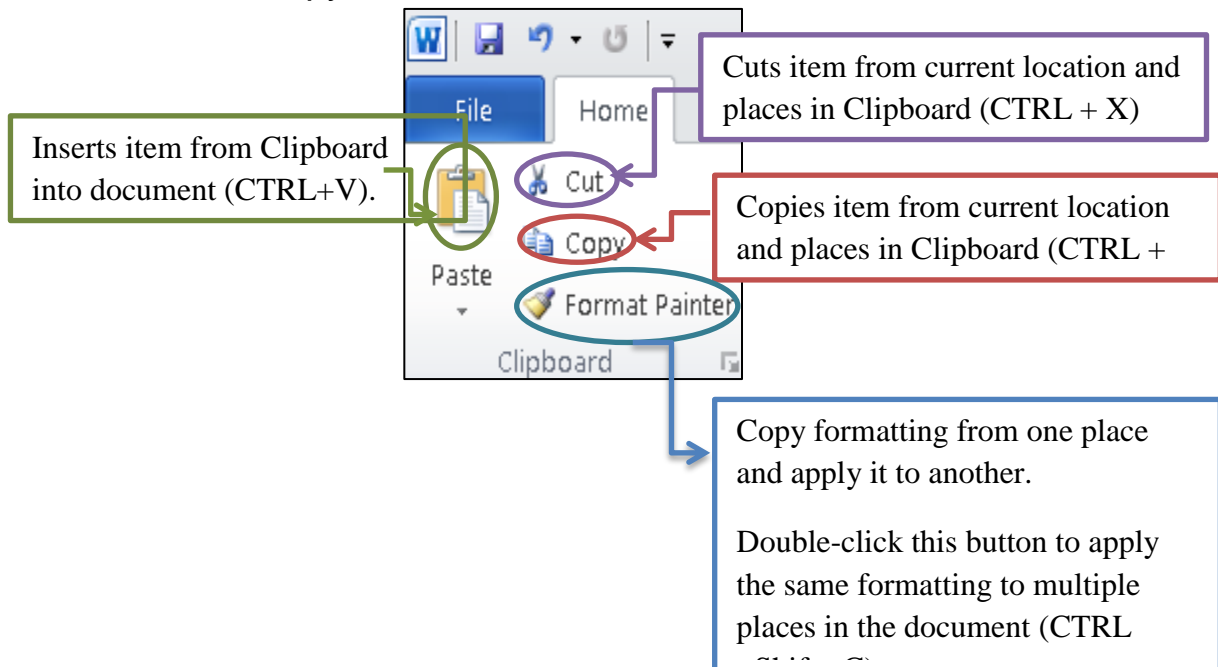
There are two keyboard keys **Delete** and **Backspace** to delete the text. **Backspace** key is used to delete the text to the left of the cursor and **Delete** is used to delete the text to the right of the cursor. If you want to delete a large amount of text, select text and press **Delete**




Clipboard group

- Using Cut, Copy, Paste and Format Painter

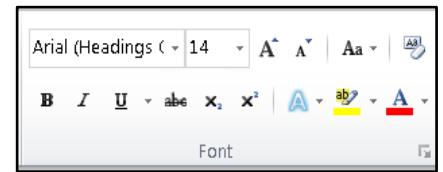
- To cut item, select item and then:
 - On **Home** tab, in **Clipboard** group, click 
 - Press **Ctrl** + **X**
 - right-click item and click **Cut**
- To copy item, select item and then:



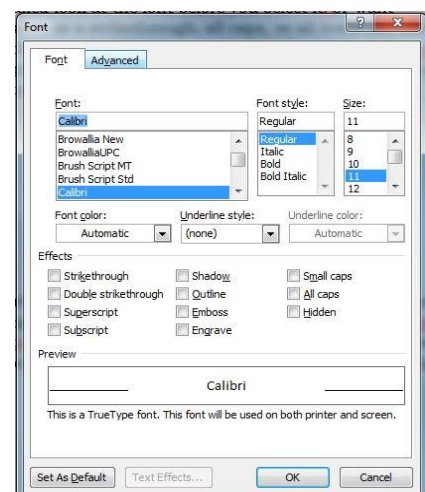
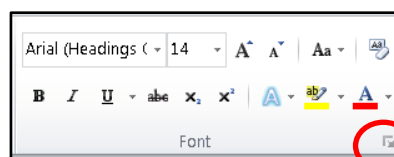
- On the **Home** tab, in the **Clipboard** group, click 
 - Press **Ctrl** + **C**
 - Right-click item and click **Copy**
- To paste item, place insertion point where to paste item and then:
 - On the **Home** tab, in the **Clipboard** group, click **Paste**
 - Press **Ctrl** + **V**
 - Right-click the item and then click **Paste**

Font group

- **Font:** Describes typeface of characters on screen and in print or press (**CTRL +Shift+ F**).
- **Font Size:** Refers to height of characters or press (**CTRL +Shift+ P**)
- **Grow Font:** Increase the font size or press (**CTRL +Shift+ >**)
- **Shrink Font:** Decrease the font size or press(**CTRL +<**)
- **Change Case:** Change all the selected text to UPPER CASE, lowercase, or other common capitalization.
- **Clear formatting:** Clear all the formatting from the selection, leaving only the plain text.
- **Bold:** Make the selected text Bold or press (**CTRL +B**).
- **Italic:** Italicize the selected text or press (**CTRL +I**).
- **Underline:** underline the selected text or press (**CTRL +U**).
- **Strikethrough:** Draw a line through the middle of the selected text.
- **Subscript:** Create small letters below the text baseline (**CTRL +=**).
- **Superscript:** Create small letters above the text baseline (**CTRL ++**).
- **Text Effect:** Apply a visual effect to the selected text, such as a shadow, glow or reflection.
- **Text Highlight Colour:** Make text like look like it was marked with a highlighter pen.
- **Font colour:** change the text colour

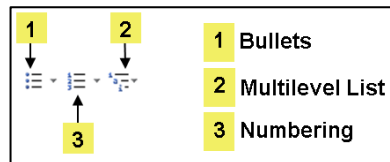


To view more additional options to enhance the text, you can access **Font dialog box launcher**.

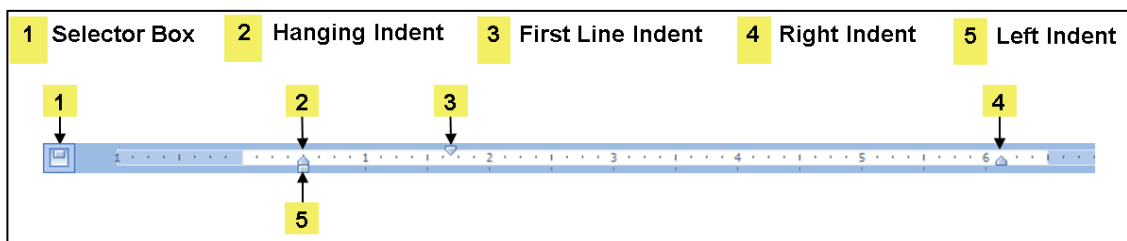


Paragraph group

- **Bullets and Numbering:** Use bullets if no priority on list items, numbers to prioritize list, or Outline feature to show progression.



- **Decrease & Increase Indent:** Decrease & Increase Indent level of the paragraph.
 - You can set indents using indent markers on ruler



- **Sort:** Alphabetize the selected text or sort numerical data.
- **Show/Hide ¶:** Show paragraph marks and other hidden formatting symbol (CTRL +*). ¶

- **Aligning Text:** Align text to left, right, center.

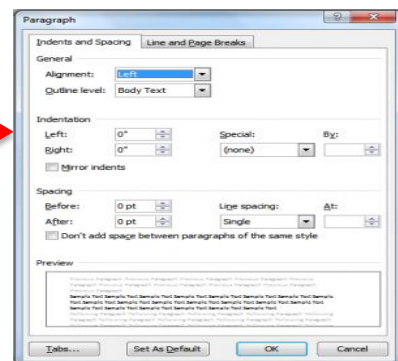
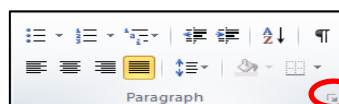


Align Left	Aligns text to left margin with ragged or uneven edge on right side. (CTRL +L).
Center	Aligns text exactly between left and right margins (CTRL +L).
Align Right	Aligns text to right margin with ragged left edges (CTRL +R).

Justify	Aligns text so left and right edges of text flush with margins and each line of text evenly spaced between margins, except for last line. (CTRL +J) .
---------	--------------------------------------------------------------------------------------------------------------------------------------------------------------

- **Line and paragraph Spacing:** Change the spacing between lines
- **Shading:** Colour the background behind the selected text or paragraph.
- **Border:** Customize the border of the selected cell or text.

To view more additional options to enhance the text, you can access **Paragraph dialog box launcher**.



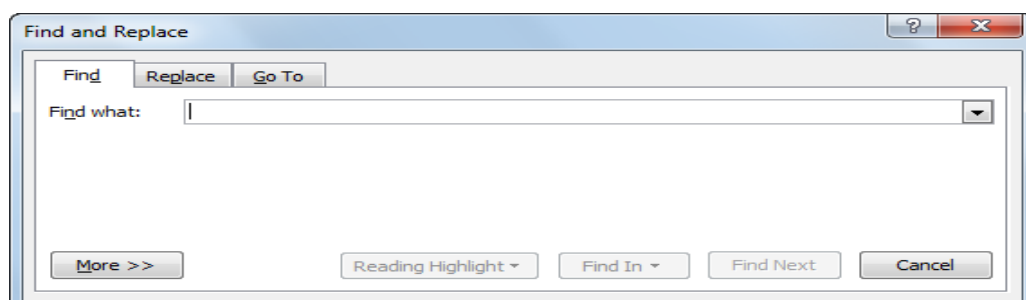
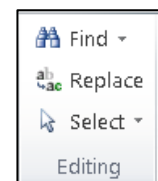
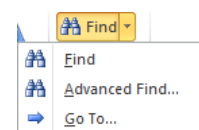
Editing group

- **Finding Items**

Can locate occurrences of specific words, phrases, symbols, codes, or any combination of items

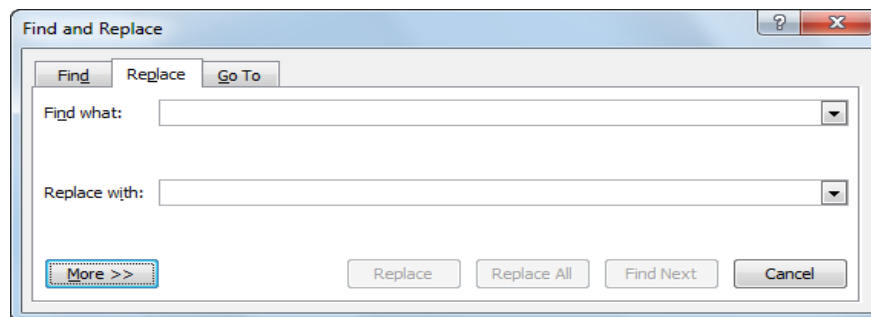
- To activate the Find feature:

- On the **Home** tab, in the **Editing** group, click **Find**; or
- click the page number box on the status bar and click the **Find** tab; or press **(CTRL+F)**



- **Replacing Items**

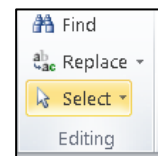
- Find item to replace with something you specify
- Can apply same search criteria as for Find feature
- To activate Replace feature:
 - On **Home** tab, in **Editing** group, click **Replace**
 - Press **(CTRL + H)**
 - If Find and Replace dialog box open, click **Replace** tab



- **Selecting Items**

Select text or objects in the document.

- To activate Select feature:



- On **Home** tab, in **Editing** group, click **Select**
- Press **(Ctrl+ A)**

Exercise

1. Open **PowerPoint**, and save it as **Home Tab Exercise**.

Save your document

2. By using the font **type Garamond**, **font size 16**, and **blue colour** type the following paragraph in slide number 1:

Types of computer

Computers can be generally classified by size and power as follows, though there is considerable overlap:

- ❖ Personal computer
- ❖ Workstation
- ❖ Minicomputer
- ❖ Mainframe
- ❖ Supercomputer

3. After typing the paragraph, do the following format:
 - A. Align the title center.
 - B. Apply a two lines underlines style for the word (**power**).
 - C. Make the **line spacing** of the paragraph to be(**1.5 lines**)
 - D. Make the space between the paragraph and the title **18pt**.
 - E. **Replace** the word “**computer**” by using “**PC**” word
 - F. Apply (superscript) effect for the word (**size**).
4. Save your file again.

References

1. **Model A:Computing Fundamentals and Using Microsoft Windows 7, Approved by Certiport.**
2. **<http://afis.ucc.ie/gkiely/IS6132/Lecture10.html>.**
3. **Basic Computing Skills, Approved by SQU, Collage of Science.**

Unit 6: Using Microsoft PowerPoint

Lesson 2: Insert Tab

Objectives

- Insert Table
- Insert chart
- Inserting Pictures
- Inserting Clip Art
- Drawing Objects
- Using Hyperlinks
- Inserting Headers and Footers
- Adding slide Numbering
- Adding Date & Time
- Inserting multimedia Objects

Insert Table:

To insert a table, use the following methods:

On the **insert tab**, in the **Tables** group, click **Table**. In the drop-down menu by dragging you can specify the number of columns and rows you want.

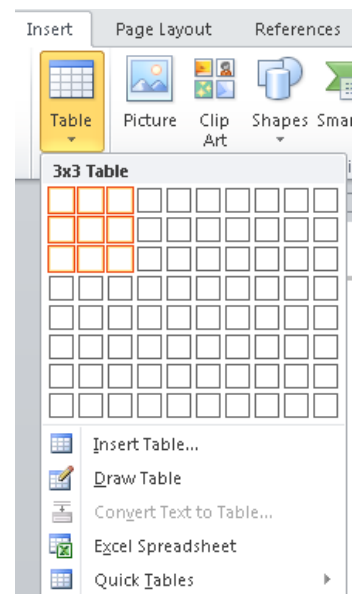
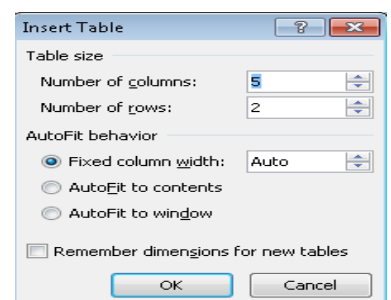
If you need table larger than 8 x 10, use the **Insert Table** feature. You can enter the number of columns and rows by typing the number into the box or using the incremental buttons.

Working with Text:

Insertion point in first cell of table for data entry

To move within table to enter text:

- Press **Enter** to add more lines of text in same cell; increases row height



- Use arrow keys to move through the text in the cell
- Use **Tab** to jump to next cell
- Use **Shift** + **Tab** to jump to previous cell

Selecting items in the Table

Entire Column	Move to top of column and click when you see ↓
Entire Row	Move cursor to selection bar and click at left of row
Multiple Columns or Rows	Click and drag across columns or rows
One Cell	Move cursor to lower left corner of cell and click when you see ↘
Multiple Adjacent Cells	Click and drag across those cells

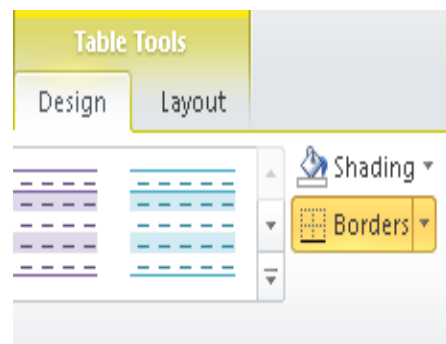
Formatting the Table:

Using Table Styles

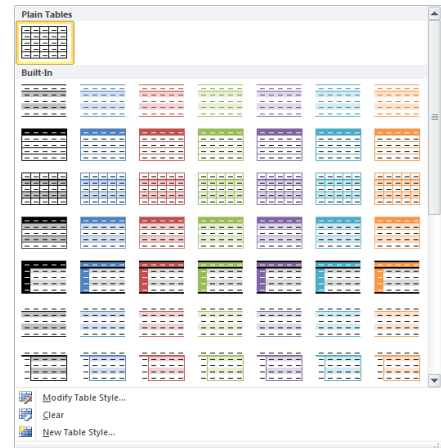
- To view Table Styles gallery, under Table Tools, on Design tab, in Table Styles group, click More
- Point at style to preview formatting

Modifying the Borders and Shading:

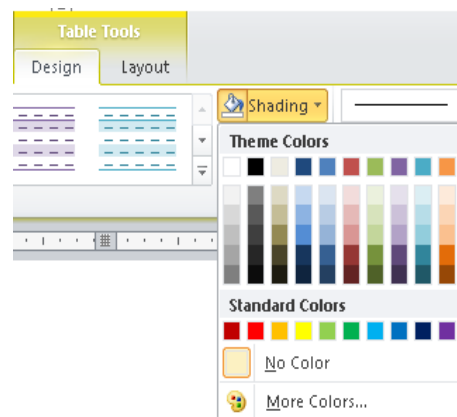
- Tables appear with single line borders around cells



- Can display different colours, styles, widths, or not at all
 - Under **Table Tools**, on **Design tab**, in **Table Styles group**, click arrow for **Borders**

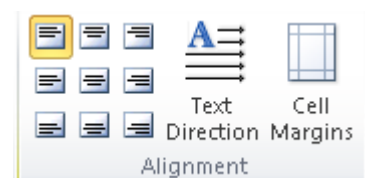


- Under **Table Tools**, on **Design tab**, in **Table Styles group**, click arrow for **Shading**



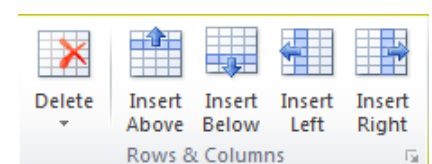
Changing the Alignment:

- To change vertical alignment of text, select cells and:
- Under **Table Tools**, on **Layout tab**, in **Alignment group**, click alignment option
- To change the text direction within the selected cells:
 - Under **Table Tools**, on **Layout tab**, click **Alignment group**, click **Text Direction**.



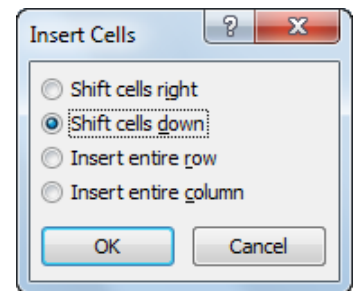
Inserting & Deleting Rows/Columns:

- To insert row or column, click where new row or column to go, then under **Table Tools**, on **Layout**

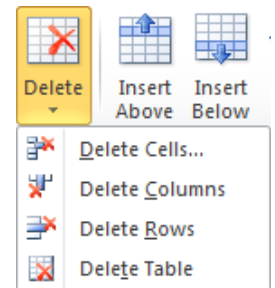


tab, in **Rows & Columns group**, click option

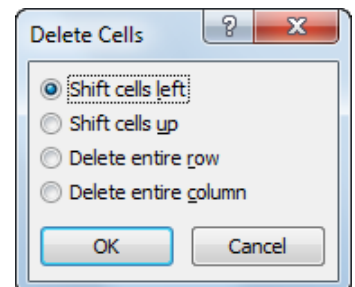
- To insert cells, under **Table Tools**, on **Layout tab**, in **Rows & Columns group**, click **Dialog box launcher**



- To delete cells, rows, columns, or entire table, under **Table Tools**, on **Layout tab**, in **Rows & Columns group**, click **arrow for Delete**, click option



- To delete specific cells, under **Table Tools**, on **Layout tab**, in **Rows & Columns group**, click **arrow for Delete**, click **Delete Cells**, click option

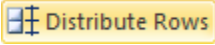



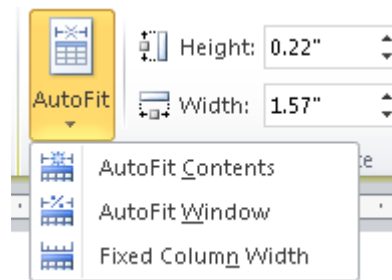
Adjusting the Width or Height:

- To adjust column width or row height:
 - Under **Table Tools**, on **Layout tab**, in **Cell Size group**, click incremental buttons or type



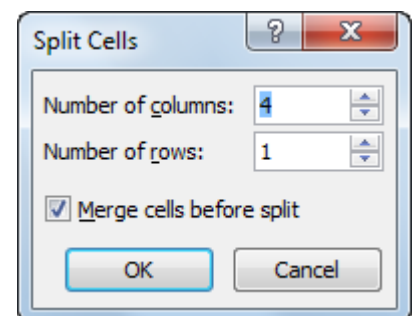
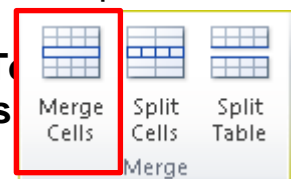
measurement to change Height or Width

- To distribute width for columns or height of rows evenly:
 - Under **Table Tools**, on **Layout** tab, in **Cell Size** group, click  **Distribute Rows** or  **Distribute Columns**
 - Under **Table Tools**, on **Layout** tab, in **Cell Size** group, click **AutoFit**



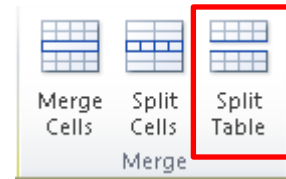
Merging and Splitting Cells:

- Can merge cells to create single cell, or be split into multiple columns or rows
- To merge cells, select cells and then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Merge Cells**
- To split cell into multiple cells, select cell and then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Split Cells**



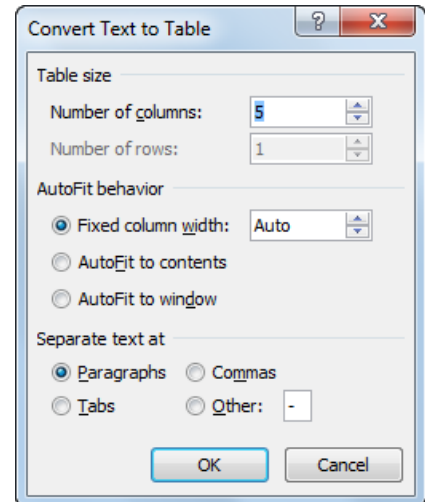
Splitting a Table

- Select cell in table row where you want to split table, then under **Table Tools**, on **Layout** tab, in **Merge** group, click **Split Table**
- Tables can only be split horizontally

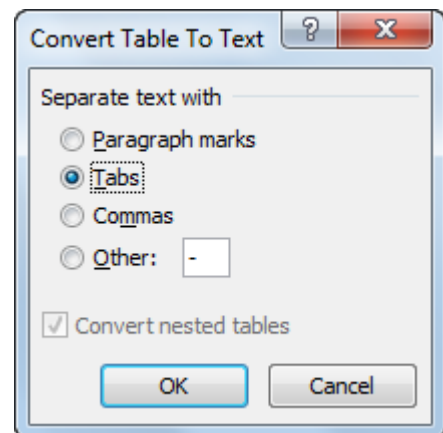


Converting Text or Tables:


- To convert text to table, select text and:
 - On **Insert** tab, in **Tables** group, click **Table**, click **Convert Text to Table**



- To convert table into text format, click in table, then under **Table Tools**, on **Layout** tab, in **Data** group, click **Convert to Text**



Sorting Information in a Table:

- Can sort in ascending or descending order
- Type of data determines sort type in table and how many columns of information
- To activate Sort, select cells and:
 - Under **Table Tools**, on **Layout** tab, in **Data** group, click **Sort**
 - On **Home** tab, in **Paragraph** group, click  **(Sort)**

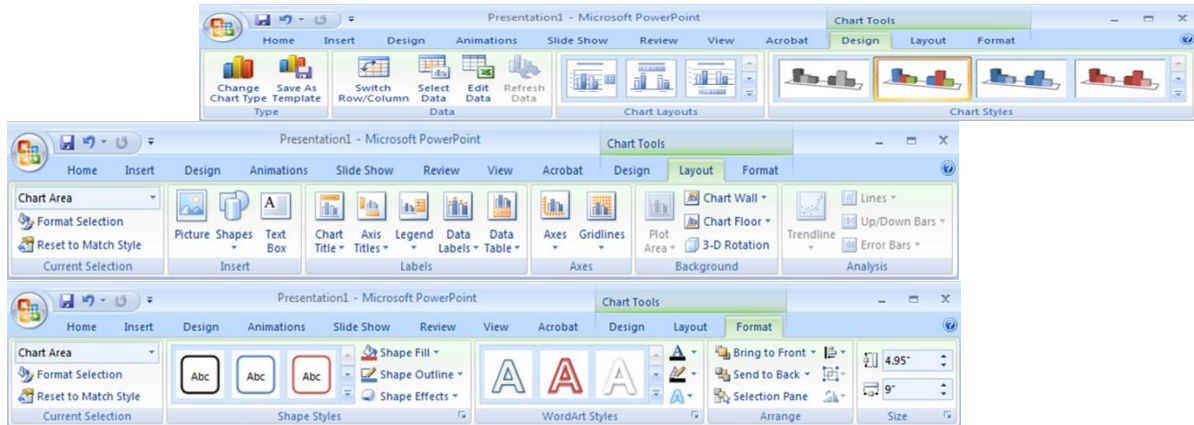


Creating a Chart

- To insert chart:
- On **Insert** tab, in **Illustrations** group, click **Chart**
- Click **Insert Chart** icon in **Title and Content** layout
- Chart appears along with **data series window**

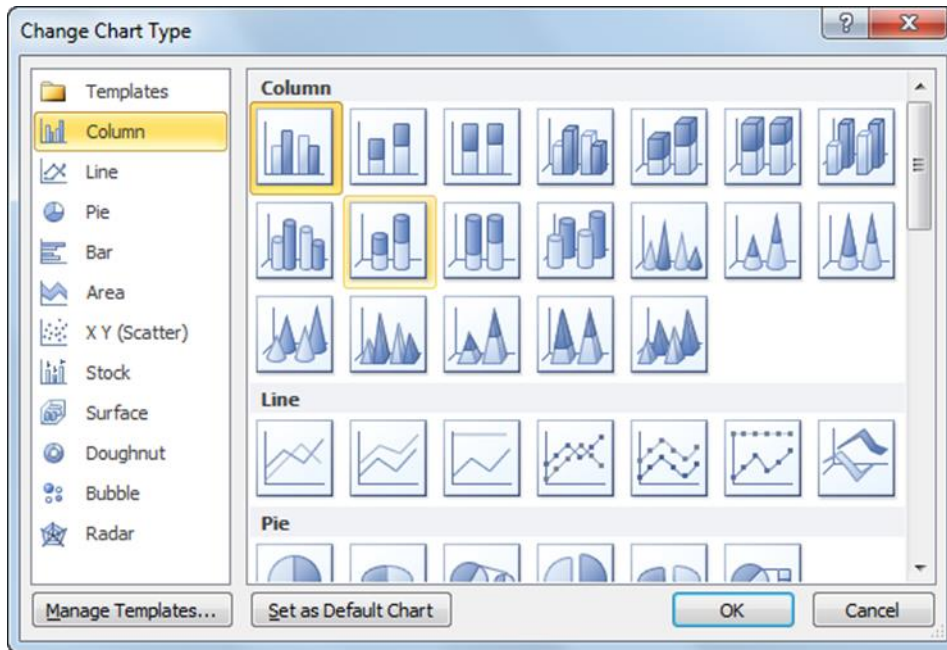
	A	B	C	D	E	F	G
1		Series 1	Series 2	Series 3			
2	Category 1	4.3	2.4	2			
3	Category 2	2.5	4.4	2			
4	Category 3	3.5	1.8	3			
5	Category 4	4.5	2.8	5			
6							
7							
8	To resize chart data range, drag lower right corner of range.						
9							

-
- Enter data for chart using Microsoft Chart tool, which simulates Excel spreadsheet, and uses same terminology as for worksheets
- Using Charts:
- Chart Tools ribbon tabs appear to manipulate or format chart and its contents.



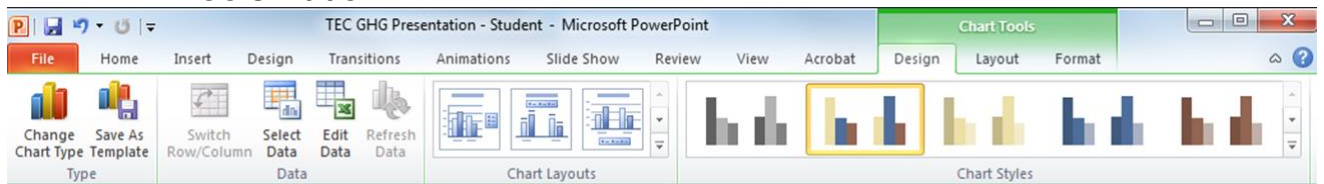
Changing the Chart Type:

- choose or change Chart Type:
 - Under Chart Tools, on Design tab, in Type group, click Change Chart Type
 - Right-click chart and click Change Chart Type

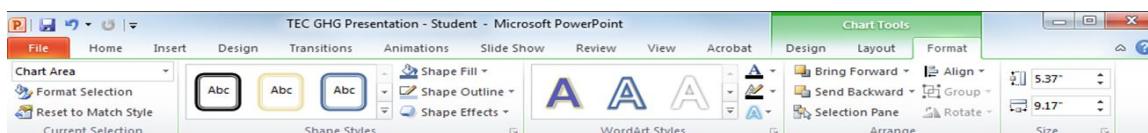


Adjusting the Data Series:

- Can change data series properties using Format tab of Chart Tools ribbon:

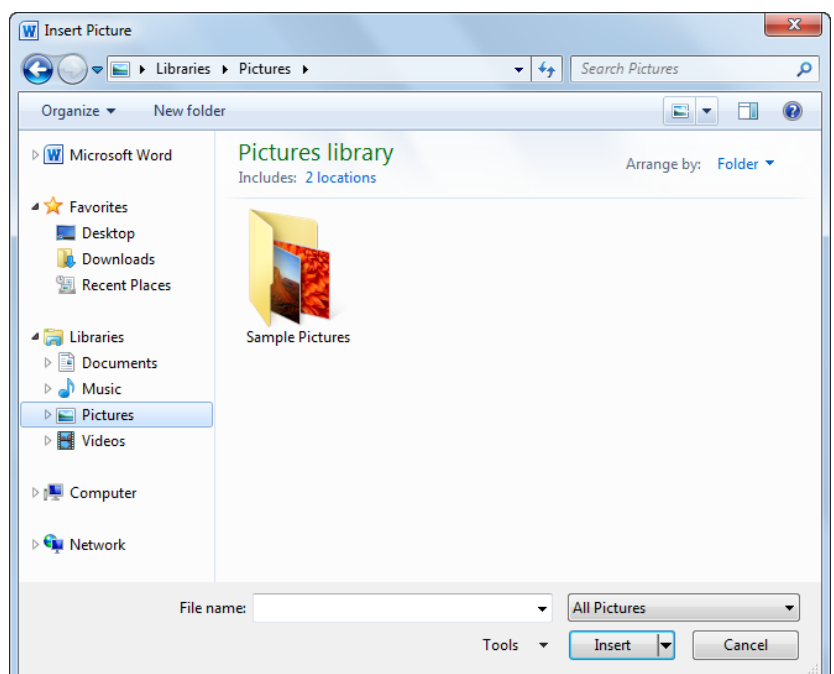


Use Format tab of Chart Tools ribbon:

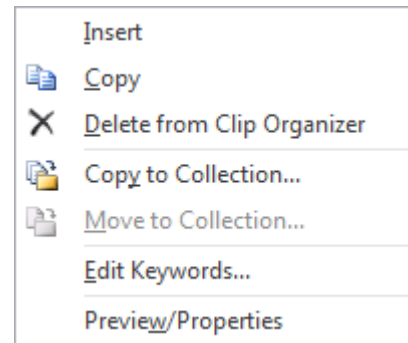


- Number of formatting options available depends on chart type

Inserting Pictures:



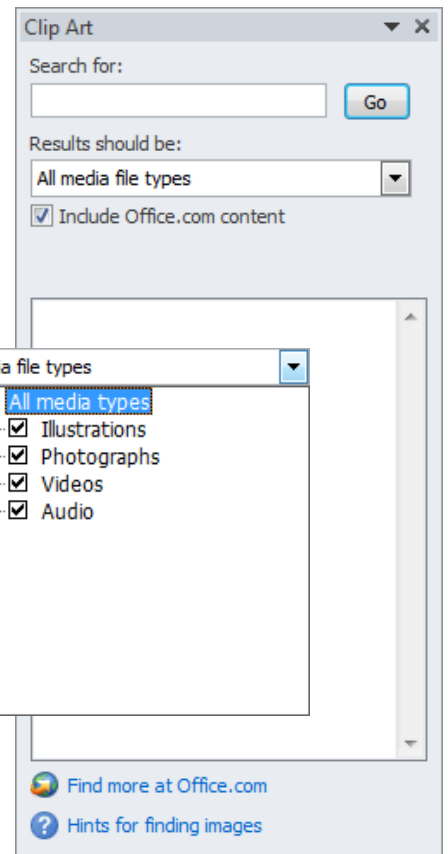
- Can add pictures to document from sources
- To insert picture, position pointer where you want picture to be, and on **Insert** tab, in **Illustrations** group, click **Picture**



Inserting Clip Art:

- Available online from Microsoft Office Online Web site with graphics you can download
- To insert Clip Art, position pointer where you want graphic to be, and on **Insert** tab, in **Illustrations** group, click **Clip Art**

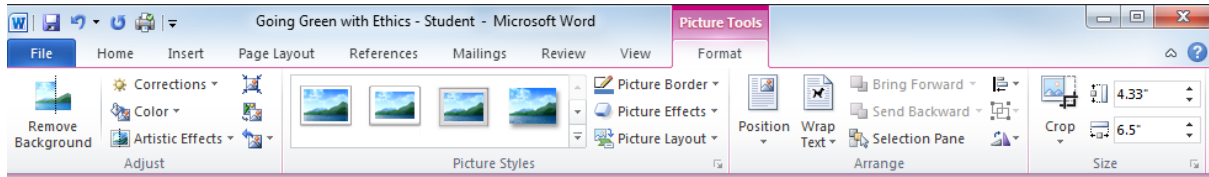
- **Search for**
 - Enter text for Word to search for specific clip art images.
- **Results should be**
 - Specifies media type to display.



- To insert picture from results of search, position pointer over image and:
 - Click image in list
 - point at graphic and click arrow beside it

Manipulating Pictures:

- Once you insert picture, **Picture Tools** ribbon appears and offers variety of ways to manipulate objects



To add picture style:

- Select **Picture Tools** , **Picture style** and select any option

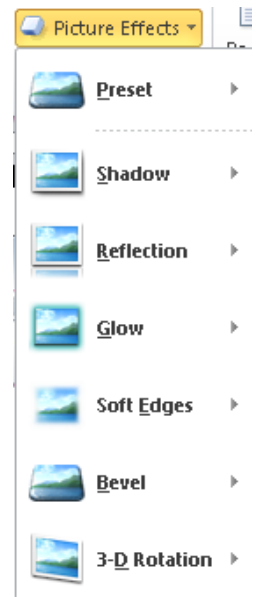


To add border to the picture:

- Select **Picture Tools**, **Picture Border**  and select any option

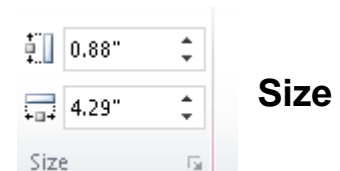
To apply effects to the picture:

- Select **Picture Tools**, **Picture Effects** and select any option



Sizing a Picture:

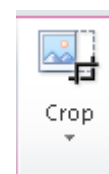
- To size picture: Select **Picture Tools**, **Group**



Cropping a Picture:

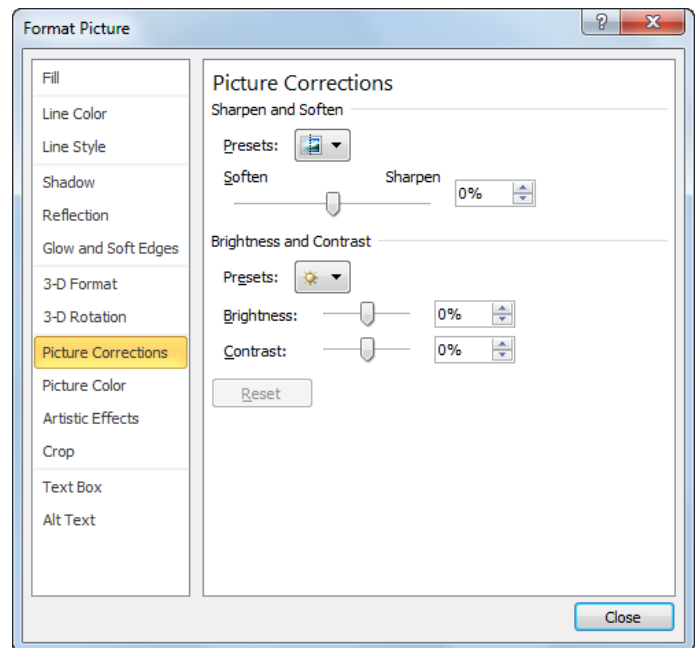
Refers to ability to “cut” certain portions of picture.

- To crop picture: Select **Picture Tools**, **Size Group**, select **crop**





Changing the Properties for a Picture:

- Way picture inserts depends on properties set for picture
- To change properties for selected picture:
 - Click appropriate feature from **Picture Tools Format** ribbon
 - Under **Picture Tools**, on **Format** tab, click **Dialog box launcher** for group properties to adjust
 - Right-click picture and click **Format Picture**



Moving a Picture:

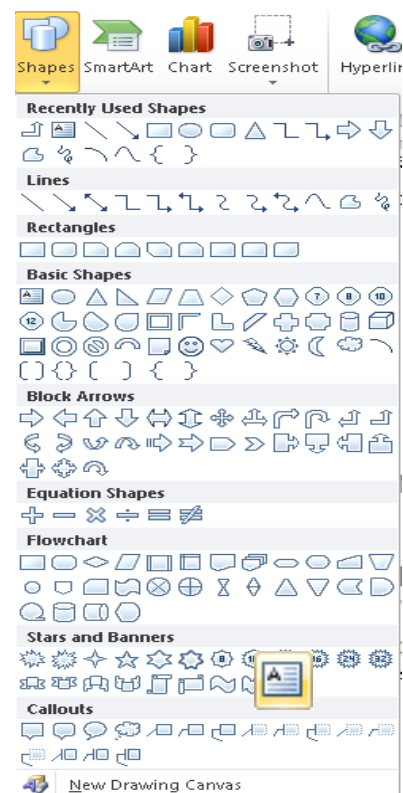
- Drag-and-drop method easiest way to move picture
- If inline object, mouse pointer displays  as you drag
- If floating object, mouse pointer displays  as you drag

Drawing Objects:

To insert shape: In **Insert Tab, Illustration Group**, select **shape**

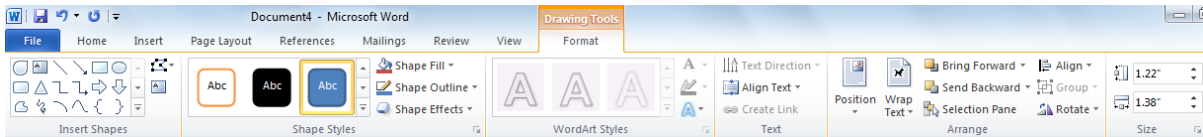
To insert text into object or edit text already there:

- Select object to display **Drawing Tools** ribbon, and then on **Format** tab, in **Insert Shapes** group, click **(Draw Text Box)**
- On **Insert** tab, in **Text** group, select **Text Box**



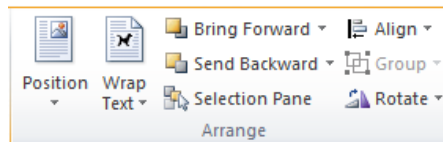
Editing Shapes:

- Refers to sizing, moving, or enhancing object and its properties
- Select object before making changes



Arranging Objects:

Under **Drawing Tools**, on **Format** tab, in **Arrange** group:

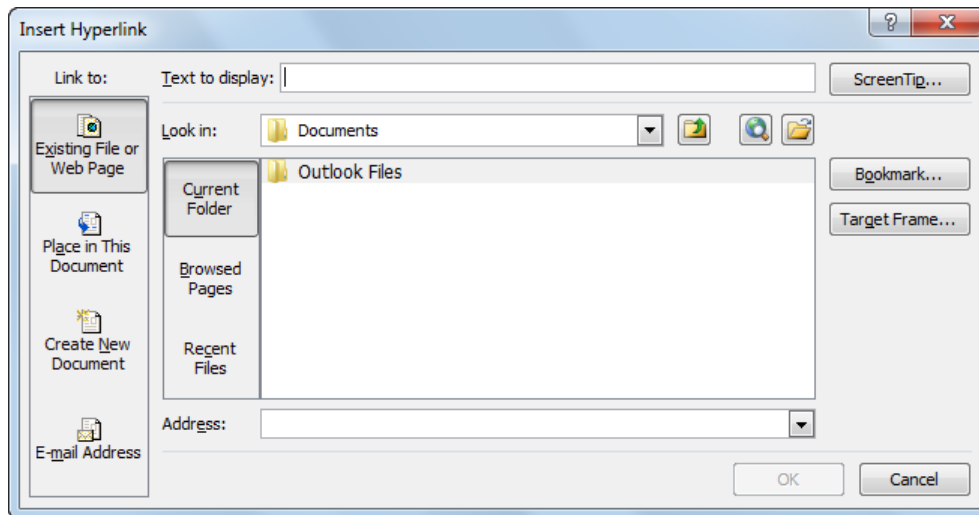


Group	Groups selected objects into single object, reverts to separate objects, or regroups objects ungrouped originally.
Bring Forward	Brings selected shape forward one layer, or to top layer.
Send Backward	Sends selected shape back one layer, or to last layer.
Align	Aligns edges of multiple objects along single line, or distributes objects evenly across page horizontally or vertically. Can view gridlines or set features of grid.
Rotate	Rotates or flips object in different directions.

Using Hyperlinks:

- Help navigate to different locations in document, to another document, to Web site, or to e-mail program
- Can set up hyperlinks anywhere in document

- To create hyperlink:
 - On **Insert** tab, in **Links** group, click **Hyperlink**
 - Press **Ctrl** + **K**

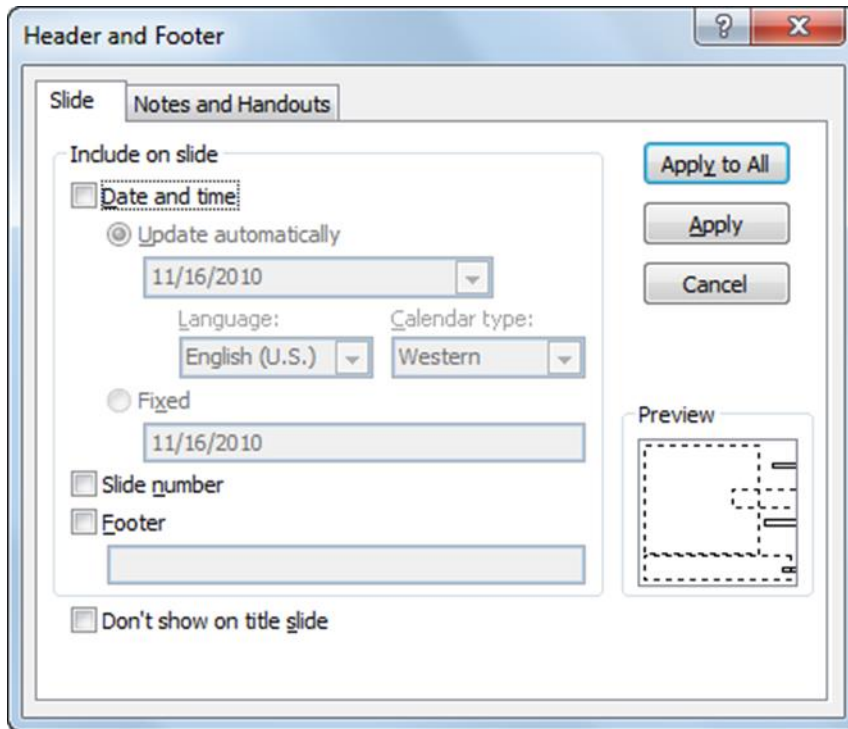


Inserting Headers and Footers:

Slides only display footers, while Notes and Handouts display both headers and footers

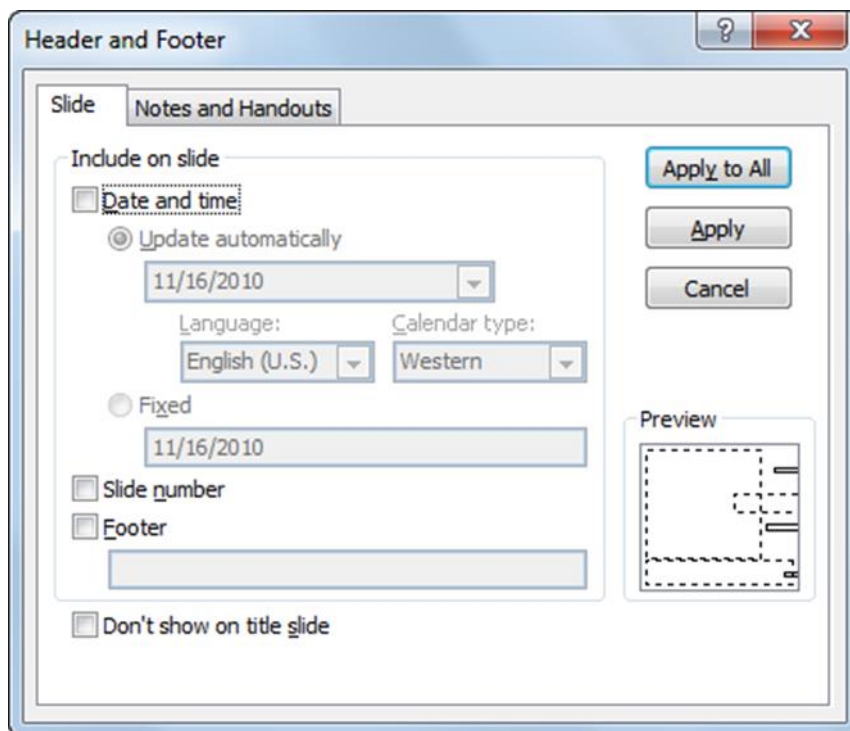
To insert header or footer, on Insert tab, in Text group, click Header & Footer

-To edit existing header or footer, double-click header or footer



Adding Page Numbering & Adding Date & Time:

- To add slide number and date and time;
- Go to insert slide number or date and time.



Inserting Multimedia Objects:

- To insert media file:
- Select slide layout that contains Content as part of slide layout, and click Insert Media Clip icon for movie or sound clip
- On Insert tab, in Media Clips group, click Movie or Sound



Exercise:

1. Open Ms .Power Point, and save it as Insert Tab Exercise.
2. Create 3 new slide
3. In first slide insert the fowling table:

Name	Math	English
Ali	46	70

4. Insert any clipart related to book in slide 2.
5. Type book in the title of slide 3 and then create hyperlink for this title to website: www.google.com.

Lesson 3: Design Tab

s
Objective

- Page Setup
- Theme
- Background

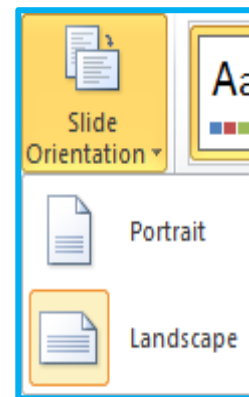
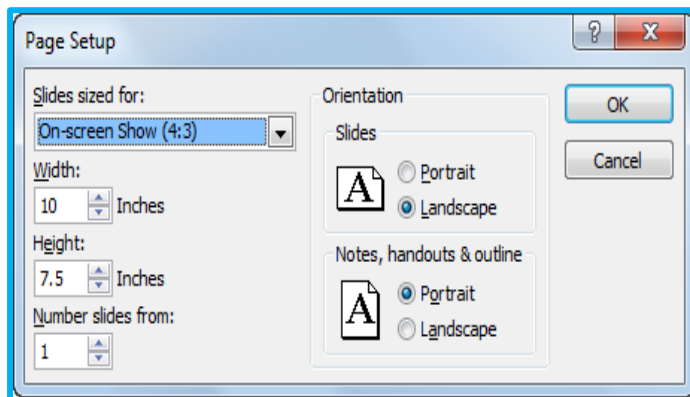
On Design Tab you have three groups:

1. Page Setup group
2. Theme group
3. Background group

Changing Page Setup:

On page setup group can change:

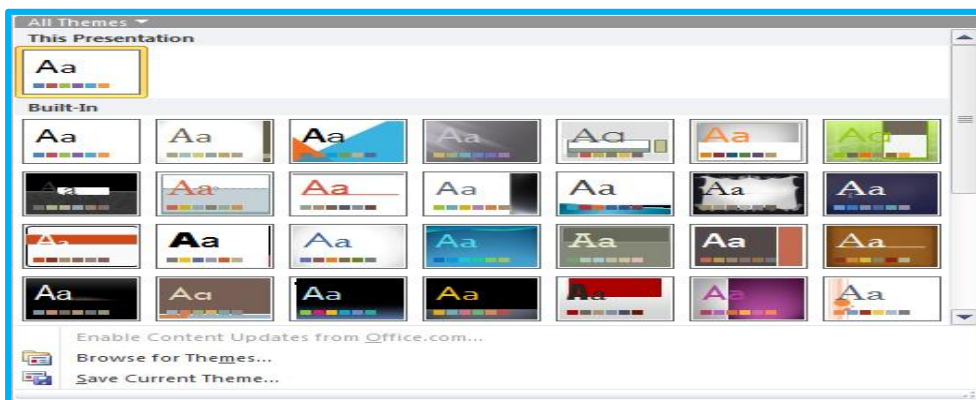
- a. **Page Setup:** On page setup group can change **the size** (Width and Height) of the slide. Also can change the **slide number to start from which number**. **Ex:** if you will add slide number to all slide and you will change the Number Slides from to 3, so the first slide will start from number 3.
- b. **Slide Orientation:** can change the page to be **Portrait** (Vertically) or **Landscape** (Horizontally).



- To change page setup, on Design tab, in Page Setup group, click Page Setup
- To change orientation for presentation only, on **Design** tab, in **Page Setup** group, click **Slide Orientation**

Changing Theme:

Refers to changing colour scheme used in pre-designed templates. Can apply or remove design elements any time. You may change **theme** for one or all slides, point at theme to see the preview. You can **customize** theme using Colours, Fonts, or Effects options in Themes group of Design tab.



- To **apply design**, on Design tab, in Themes group, click design or theme, or click More to display themes

Changing Background

- Can **change background** color for one or all slides. Can change background color for one or all slides. Changing background does not remove any design templates applied; only background color

- To remove design template, change to default design
- To change background for one or all:
 - On **Design** tab, in **Background** group, click **Background Styles**
 - Right-click blank area of slide and click **Format Background**

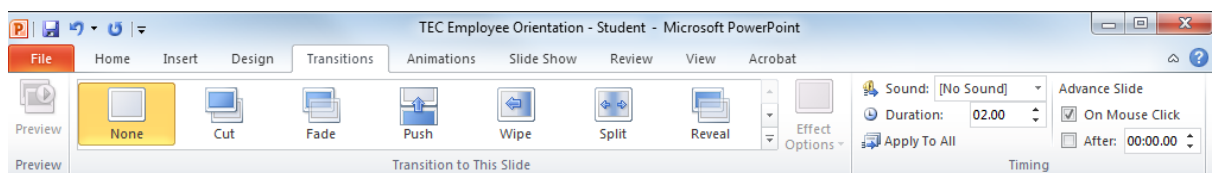
Lesson 4: Transitions Tab

Objectives

- Transition to this slide
- Timing

Transition to this slide

Special effects appear as you change from one slide to next during slide show. To apply slide transition, on Transitions tab, in Transition to This Slide group, click transition style from gallery. Click More to display gallery, and point at transition to preview



Timing

You may customize transition by adding sound or changing speed. Also you can apply transition to one slide only or all slides. Use options in Advance Slide area to run presentation on its own without speaker.

Animating Slide Objects:

Animating slide objects means customizing how text, objects, and graphics “arrive” on slide. It also increases the effectiveness of slide shows.



- To add animation, on **Animations** tab, in **Animations** group, click **More** to display Animation Gallery

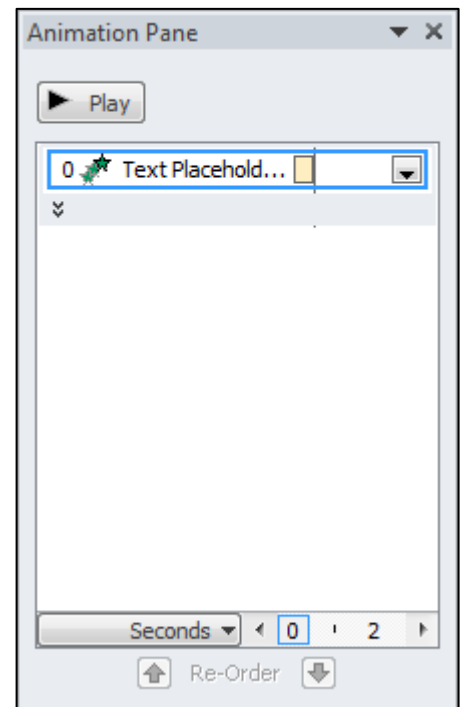
Important Tips:

- Try to be consistent in number and style of animation schemes used
- Consider audience and choose speed and effect accordingly

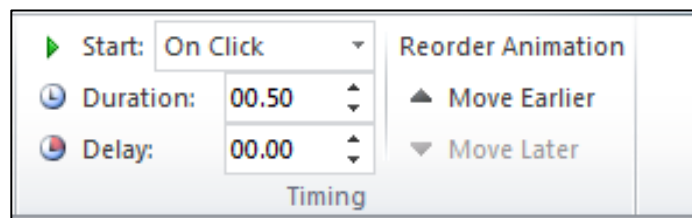
Customizing the Animation:

To customize animation: On **Animations** tab, in **Advanced Animation** group, click **Animation Pane**. Each element has option of when or how element appears.

- Animated elements have numbered boxes to indicate order that items will appear
- Animation Pane also lists animation in numeric order
 - Can rearrange elements using  or  **Re-Order** arrows

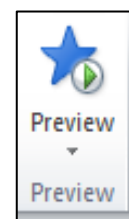


Be careful of effects used for different elements and check speed and timing and play to check it works.



Important Tips:

- Animation options vary with effect used
- Use care with animation and always **preview** animation to minimize potential distractions during presentation
- When no longer want or need animation, remove from Animation Pane list



Lesson 5: Animations Tab

Objectives

- Animate slide objects and text
- Customize animation effects

1. Animating Slide Objects:

Animating slide objects means customizing how text, objects, and graphics “arrive” on slide. It also increases the effectiveness of slide shows.



- To add animation, on **Animations** tab, in **Animations** group, click **More** to display Animation Gallery

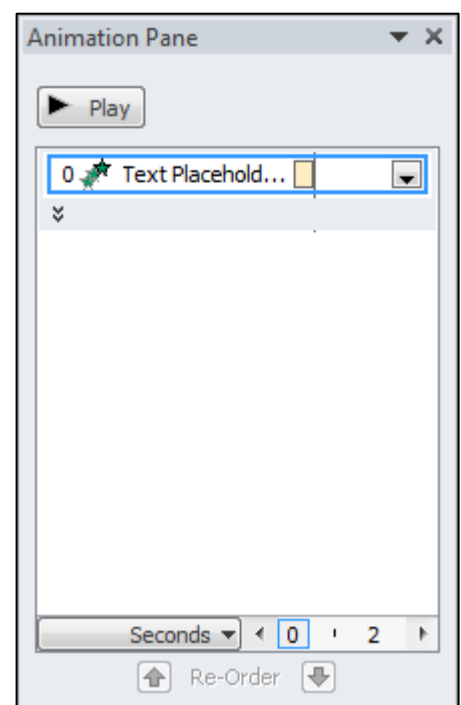
Important Tips:

- Try to be consistent in number and style of animation schemes used
- Consider audience and choose speed and effect accordingly

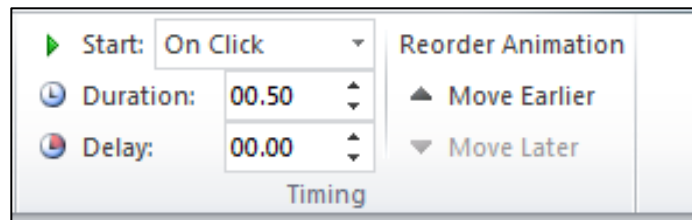
2. Customizing the Animation:

To customize animation: On **Animations** tab, in **Advanced Animation** group, click **Animation Pane**. Each element has option of when or how element appears.

- Animated elements have numbered boxes to indicate order that items will appear
- Animation Pane also lists animation in numeric order
 - Can rearrange elements using  or  **Re-Order** arrows

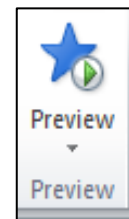


Be careful of effects used for different elements and check speed and timing and play to check it works.



Important Tips:

- Animation options vary with effect used
- Use care with animation and always **preview** animation to minimize potential distractions during presentation
- When no longer want or need animation, remove from Animation Pane list



Unit 6: Using Microsoft PowerPoint

Lesson 6: Slide Show Tab

s Objective

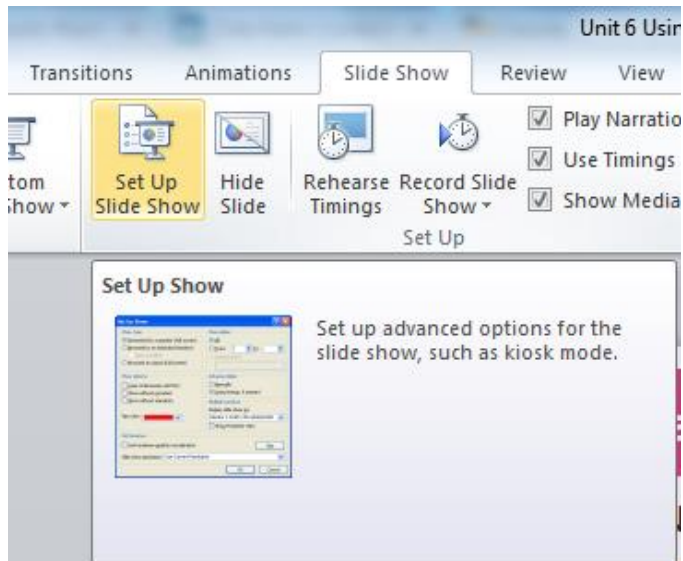
- Start Slide Show
 - run and view your slide show
 - Setup the slide show

Start Slide Show

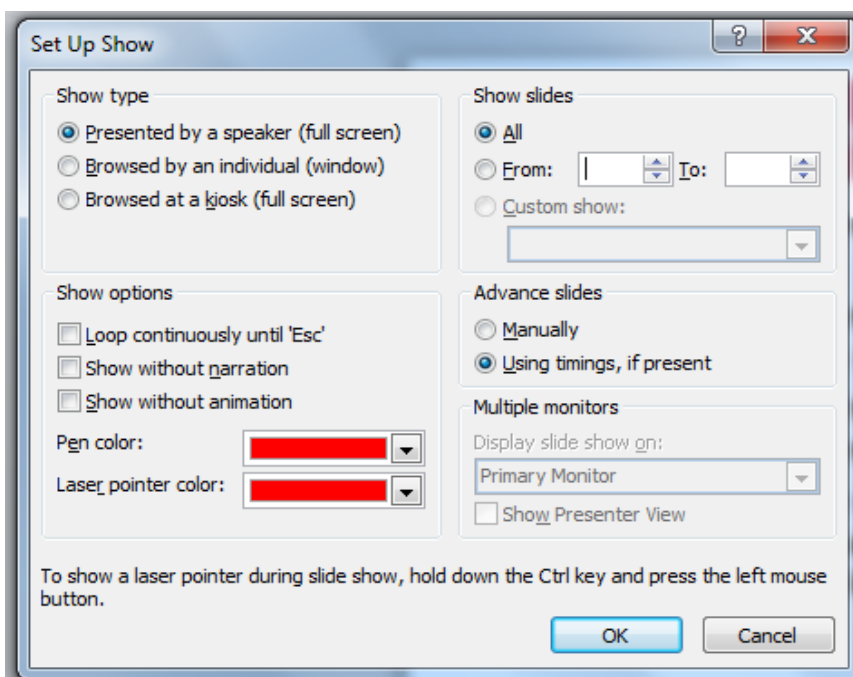
Once your slide show is completed, you will need to learn how to present it to an audience. PowerPoint may give you different options for setting up and playing a slide show. For example it's give you the option to start from first slide or any slide within the slide show.

To access slide show setup options:

1. Select Select the **Slide Show** tab.
2. Click the **From Beginning** command in the **Start Slide Show** group to start the slide show with the first slide.
 - You can also start the slide show from the slide you prefer by selecting the slide and clicking on **From Current Slide** from the **Start Slide Show** group. This option is convenient if you only want to view or present certain slides.
3. Click the **Set Up Show** command.



4. The Set Up Show dialog box will appear. Click the buttons in the interactive below to learn about the various options available for setting up and playing a slide show.



5. To hide a specific slide, select the slide and click on **Hide slide** on **Set Up Group**.

Unit 6: Using Microsoft PowerPoint

Lesson 7: Review Tab

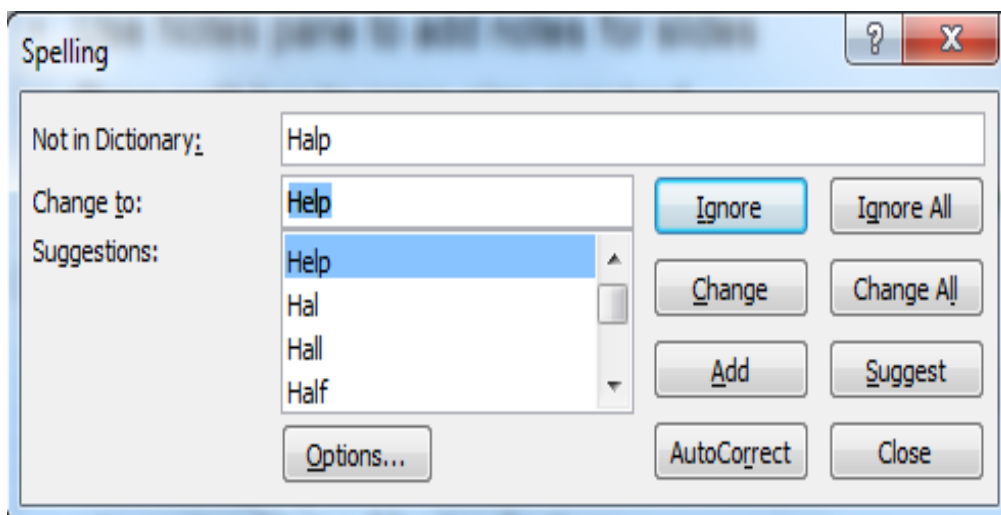
Objectives

- Using Spell Checker.

Using Spell Checker

Use the spell check features on text labels only – The Review tab is where you can check the spelling, change the language in your presentation, or compare changes in the current presentation against another presentation, it displays words not found in dictionary. To activate Spelling feature:

- On **Review** tab, in **Proofing** group, click **Spelling**
- Press **F7**



Exercise

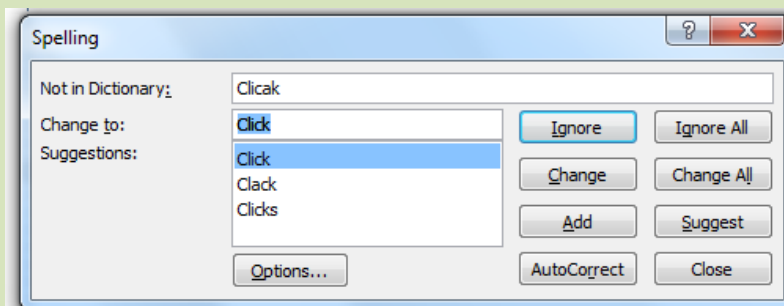
26. Open **Ms .PowerPoint**, and save it as CO3 Emission Workbook

27. Type following text:

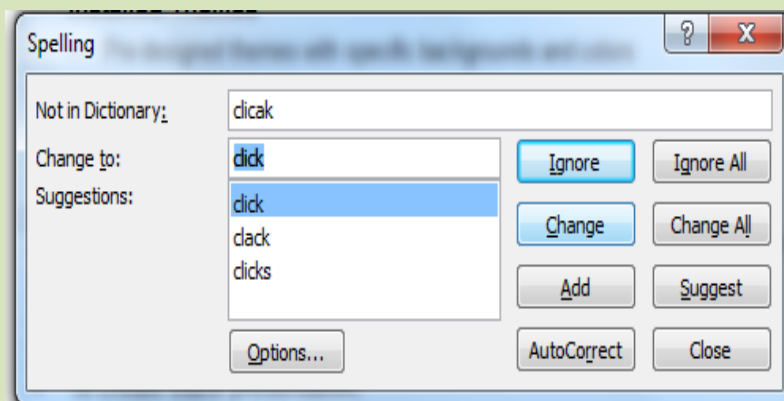
What Does a Presentation Include?

- Each slide has placeholders
- Click in placeholder to insert text or object

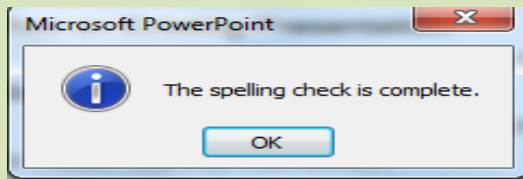
28. On the **Review** tab, in the **Proofing** group, click **Spelling**.



29. Select "Click" in the **Suggestions** list and then click **Change**.



8. Click **Ignore Once** as this is the name of Country.



9. Click **OK**.
10. **Save** and **close** the document.

Unit 6: Using Microsoft PowerPoint

Lesson 8: View Tab

Objectives


- Display Information in the Presentation
- Enhancing the Presentation

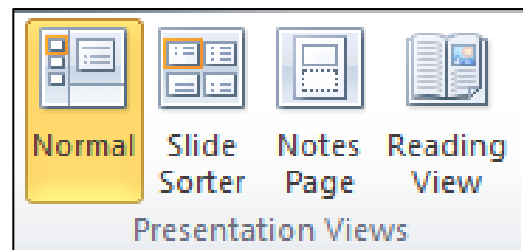
We'll work on 4 groups In the **View Tab**. They are:

1. Presentations View
2. Master Views
3. Zoom
4. Window

Presentation View:

This is how to Display Information in the Presentation. So to change view, on **View** tab, in **Presentation Views** group, click **view**.

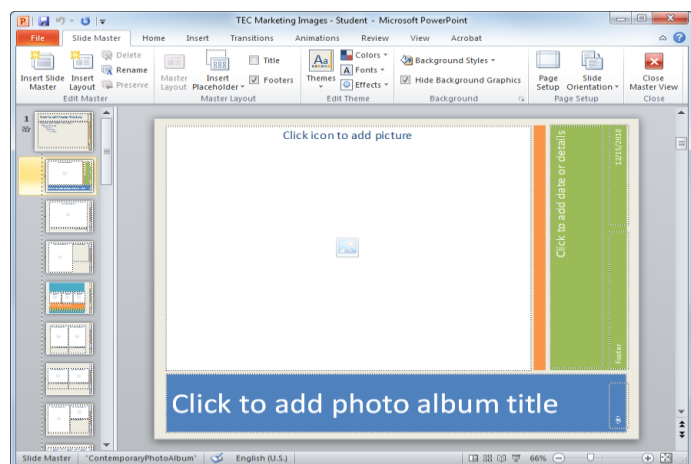
- Can also click view button at bottom right of screen. 



Master Views



Is to add items to repeat on each slide so to create a Master Slide you have to change to slide master view, on **View** tab, in **Master Views** group, click **Slide Master**.

- Changes made to individual slide overrides formatting specified on master slide.
- The same for Handout Master and Notes Master.









Zoom

Can change magnification for presentation:

- On **View** tab, in **Zoom** group, click **Zoom**
- On status bar, use view options for zoom
- Click  (**Zoom level**) to set a specific percentage level for the view
- Click  (**Fit slide to current window**) to have PowerPoint automatically resize slide to fit in current window

Moving Around in the Presentation:

- To navigate between slides:
 - Click  (**Previous Slide**) or press  for previous slide
 - Click  (**Next Slide**) or press  for next slide
 - In Outline or Slides tab, click slide to move to, or use  or  to move between slides
 - In Slide Sorter view, click slide to view

Switching Between Presentations

To switch between presentations quickly and easily:

- On **View** tab, in **Window** group, click **Switch Windows**
- Click button for required document on taskbar

If Document window in Restore Down view, open documents may display in cascading layout; if s

Unit 7: Getting Connected

Lesson 41: Network Fundamentals

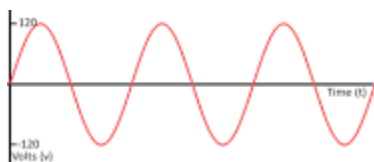
Objectives

- basic networking fundamentals
- how the telephone network works
- how the computer network works
- advantages and disadvantages of being on a network
- how to connect to a network
- identifying low and high bandwidth connections

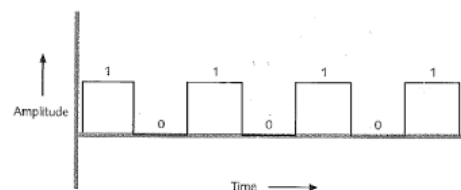
Networking Fundamentals

The purpose of setting up a network is to share information regardless of data type, whether the content consists of audio, data, or video. Example of audio: Communication systems developed using analog signals carried over long distances and converted by dedicated devices to and from sound like (radio and television); these signals became transmitted using wireless technology. They are continuous and consumed large amount of bandwidth. In digital technology (Discrete time signals), translation of information is into binary format (zero or one) where each bit is representative of two distinct amplitudes. Computers, CDs, DVDs, and other digital electronic devices all are examples of digital signals.

True networks now rely on digital technology to carry large volumes of data, forming foundation that supports network where information shared back and forth instead of one direction.



Analogy signal



Digital signal

Looking at the Telephone Network

To communicate using telephone network, you need to know other person's number, and must speak same language. If you don't speak the same language, you will still be able to communicate but you will not communicate successfully. Main difference between cellular and landline phones is type of devices or equipment needed to connect to network. For example, cellular phones are portable, has wireless connection, and most of them are smart(PDA),that have some special digital functions like internet browsing service, using emails, paging ,GPS and etc. Landline phones are stable, need telephone cable and only be able to transmit audio and with some units and video.

Each country has organization responsible for telephone network that ensures conformity to international telephony protocols or standards. This allows all country networks to be connected to form an international telephone network.

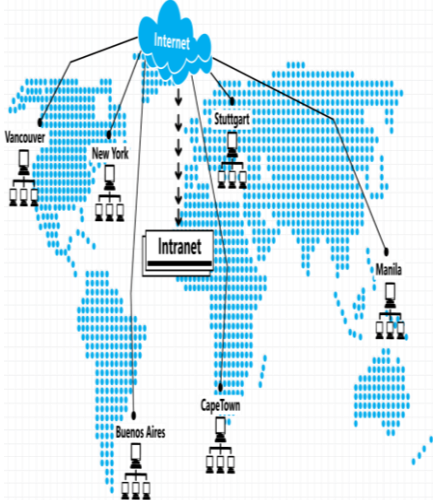
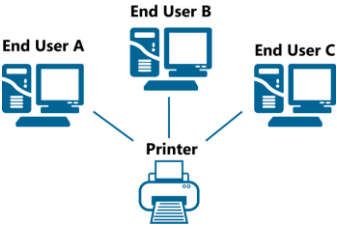
All devices connected to voice telephone network are analog devices and transmit voice, fax, or data using that technology. Devices connected via network must speak same language and follow same rules or protocol.

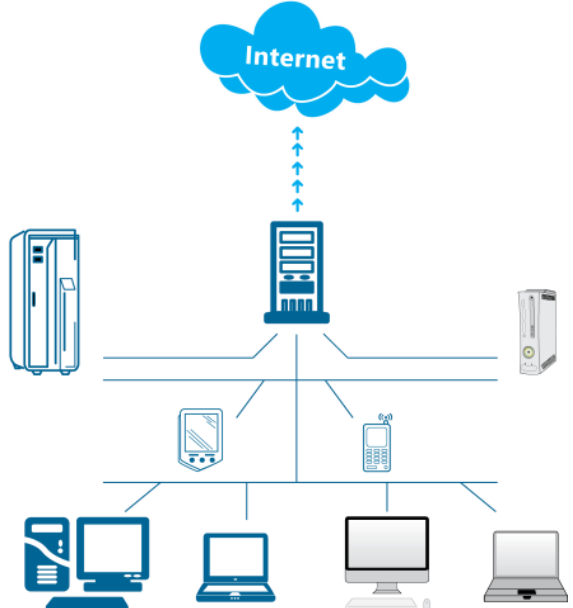
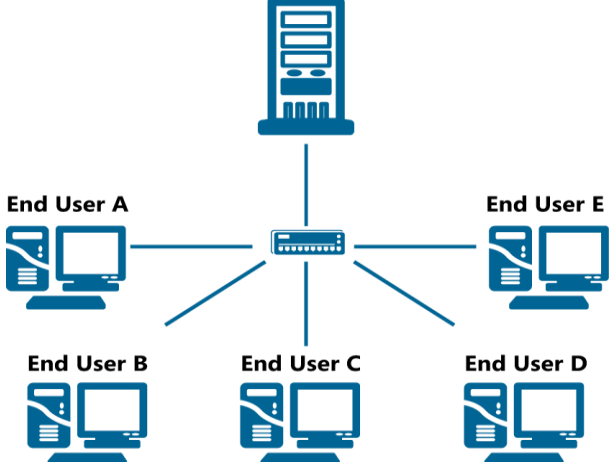
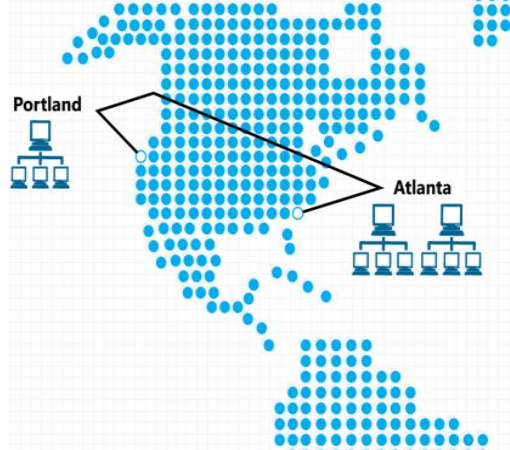
Computers also using the telephone system to communicate to each other required a modem on both ends to convert their internal digital signals (1s and 0s) to the analog carried by the telephone system.

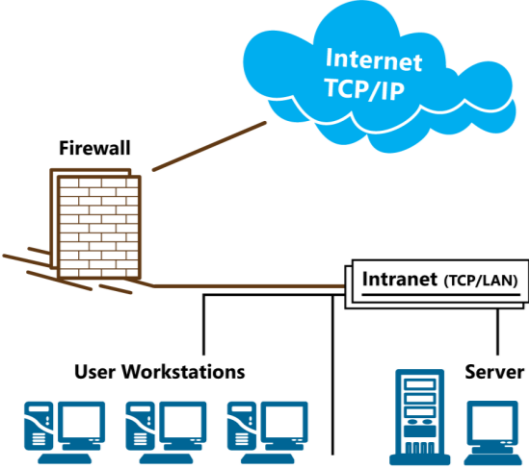
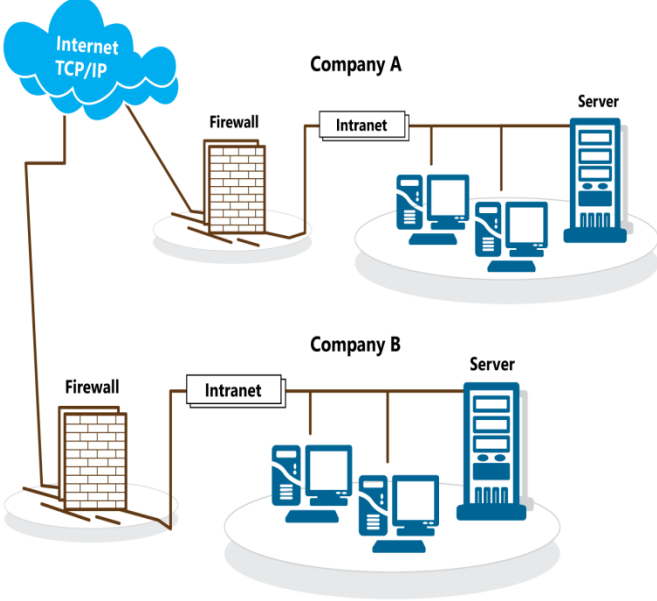
Telephone trunk lines now are digital, so telephone companies can offer many more computer-related services using lines.

Looking at Computer Networks

A computer network is a communication system that connects two or more computers so that they can exchange information and share resources. Networks can be set up in different arrangements to suit user’s need. There are many types of networks:

Type of Network	Features	Form
Internet	<ul style="list-style-type: none"> • International computer network, made up of smaller networks connected to allow people globally to communicate using shared set of standards. • Similar in design to worldwide telephone network. • Needs high level protection 	
Peer-to peer	<ul style="list-style-type: none"> • Inexpensive and easy to put together, ideal for home or small office networks. • All computers have equal authority. • Any computer can share resources with other computers on network. 	

<p>Client Server Networks</p>	<ul style="list-style-type: none"> • Use central computer (server) to coordinate and supply services to other nodes on the network. • Client request services and server provides services. • Cost-effective way to share resources and control who can access what and when. • Used in larger networks where multiple servers perform dedicated functions. 	
<p>Local Area Network (LAN)</p>	<ul style="list-style-type: none"> • Stays in building. • Provides two benefits: economy and flexibility. • Widely used by colleges, universities, and other types of organization. 	
<p>Wide Area Networks</p>	<ul style="list-style-type: none"> • Country wide and worldwide network. • Crosses Public Street and uses publicly supplied cabling for part of network. • Span distances greater than 100 miles. • Use microwave relays and satellites to reach 	

	<p>users over long distance.</p>	
<p>Intranet</p>	<ul style="list-style-type: none"> • Private LAN within an organization. • Uses same set of network protocols as Internet but set up in organization. • Typically has Web server that contains common documents. • Needs low level protection. 	
<p>Extranet</p>	<ul style="list-style-type: none"> • Private network that connects more than one organization. • Uses Internet technology to allow company to share information with another organization. • It allows employees of different companies to share data. • Commonly used in B2B networks • Security protection levels lower for extranet than Internet, but higher than internal intranet 	

Benefits of Networking

There are two main benefits of networking are: Communicating and Sharing Resources.

Communicating:

You can send information directly between each user without typical delays like messaging via e-mail. The Message can be stored and not lost if recipient not available. Also, you can use Instant messaging (IM) allows for “real time interaction” in text. Multiple users can participate in the same conversation like Windows Messenger. Web conferencing is another advantages of networking that enable users in different locations to collaborate on projects or meet to share information on all users’ screens to view. This is less expensive than sending someone to a remote site for several days.

Sharing Resources:

Sharing resources is another benefit that can be gain from networking. As well as, networks can share devices like printers and routers rather than connect each computer with separate device, so company saves costs when purchasing devices, technical support or maintenance needed. Also, Files or folders can be set to be shared by all users.

Workgroup (group of people sharing information), can transfer or save files to common area or centralized server that controls which files can be accessed and by whom.

Also, it is very beneficial to network administrator for setting up rights or performing maintenance for workgroups.

Disadvantages of Networking

Dependency:

Dependency can be the biggest disadvantage of being able to share information. As well as, Organization’s activities and communication lines depend on network to work properly. If network fails, users lose

access to information and ability to communicate electronically. For example, network drive fails lost connection to the Internet.

Security Risks

A network vulnerable to a lot of security risks that can effect on organization as some sensitive information stored there. These risks can include hackers, spammers, viruses and etc. However, all these risks can be restricted and minimized by many procedures:

- Ensure every user entitled to access server is valid with unique login ID .Some organizations prefer to use biometric scanning devices such as fingerprint and iris (eye) scanners to insure valid authentication. Also, there are numerous applications that use face recognition to allow access to computer system.



- Passwords should be changed at set intervals and with restrictions. Make it easy to remember but difficult to be guess by others. It should be mixed of letters, characters and numbers, and occasionally change password.
- Assign login IDs and passwords to those working with network administrator and ensure user passwords never given out and especially not network administrators.
- Delete all IDs and passwords assigned to any user who no longer works for the company, and ensure former user's messages are forwarded to someone else.
- Audit IDs periodically to ensure each user has access to programs and files appropriate, to make it easy for users to

move to different positions in the organizational, ensure users have control over own files and folders.

- Ensure any requests for network access, including setup of new users, are appropriately authorized.
- Set up firewalls and proxy servers that control access to company's intranet and other internal networks.
- Ensure that server have active antivirus program and the copy set up in user's computers. Update antivirus program on server to provide protection against latest viruses. Perform maintenance checks to view reports or logs created by security programs. This feature identify any viruses are found and indicates the status of these viruses.
- Monitor employee activities on Internet to prevent potential software threats, such as viruses or spyware from entering the network.
- Encourage users to ensure they have latest updates of Windows on computers. It is important to apply security update for each station.

Loss of Autonomy or Privacy

It refers to inability to work independently from server. There is no Privacy in the network. So, If leave computer logged in when away from desk, anyone can access your local drive.

General business rules dictate that work on company computer belongs to company, even if you work on document on your own time. It is important to check it with your manager to ensure there is no consideration of impropriety.

Networks vulnerable to virus attacks



Virus is a program that migrates through networks and operating system by attaching itself. Virus introduced on one workstation can




spread quickly to other workstations. Because of that, it is crucial to ensure antivirus program on server current and active, and all workstations have local copy of antivirus program active at all times, and it is better to prove the antivirus program with automatically detect viruses feature in “real time”.

New viruses created every day and users should read screen carefully before opening message or clicking highlighted button on screen

Connecting to a Network

Communication channels are essential element of every communication system. These channels actually carry data from one computer to another. There physical connection, or solid medium such as wire or cable used to connect sending and receiving devices. They are:

	<p>Coaxial</p>	<p>High frequency transmission cable, It consists of Copper wire surrounded with insulation and grounded cover of braided wire to minimize electrical and radio frequency interference; main type of cable used for cable television distribution and computer networks.</p>
	<p>Fiber Optics</p>	<p>Bundled glass or plastic fibers to transmit data; much larger bandwidth for transmitting data and less susceptible to interference. Compared to coaxial cable, it faster and lighter, and more reliable at data transmission. It is replacing twisted pair cable telephone lines .</p>

	<p>Twisted Pair</p>	<p>Type of cable containing 1 to 4 pairs of copper wires carrying analog or digital signals; telephone and computer networks commonly use this form of connection.</p>
	<p>Wireless</p>	<p>Each computer must have wireless network interface card and access point; work with radio frequencies for data transmission.</p>
	<p>Infrared</p>	<p>Works with infrared light waves to transmit data; downside is distance between infrared devices must be less than wireless device using radio frequencies. Infrared transmitter must be pointed at receiver, or beam diluted and signal strength too weak to register.</p>

Connecting to the Internet

There are different types of connections available to connect to the Internet. They divided to low and high bandwidth connections.

Low Bandwidth

Telephone or dial-up access considered low bandwidth, which means it might not connect to Internet or download information quickly. When you set up account with ISP, get telephone number to dial, which then connects to an incoming line at the ISP. Your computer also needs and modem to connect to ISP's dial-up line.

High Bandwidth

It works with TV cable, connected all the time with dedicated access but also more expensive. Cable is a popular option for home users as packaged with cable services and offers very fast speeds.

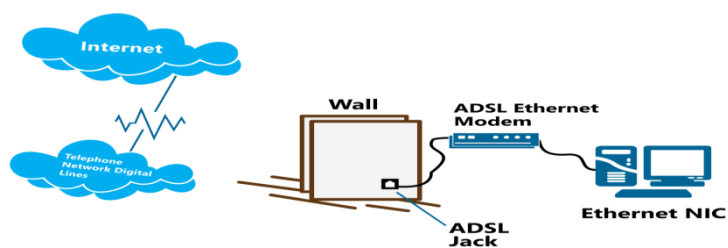
Digital high-speed connections using telephone line include ISDN, DSL, or ADSL. **ISDN (Integrated Service Digital Network)**. ISDN offers the speed and quality that previously was only available to people who bought expensive, point-to-point digital leased lines. Combined with its flexibility as a dial-up service, ISDN has become the service of choice for many communications applications. Popular ISDN applications include:

- Internet access
- Telecommuting/remote access to corporate computing
- Video conferencing
- Small and home office data networking

DSL (Digital Subscriber Line) is provided by telephone companies using existing telephone lines to provide high-speed connections. **DSL** is much faster than dial up.

ADSL (Asynchronous Digital Subscriber line): modem uses standard phone lines. These modems can be either internal or external. It is one of the most widely used types of DSL.

T1 lines are generally leased by ISPs. A T1 line is a dedicated circuit that connects to the internet with a speed of 1.544 Mbps. This T1 line speed is symmetrical; it will deliver both an upload and download speed of 1.5Mbps. It is much more reliable, comes with a SLA, and has a guaranteed up-time.



Review Questions

1. A server provides services and a client uses those services.
 - a) True
 - b) False
2. What are some benefits of networking?
 - a) Communicating with others
 - b) Sharing devices like printers
 - c) Having a server that is dedicated to a specific task, such as, mail, database, or network
 - d) Sharing of files and other information
 - e) Any of the above
 - f) a, b, or d
3. What are some disadvantages of networking?
 - a. Cost of setting up and maintaining the network
 - b. Potential security risks by outside sources
 - c. Dependency on the network always working
 - d. Viruses
 - e. Any of the above
 - f. a, b, or d
4. A unique login ID and a password can be set up using biometric data.
 - a) True
 - b) False
5. What is the set of protocols used by the Internet called?
 - a) DNS
 - b) TCP/IP
 - c) SMTP
 - d) All of the above

References

- 1-<http://www.geekswithblogs.net>
- 2- <http://public.swbell.net/ISDN/overview.html>
- 3- <http://www.hazleton.com>

Unit 8: Using Windows 7

Lesson 42: Understanding E-mail Fundamentals

Objectives

- Identifying of Electronic Communication
- Using Electronic Communication
- Understanding an E-mail Address
- Looking at E-mail Components
- Using E-mail Appropriately
- Managing Spam
- Identifying Common Problems

Identifying of Electronic Communication

Electronic Communication refers to any process that enables you to communicate and interact with other using an electronic method such as:

Electronic Mail

Commonly known as e-mail and requires valid address to send messages. Email is a very popular method of sending messages when response is not urgent that message.

Instant Messages (IM)

This type of electronic communication is like having conversation involving two or more people, except in text and only one comment at a time can be received by everyone in that conversation(real time) without needing to be at the same location. It can be very useful when an answer is needed quickly.

Text Messages

These types of messages are similar to instant messages except created and sent from cellular phones with limit on number of characters allowed per message. You can send a text message to one or more people but it may not be received as quickly as with IMs.

VoIP

Stands for Voice over Internet Protocol; uses digital format that follows Internet protocol to enable audio conversations by two or more people in different areas. Some cellular phones run on VoIP technology. Some businesses are using VOIP for long distance calls cost less than traditional phones calls.

Online Conferencing

This type of electronic communication is enabling numerous people to meet online using the Internet. This can be a useful way to conduct online training or meetings that include employees in remote locations.

Chat Rooms

Chat rooms are similar to IM, you can participate in main discussion or you can go into separate “room” for different or private conversation. People from anywhere can join a chat room.

Social Networking Sites

These are web sites you can join to connect with people you know or to meet new people. You can create a profile and post pictures, video, or text about yourself, or play games. Some company set up a page on social networking site to promote a service or product.

Blogs

Blogs can be used as journals where one person writes on specific topic, and others then post comments for that topic. A company may set up a blog o their Web site to encourage customers to offer suggestions or discuss problem regarding a service or product.

Message Boards or Newsgroups

Message Boards or Newsgroups are similar to bulletin boards where you can post comment about topic although you may have to subscribe to newsgroup. You can set up your e-mail address to receive new postings comments in that topic.

Using Electronic Communication

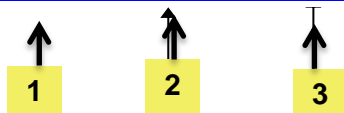
There are many advantages to using electronic communication including:

- It can be faster to use electronic communication to send message to one or more people instead of using telephone to try and contact them
- Can print copy of conversations as record of communication
- Can share information by sending files or attachments with e-mails, in instant messages, or through another online feature.
- Can post file as download from Web site.
- Can access e-mail and company’s intranet or Web site from any location.
- Use electronic messaging to set up meetings or inform others about them, and then meet using Web-based programs.
- Initial cost may be high but cost to maintain is low.
- Regardless of electronic communication methods, require server to provide services and computing device for client to use.
- Sharing and communicating with others can build sense of community.

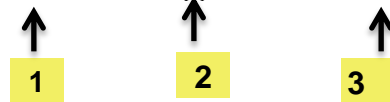
Understanding an E-mail Address

To use e-mail address, must be set up as user on domain. This could be the ISP (Internet Services Provider) or it could be the your company. Your e-mail address is structured as follows:

a.14528@unizwa.edu.om



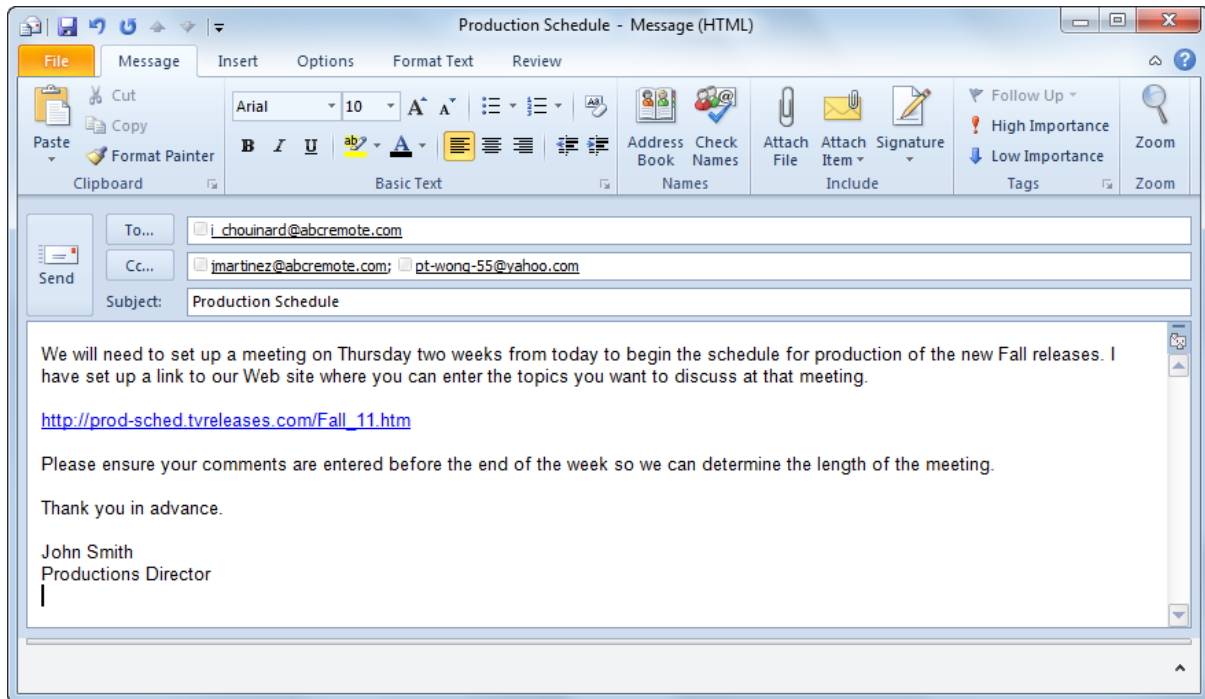
Ahamed909@hotmail.com



1- Mailbox Name	Identifies particular mailbox on the e-mail server.
2-Name of Organization	identifies organization that owns server
3-Domain Category	Identifies type of domain. For example: .com refers to commercial organization while .uk refers to a country.

Looking at E-mail Components

The components of e-mail: Addressing, Subject Line, Body, Attachments.



Addressing

Identifies who will receive and send e-mail

To	The message has been sent to the targeted e-mail as primary recipient.
Cc	“Carbon copy” The message has been sent to people just for their information.
Bcc	“Blind carbon copy” The message has been sent to people just for their information and their e- mails are hidden
From	The list people who send message.

Subject Line:

It's Identifies topic of message, usually short description of content or purpose of e-mail. You try to put something in subject line are related to topic and avoid sending an e-mail without a subject line, it will be considered as spam message or junk mail.

Body:

It's where you type body of message.

Attachments:

When you want others to receive specific files or share information. However, consider the following points:

- Keep attachment file size as small as possible
- Consider what attachment is and if e-mail best way to send it
- If sending sensitive or confidential attachment, encrypt document to protect from unauthorized users
- Include URL link in e-mail instead of large attachment
- Consider file type and whether recipient can open it
- Links and pictures can provide specific information but recipient may have security options set to prevent seeing these
- Be aware of other security options
- Always set antivirus program to automatically scan and check all incoming and outgoing mail

Managing Spam

Spam refers to unsolicited message to promote products and services or for political/religious purposes. It is the same as junk mail. People who send these types of messages are called **Spammers** buy e-mail address lists from companies specializing in e-mail marketing

Most e-mail programs filter and block spam or other junk e-mail. Many ISPs also have this feature set up on their mail servers to block these types of messages.

Following are some ways to avoid being placed on list that results in you receiving spam messages:

- Do not allow e-mail address to be added to any marketing address lists.
- Set up e-mail account with Web-based e-mail for these types of requests.
- Do not reply to e-mail that is junk even if message says name will be removed.
- Avoid putting name and e-mail address on any public lists.
- Avoid giving e-mail address on any online forums or newsgroups.
- Avoid being flagged as spam by other servers by following general guidelines for sending e-mail. Some of the things spam filters are programmed to search for are subject lines that include Hi, or Your Order.

Identifying Common Problems

Electronic communications are associated with many risks or problems. Some common problem includes:

Lost connection:

losing a connection with your server can be inconvenient if waiting for e-mail, if it occurs during Web conferencing session, or if in area where you cannot get service .You need to work with your ISP to determine how long it will take them to restore it.

Messages not being sent or received:

This could indicate mail server at ISP is not connecting to system. First, check the cables, or wireless connections are fully plugged in. Or, call the ISP for help to determine what is the problem such as: the correct IP address or mail server name.

Delivery failure message:

When receive “failure message,” read contents carefully to determine whether problem is something you can fix, such as the mailbox is temporarily unavailable, the e-mail address dose not

exit, the domain server is unavailable, or there is too much traffic through the mail server.

Garbled messages:

These can arise when different mail formats used for sending and receiving messages. Many e-mail programs can switch between plain text and HTML format. For Example, if you send a formatted message using Macintosh computer to recipient who is using Linux, the message may arrive without formatting.

Cannot download items:

If you cannot download items, this is likely restriction on computer by school or company, the problem may be occur at the Web site the download is no longer available, if you sure the download is valid, contact the Web site owner to inform them about this problem.

Junk mail:

Responding to message asking to have your name removed from distribution list to junk mail. It should be automatically divert to Junk E-mail or Deleted Items folder.

Viruses:

Use extreme caution with messages with attachments. Ensure your antivirus program is set to scan incoming message to detect viruses, and if you receive an attachment that contains a virus from someone you know, delete the message and inform the sender of the infected file. Then send a new message to network administrator about this so they can track this message may have been sent.

Hoaxes:

Be skeptical when get messages informing of virus being spread to computers. Always check an antivirus program Web site or ask a technical specialist to check this information before forwarding the message to others.

Review Questions

1. What types of electronic communications are available?
 - a) E-mail
 - b) Web conferencing
 - c) Text messaging
 - d) Blogs
 - e) Any of the above
 - f) a or c
2. In the following e-mail address, which part represents the domain category? p.f.92fallon@yahoo.com
 - a) Yahoo
 - b) p.f.92fallon
 - c) .com
3. Why is it important to include something in the Subject line?
 - a) To provide the recipient with a quick description of the message contents
 - b) To prevent an ISP from marking this message as potential junk mail
 - c) Because it is mandatory to fill it in when sending a message
 - d) Any of the above
 - e) a or b
4. For what reason might you be unable to download a video from a particular Web site?
 - a) You do not have enough access rights to download items.
 - b) You need to use a special login to gain access to all Internet items.
 - c) The security is set too high for you to download items.
 - d) The company has set up a policy that no downloading is possible by any of its users.
5. What are some benefits of using e-mail?
 - a) Speed for sending and receiving
 - b) Sharing information such as files or presentations
 - c) Having a paper trail that tracks any discussions based on messages received
 - d) Cost savings compared to using couriers or long distance
 - e) All of the above

Reference:

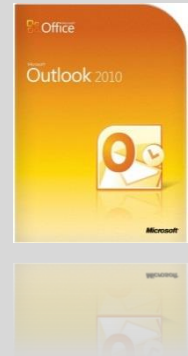
1. Basic Computing Skills, Approved by SQU, Collage of Science.
2. GLOBAL SKILLS

Unit 7: Getting Connected

Lesson 43: Using Microsoft Outlook 2010

Objectives

- what Microsoft Outlook is
- recognize elements on the screen
- how to send and create new message
- how to receive messages
- how to reply or forward a message
- work with attachments
- Work with Inbox
- work with the contacts
- understand mail maintenance options



What Microsoft Outlook is

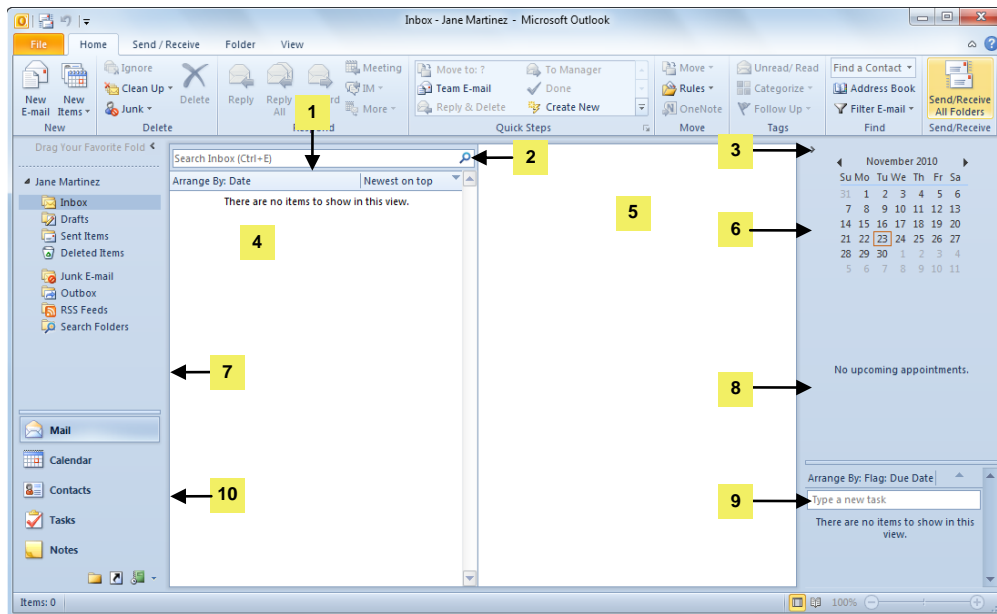
Microsoft Outlook is a personal time and information management program that you can use for:

- sending and reading e-mail message
- scheduling appointments
- managing contacts
- creating a to do list
- tracking time spent on a project
- recording notes

Outlook provides many features to organize and share information and communicate with others inside and outside of your organization. Some of these features are:

To-Do Bar	Integrates tasks, flagged e-mail messages, appointments, and calendar information in one convenient place.
Tasks integrated with Calendar	Can be viewed in Tasks module, on To-Do Bar, and in Daily Task List of calendar.
Color categories	Categorize e-mail, tasks, and other items by color to find and identify.
Instant Search	Find information quickly.
Attachment Preview	View e-mail attachment without opening it.
Calendar overlays	Overlay multiple calendars to find time to meet without double-booking.
Sharing your calendar	Create snapshot of calendar and e-mail to others or publish to share calendar on Microsoft Office Online.
E-mail Postmark	Helps prevent receipt of spam or junk e-mail messages.

Recognize elements on the screen



- | | | | | | | | | | |
|---|----------------|---|--------------------|---|--------------|---|-------------|----|-----------------|
| 1 | Contents Pane | 2 | Search | 3 | To-Do Bar | 4 | E-mail List | 5 | Reading Pane |
| 6 | Date Navigator | 7 | Vertical Split Bar | 8 | Appointments | 9 | Task List | 10 | Navigation Pane |

Creating & Sending New Messages

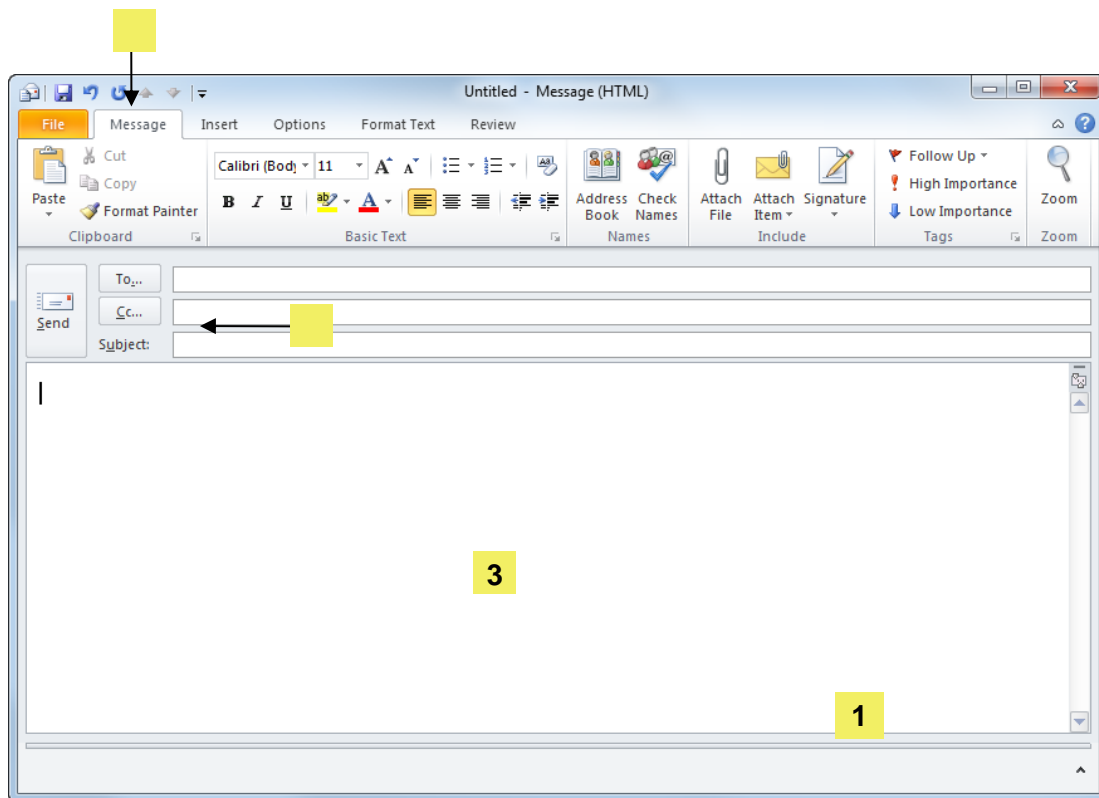
Sending e-mail similar to when you send letter:

- 1) Create new mail message.
- 2) Address message to recipient.
- 3) Type text for message and apply formatting as required. If need to include file, attach to message.
- 4) Use spell checker and proof read message to eliminate spelling or grammatical errors.
- 5) Send message.

Once sent, temporarily stored in Outbox until mail server retrieves for delivery.

To create **new** message from main Outlook window:

- **Home** tab, in the **New** group, click **New E-mail**
- **Home** tab, in the **New** group, click the arrow for **New Items** and then click **E-mail Message**
- Press **Ctrl** + **N**



3 Message Pane

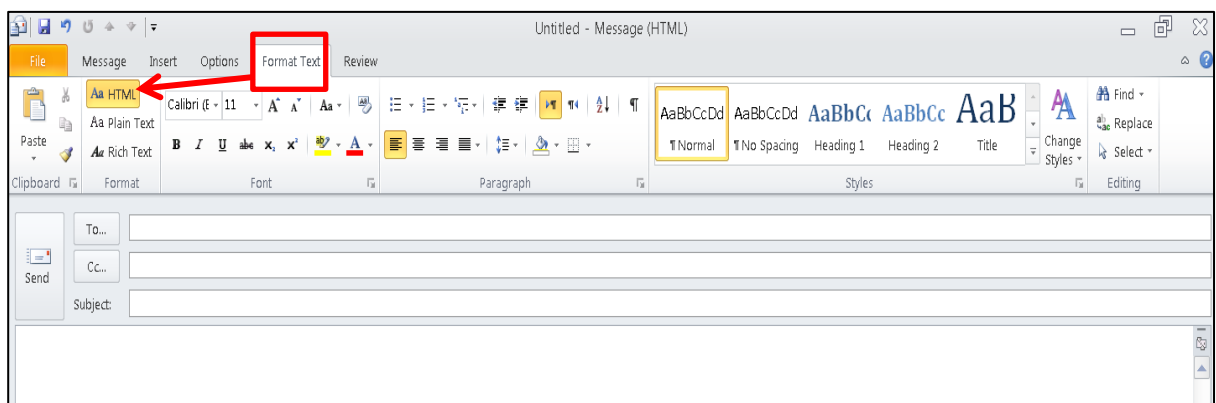
1 New Message Ribbon

2

- **HTML**

Is default format for new mail messages

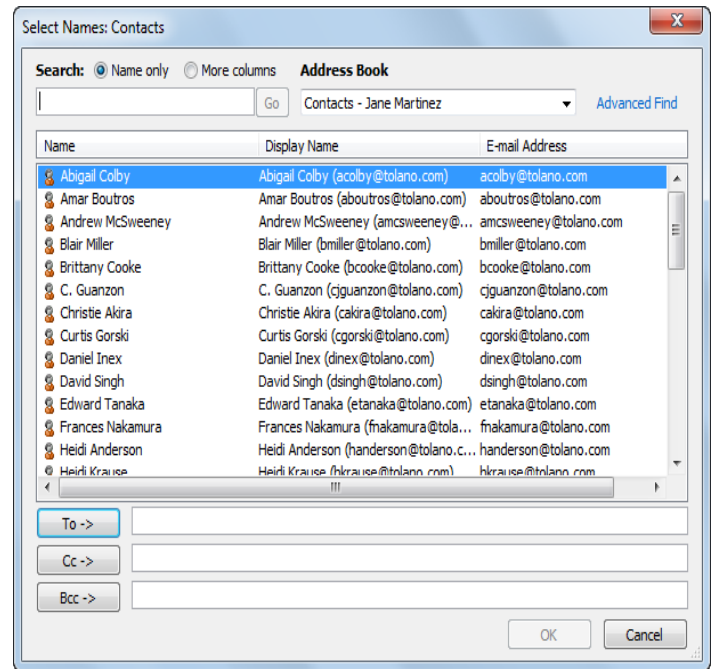
- To change in message, click **Format Text** tab, in **Format** group, click **mail format**



- To change for all messages, select **Tools, Options** and on **Mail Format** tab, choose **mail format**

Addressing the Message

- To access list of contacts, click **To...** or **Cc...**
- To include everyone in range of names, click first name in list, press **(Shift)** as you click last name you want
- To select individual names, click first person, press **(Ctrl)** as you click name of each person to select **(Ctrl)**
- Need to select names for each address field

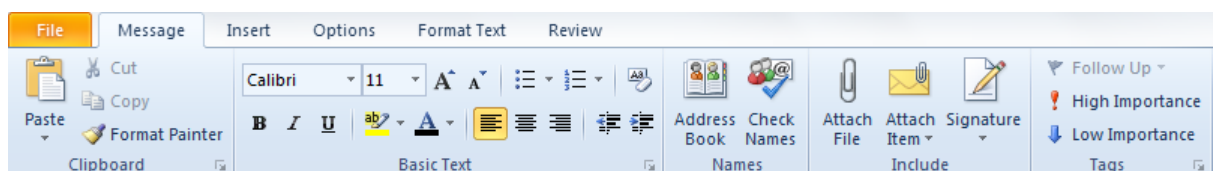


Adding a Subject Line

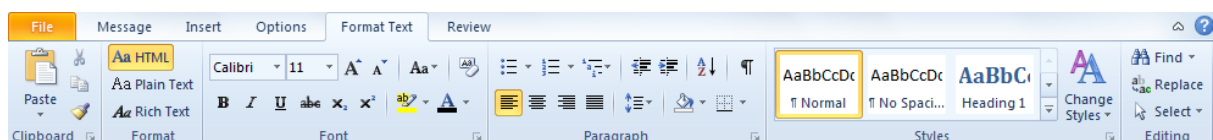
- Be brief, but succinct, when entering text in Subject field

Formatting the Message Text

- **Message** tab contains formatting features in New Message



- **Format Text** tab contains commonly used formatting features



- Can be applied as you type or after text entered
- Gives message professional appearance to emphasize specific areas

Proofing Your Message

- Check for misspelled words or words not commonly found in dictionary

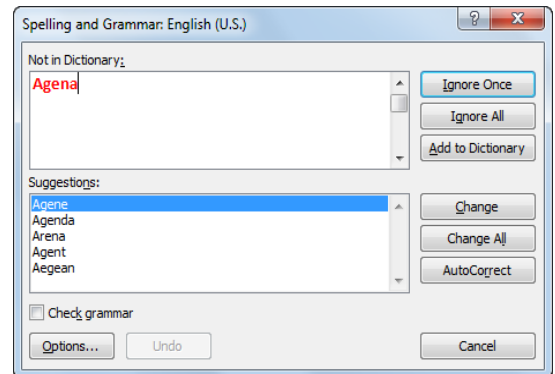
- To activate thesaurus or other proofing tools, click arrow for **Spelling**

- Always try to maintain professional manner in messages

- To activate spelling feature:

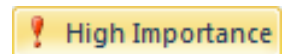
- On **Message** tab, in **Proofing** group, click **Spelling**


- Press **F7**



Setting the Priority

- To set priority, on **Message** tab, in **Tags** group, click



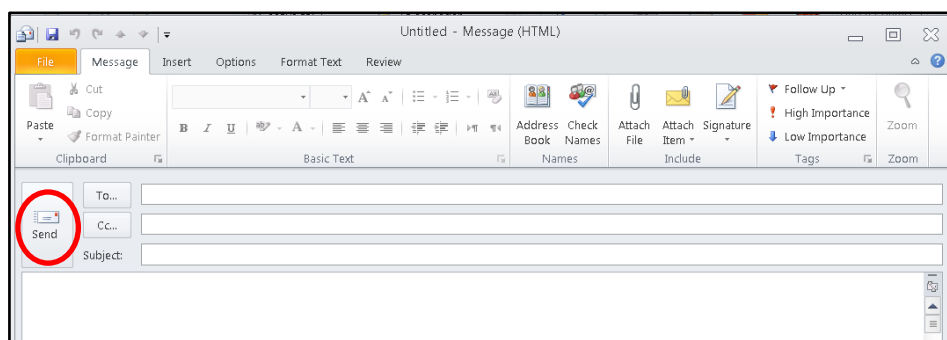
- or 

Saving the Message

- Save contents of message to Drafts folder for retrieval later
- To open message in Drafts folder, click **Drafts** folder in **Folder** list and double-click message to edit

Sending the Message

- To send message: At left of addressing fields, click **Send**





Receiving Messages

To check if received any messages, use one of the following methods:

- On **Send/Receive** tab, in **Send & Receive** group, click **Send/Receive All Folders**
- Press **F9**

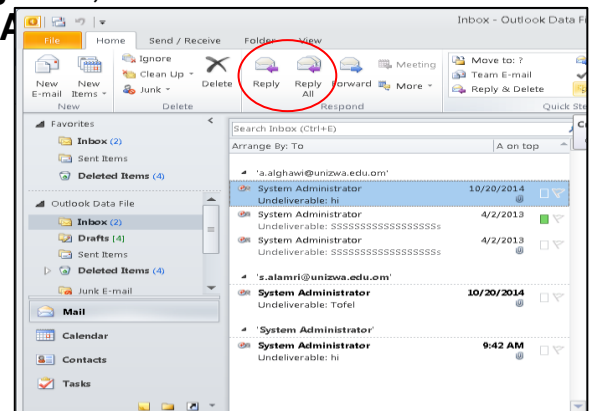
When Outlook finishes sending and receiving all messages, new messages appear in Contents Pane of the Outlook window. The Inbox folder displays a number in brackets of total new messages received in the Folder list.

Outlook shows the Contents of message in Reading Pane. The envelope icon changes from  to  when you open or view a new message. Use split bar to show more or less of each pane. You can double-click message to view contents in separate window.

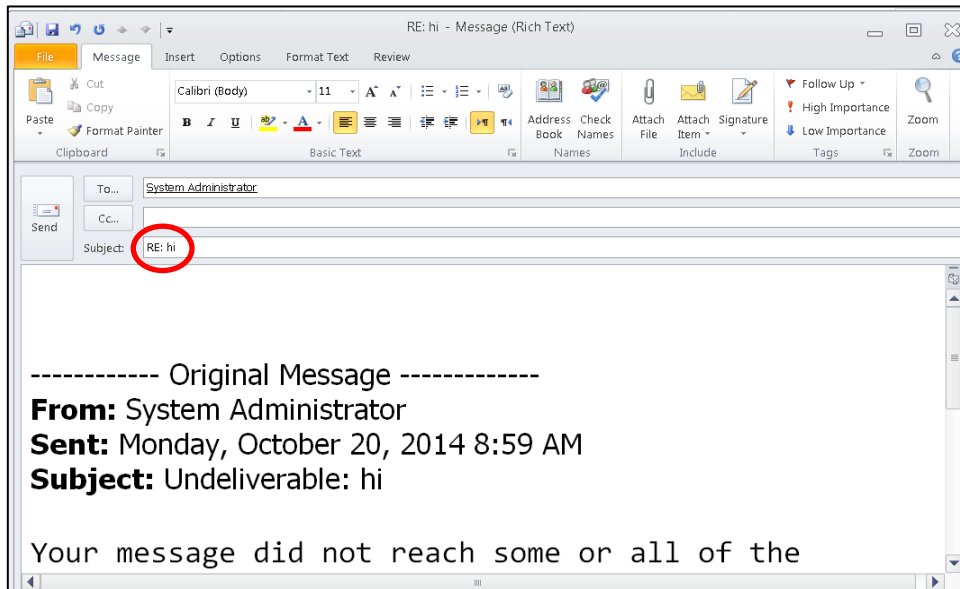
Replying to a Message


You can reply to sender or all recipients of original message.

- To reply to message, use one of the following methods:
 - On **Home** tab, in **Respond** group, click **Reply**, or
 - Press **Ctrl** + **R**
 - If viewing message, on **Message** tab, in **Respond** group, click **Reply**
- To reply to everyone addressed in original message:
 - On **Home** tab, in **Respond** group, click **Reply to All**
 - Press **Ctrl** + **Shift** + **R**
 - If viewing message, on **Message** tab, in **Respond** group, click **Reply to All**



Notice that Outlook displays a copy of original message as a reference, and adds **RE:** to subject line to identify this message as a response.

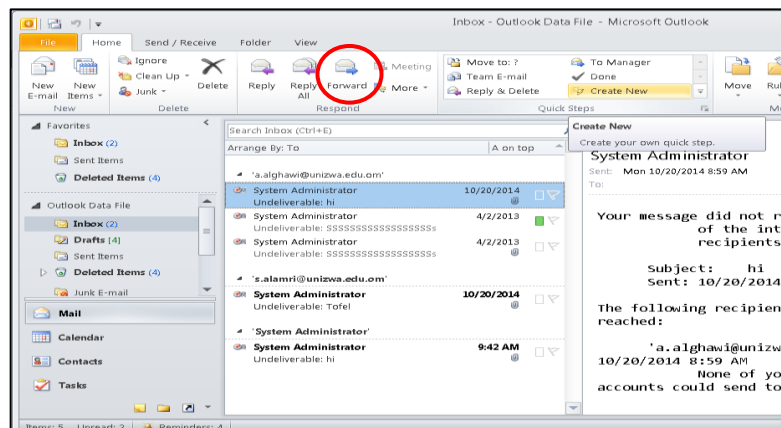


Once you have replied to a message, Outlook displays  next to the message in the Inbox to indicate that you replied to this message.

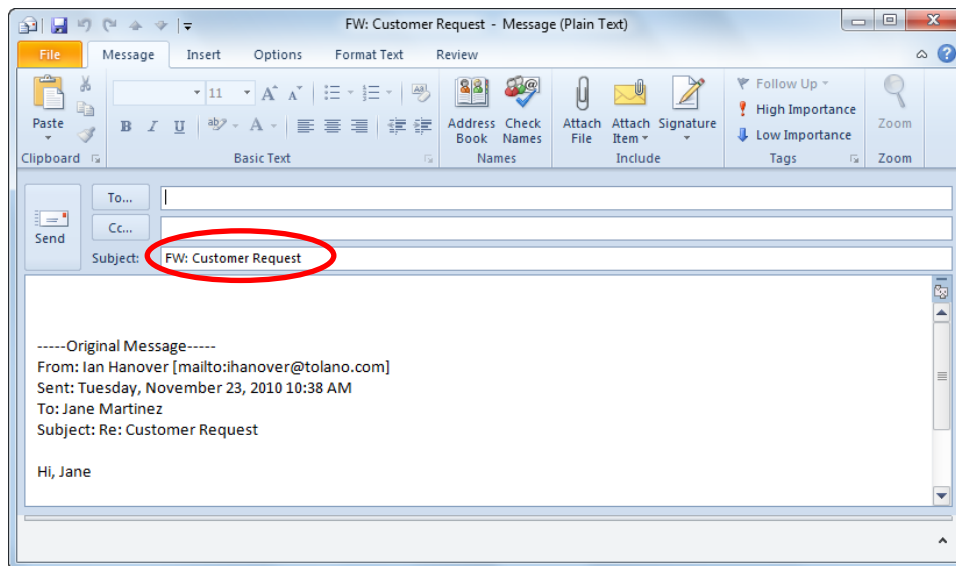
Forwarding a Message


Use the Forward option to send the message to someone else for further action or reference.

- To forward message, use one of the following methods:
 - On **Home** tab, in **Respond** group, click **Forward**
 - Press **Ctrl** + **F**
 - If viewing message, on **Message** tab, in **Respond** group, click **Forward**



Notice that Outlook automatically adds a FW to original message. Unlike a Reply command, the address fields are blank.



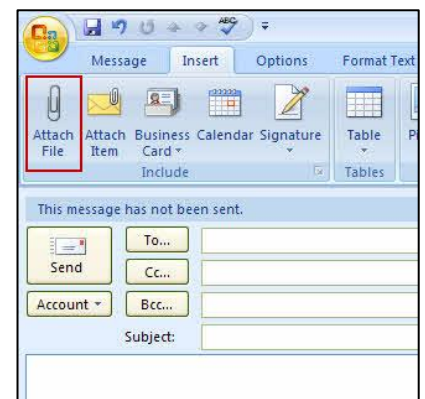
After forwarding a message, Outlook displays  next to message in the Inbox to indicate that you forwarded this message to someone else.

Attaching Files

You can send file to e-mail recipient for reference, or to supplement information provided.

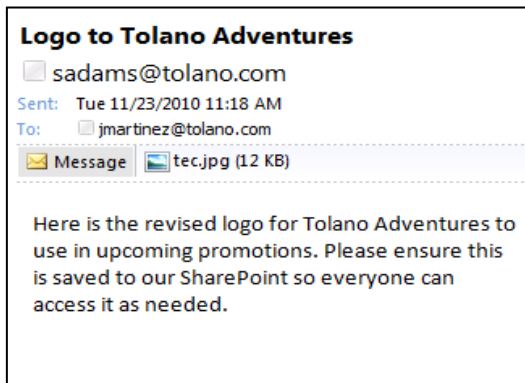
The file can be any type, as long as recipient has appropriate software to open it.

- To attach or insert file with message, use one of the following methods:
 - On **Message** tab, in **Include** group, click **Attach File**
 - On **Insert** tab, in **Include** group, click **Attach File**
- To remove attachment from message:
 - Select file name in the **Attached** field and press **Delete**
 - Right-click file name in the **Attached** field and click **Remove**



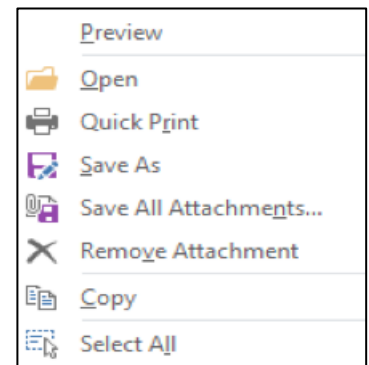
Viewing Attachments

When you receive a message with an attachment, Outlook displays with next to the new message. The Reading Pane displays file name attached.



You can then Right-click the attachment to display options for handling attachment:

- Click **Preview** to display preview of attachment in Reading Pane or message window.
- Click **Open** to open file in program that recognizes file type.
- Click **Save As** to save attachment.
- Click **Delete** to remove attachment from message.



Using the Inbox

Message sent to you appear in the Content Pane with the Inbox highlighted in the Folder list. Use thus folder as the main folder to manage your message.

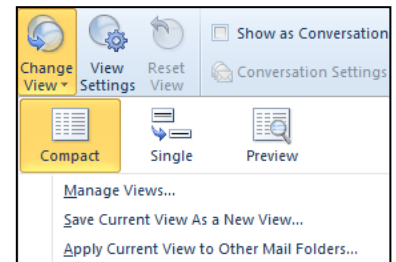
Selecting Items

Before you can do anything with any item, you need to select them, as follows:

- To select one message, click it
- To select multiple consecutive messages, click first message, press **(Shift)** and then click last message in list.
- To select multiple non-consecutive messages, click first message, press **(Ctrl)** as you click each message to select.

Changing the View for Messages

You can adjust view by using the options in the **Current View** on **View** tab. These options offer other ways to keep the Contents Pane “clean” by showing only those messages you want to list. You can arrange view of messages by specific items and groups, or customize fields used.



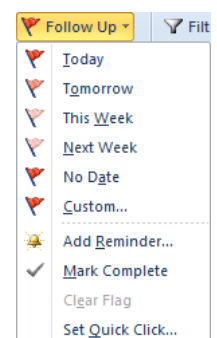
Marking Messages

- To mark selected message as read, in main Outlook screen:
 - Press **Ctrl+Q**
 - Right-click message and click **Mark as Read**
- To mark all messages as read, in main Outlook screen:
 - Right-click selected messages and click **Mark as Read**
- To mark message as unread, select the message and then:
 - Press **Ctrl+U**
 - Right-click message and click **Mark as Unread**
 - In the open message window, on the **Message** tab, in **Tags** group, click **Mark Unread**.

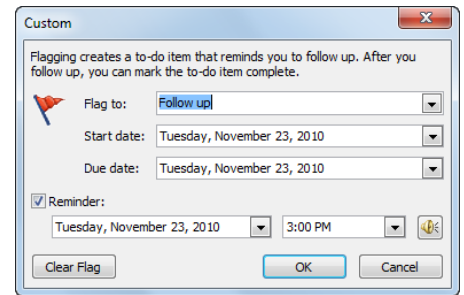
Flagging Messages

Flag or put a reminder on message for follow-up or to request a reply to your message by specific date.

- To flag message in main Outlook screen:
 - On **Home** tab, in **Tags** group, click **Follow Up**.
 - Right-click flag at far right side of message and click appropriate option.



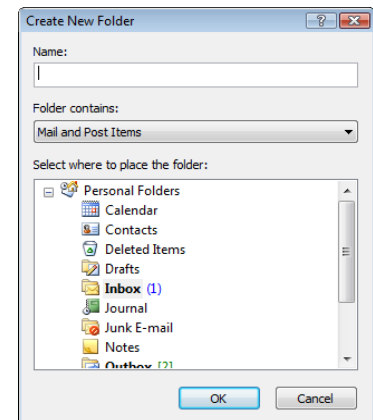
- To flag message with message open, on **Message** tab, in **Tags** group, click **Follow Up**
- To add reminder to flag, click **Add Reminder**



Creating Folders

Create folders in the Inbox to store message for specific topics or projects. The new folder becomes a subfolder in the Inbox.

- To create new folder in Inbox:
 - On **Folder** tab, in **New** group, click **New Folder**
 - right-click folder where inserting new folder, and click **New Folder**
 - Press **Ctrl + Shift + E**
- Use **▶** (Expand) or **▲** (Collapse) to show folder structure.
- Delete folders as if deleting messages
 - Select folder and press **Delete**
 - Drag folder to Deleted Items folder



Copying or Moving Messages

You can copy or move a message to any folder. You will probably move message from the Inbox to a folder for storage more often than you will copy them.

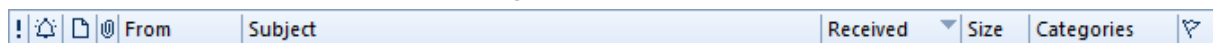
- To move messages to a folder, after selecting messages:
 - Press **Ctrl + X**

- Drag the selected message to the folder
- To copy messages to folder, select messages and then:
 - Press **Ctrl** + **C**
 - Right-click message, click **Copy**
 - Press **Ctrl** and drag message to folder
- To paste message in folder, click folder and then press **Ctrl** + **V**

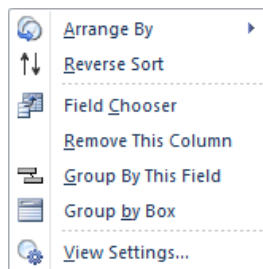
Sorting Messages

One way to find specific message can be to sort your messages according to different criteria in the Contents Pane:

- To sort messages, use one of the following methods:
 - Click column headings in Contents Pane



- Right-click column field and then choose appropriate sort option



- When using column heading as sort criteria, the ▲ arrow indicates ascending order(A-Z) and the ▼ arrow indicates descending order(Z-A).
- You can arrange fields in Contents Pane using **View** tab

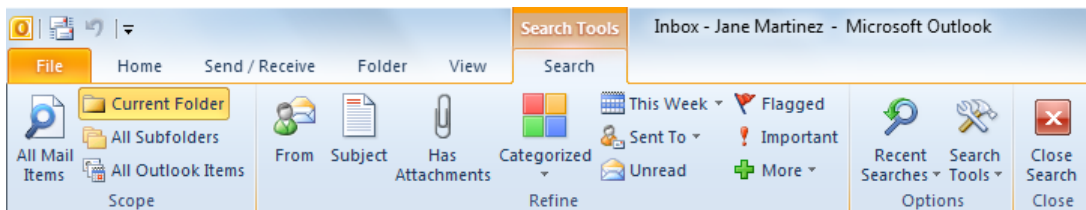
Finding Messages

You can locate information quickly using the Search tool. Your search criteria can be specific or general; you can search by names, words, or phrases.

- To perform search, type search criteria in **Search Inbox** field

Search Inbox (Ctrl+E)

- Outlook searches occur in all parts of message, including the subject, addresses, message body, and the name of attachments.
- By default, search specific to current folder but can change:
 - o To search all mail folders, click **Try searching again in All Mail Items** link, or
 - o Use options in **Search Tools** ribbon

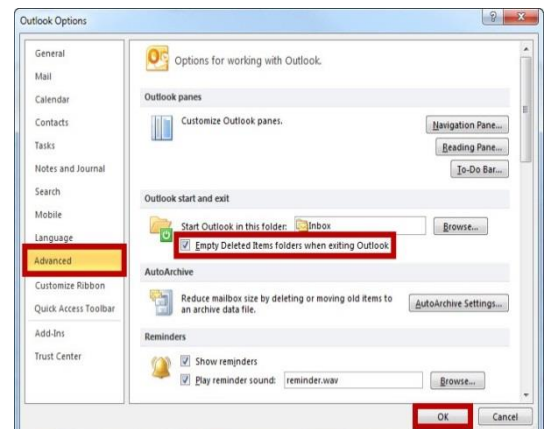


- To clear results from search:
 - o In **Search** field, click (**Clear Search**)
 - o Press **Esc**

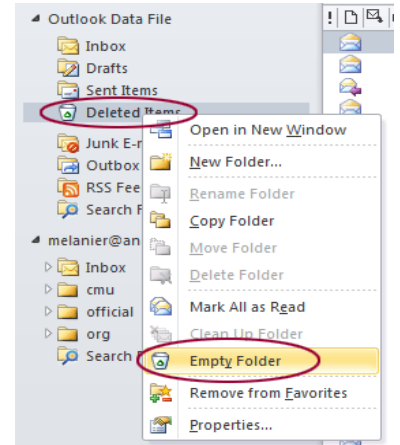
Deleting Messages

When messages are no longer needed, delete them to keep your Outlook file small. This includes all folders in your Inbox group. All deleted messages placed in Deleted Items folder.


- To delete items from folder, select item and then:
 - o On **Home** tab, in **Delete** group, click **Delete**
 - o Press **Ctrl** + **D** or **Delete**
 - o Drag message to **Deleted Items** folder

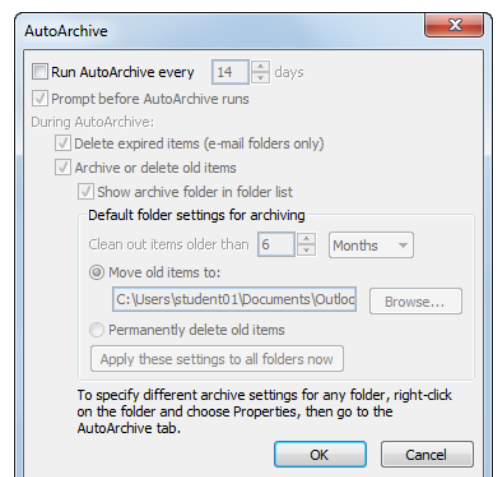


- The Deleted Items folder provides resource to restore the deleted item at a later item.
- To empty contents of Deleted Items folder every time you exit Outlook, click **File** tab, click **Options**, in **advanced** category, click **Empty the Deleted Items folder upon exiting** option.
- To empty contents of Deleted Items folder manually, right-click **Deleted Items** folder and click **Empty 'Deleted Items' Folder**



Archiving Messages

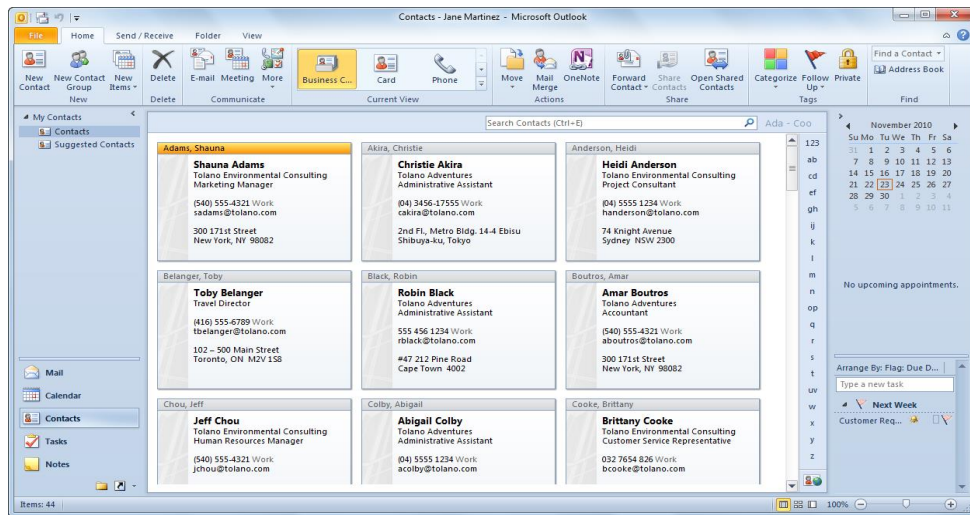
- Keep all messages but stored in separate file
- Can click archive file to refer to older message
- To archive messages any time manually, click **File** tab, with **Info** category selected, click **Cleanup Tools** and then **Archive**
- After setting options for archiving process, status bar displays 
- On completion, *Archive Folders* appears in Navigation Pane
- To automatically archive items, click **File** tab, click **Options**, in the **Advanced** category, click **Auto Archive Settings**



Working with Contacts

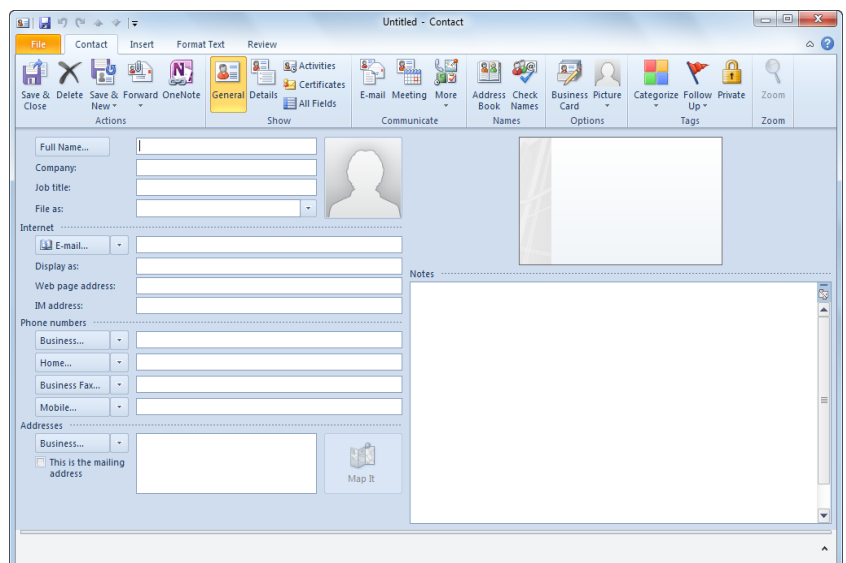
The Contacts feature work as an address book. You can use it instead of spending time trying to remember and type in someone’s e-mail address.

- To access Contacts feature, click Contacts group



Adding a Contact

- To create **new** contact, select **Contacts**:
 - On **Home** tab, in **New** group, click **New Contact**
 - On **Home** tab, in **New** group, click arrow for **New Items**, click **Contact**
 - Press **Ctrl** + **N**

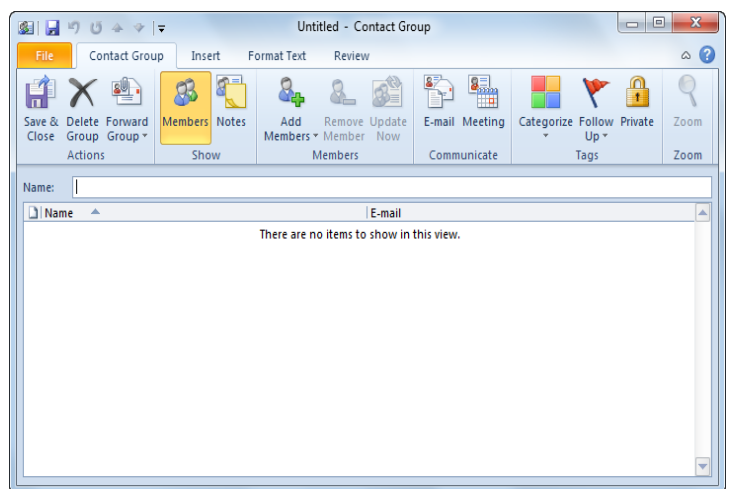


- When finished entering information, to save contact:

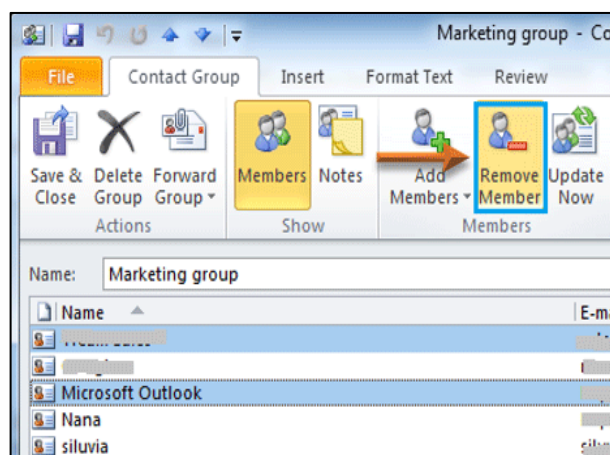
- To save this contact, on **Contact** tab, in **Actions** group, click **Save & Close**
- To save contact and enter another, on **Contact** tab, in **Actions** group, click **Save & New**
- To save contact and enter new one at same company, on **Contact** tab, in **Actions** group, click arrow for **Save & New** and click **Contact from Same Company**.

Using Groups

Contact Group is an address list containing group of people you send messages often to them.



- To create Contact Group:
 - On **Home** tab, in **New** group, click **New Contact Group**
 - On **Home** tab, in **New** group, click arrow for **New Items**, click **Contact Group**
 - Press **(Ctrl) + (Shift) + (L)**
- Once group created, can add or remove members



Deleting Contacts or Groups

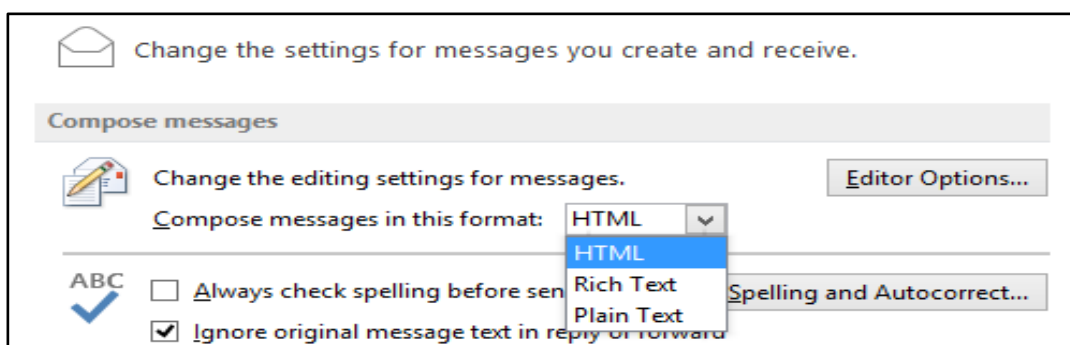
- When contact no longer needed, delete from list
- Cannot recover deleted group from Deleted Items folder
- To delete contact or group in the Contacts Pane, select contact or group:
 - On **Home** tab, in **Delete** group, click **Delete**
 - Press **Delete**

Maintaining Outlook

Changing the Mail Format

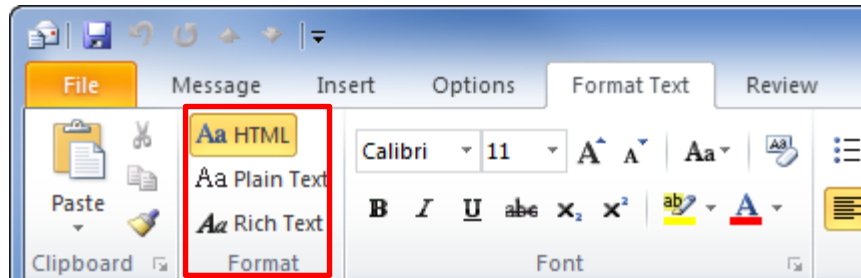
Outlook displays the contents of message in a format that easy to read.

- Could be HTML or Rich Text as both formats display text formatting
- Control mail format for all new messages by changing default options in **File, Options**, and in **Mail category**, choose **format** from **Compose messages**

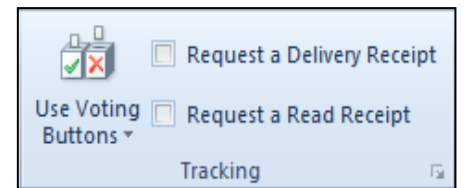


- To change mail format while creating message, click in message body area; on **Options tab**, in **Format** group, click mail format to use.

Tracking Options

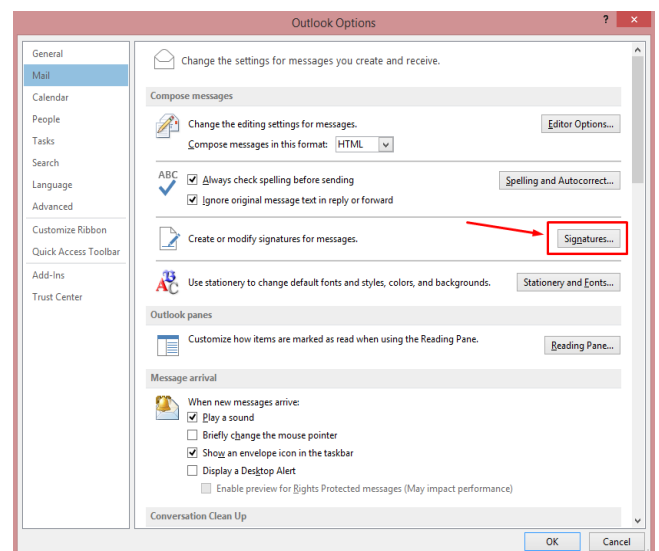


- Can set Outlook to send notices when message received or read by others
- To set receipts for every message you send, select **File**, **Options**, and in **Mail** category, click items from **Tracking** area
- To set receipts for message, in new message window on **Options** tab, in **Tracking** group, select tracking option to use.
- Recipient's e-mail system may not be able to track e-mail messages, and hence may not send notices

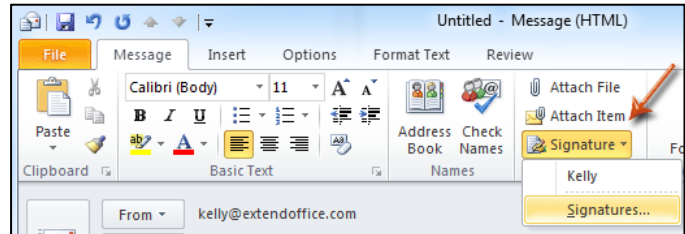


Using Signatures

- Piece of text that automatically appears when you create new message
- Can create as many signatures, but only one set as default
- To create signature, select **File**, **Options**, in **Mail** category, in **Compose messages** area, click **Signatures**



- Can enter as many signatures as need
- To choose different signature in new message, on **Message** tab, in **Include** group, click arrow for Signature, and click **signature** to use



Sending Out-of-Office Notices

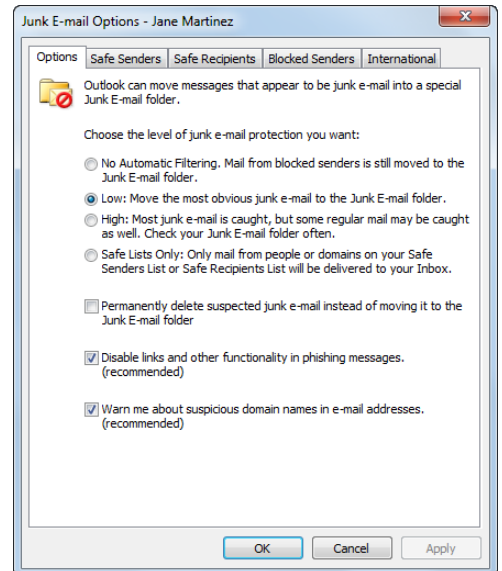
- As business practice and courtesy, if away from office, send message in advance to those you deal with regularly
- Out-of-office notices should provide details regarding dates you are away and who is handling your work during absence
- Some e-mail programs and mail servers provide option to send out-of-office response automatically to anyone who sends you e-mail during this time.

Staying Up to Date

- If Outlook installed on computer and PDA, can stay up to date with all messages on both devices.
- Use synchronization feature available in Outlook.
- New computing devices enable you to synchronize from different Outlook modules to the device.





Blocking Messages

- Use Junk E-mail feature to reduce number of junk messages you receive.
- To block messages from e-mail address, on **Message** tab, in **Delete** group, select **Junk, Junk E-mail Options**.
- Can add or remove items using **Edit** or **Remove**



Review Questions

1. The Reply function enables you to send a message to all recipients of the original message.
 - a. True
 - b. False

2. Which symbol appears in Outlook to indicate there is an attachment included with the message?
 - a) 
 - b) 
 - c) 
 - d) 

3. Adding a contact helps to reduce the amount of time spent entering e-mail addresses in messages.
 - a. True
 - b. False

4. A group is a distribution list consisting of names from your contact list so you can send messages to everyone in this group instead of having to type each name individually.
 - a. True
 - b. False

5. Which option would you use to prevent spam messages from being delivered to your Inbox?
 - a) Security Issues
 - b) Junk E-mail
 - c) Block Spam
 - d) Mail Format

Unit 8: Using the Internet

Lesson 44: Getting Started

Objectives

- what the World Wide Web is
- what a Web site is
- what a Web browser is
- identify standard elements on a Web page
- recognize different Web site types
- understand some common terminology

Understanding the World Wide Web:

- **The Internet** is a worldwide collection of networks that connects many smaller networks connected together.
- The **world wide web** (WWW), or **Web**, consists of a worldwide collection of electronic documents. Each electronic document on the Web is called a **Web page**, which can contain text, graphics, audio(sound), and video.
- **Web server** stores or hosts the websites created by company or person and deliver requested web pages to your computer.
- **Web site** is collection of pages containing information about company, person, product, or service which stored on a Web sever.
- To view Web page, you need web browser to help access information by displaying pictures, text, and animations using “point and click”.
 - Web browser is application software that allows users to access and view Web pages.
 - The more widely used Web browsers for personal computers are Internet Explorer, Netscape, Mozilla, Firefox, Opera, and Safari.



Looking at Web Pages:



- 1
- URL
- 2
- Navigation Bar
- 3
- Picture
- 4
- Field
- 5
- Hyperlink

The first page that a Web site displays called **Home page**.

The elements available on Web pages:

URL: Uniform Resource Locator an address bar that shows the web address of the page you are on. To go to a different page, you can type an address in the address bar and then press Enter Key.

Navigation Bar: May contain navigation bar on left side or top of page, or called site map.

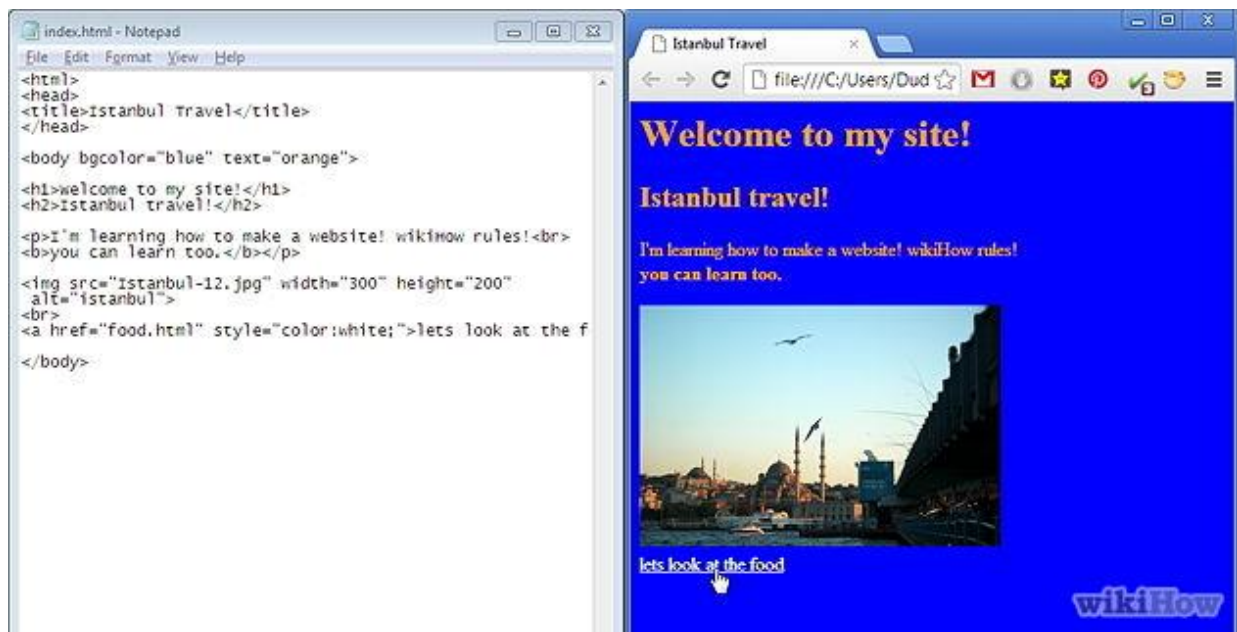
Picture: Can contain pictures which can be static or dynamic.

Field: Forms with fields or blank spaces where you can enter information.

Hyperlink: Text or graphic with URL “embedded”;  indicates link.
Button: Interactive graphic that performs action when clicked.

Web pages stored on a Web server are simple text files with no formatting or images. The designers of Web pages use a variety of techniques to develop Web pages. These include some of the languages. Most Web pages are written in HTML (Hypertext Markup Language) with tags that indicate how the pages are displayed in a browser window.

- HTML (Hypertext Markup Language) is the language used to format documents for display on the web.

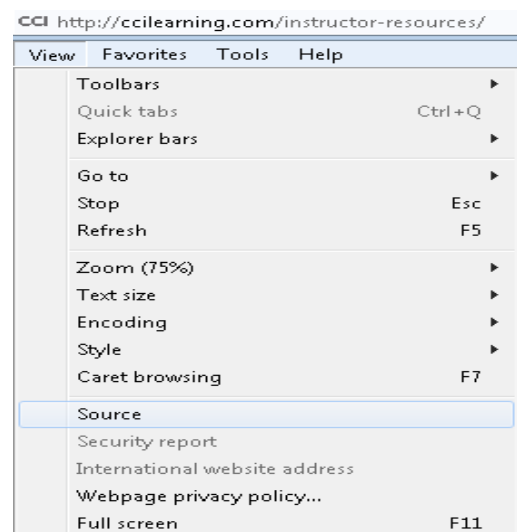


(portion of HTML program)

You can see the HTML code for a Web page by clicking View on the browser menu bar and then clicking Source, Source code, or Page Source on the View menu.

Any data used from Web pages is called eXtensible Markup Language (XML) content

XML separates the web page content from its format, allowing Web programmers to create one version of Web site and the content can be formatted to display



appropriately on various devices. Using HTML, a programmer must create three separate Web sites, with special coding for each device (Notebook computer, PDA and Smart Phone).

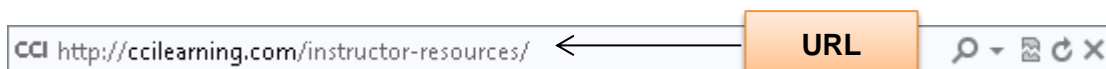
XML differ from HTML that HTML was designed to display data and to focus on how data looks. XML, by contrast, was designed to describe data and to focus on what data is.

When the browser receives a Web page from server, it first format the text using HTML instructions included on the page. Pictures and multimedia files take longer to arrive from the server and usually appear on the page after it has been formatted because of these picturesand multimedia files are not part of the page but are stored separately on the server. The Web page only contains “placeholders” where the pictures will be inserted.

All Web browsers contain button to quickly return to default home page.

In Internet Explorer, the Home button appears as  in the toolbar.

To go to Web page or site other than home page, URL must contain path to particular file, as in the following example:



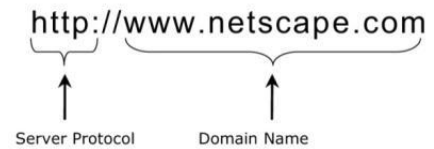
You can access website by entering its Internet Protocol (IP) address into URL field. Every Web sites has a unique IP address, which consists of numbers in the 100.11.100.100 format. These numbers represent the path or address to this Website just as the URL does. Most companies make their Web sites accessible by name because most people rember words more easily than numbers.

Using the Uniform Resource Locator (URL)

A web page has unique address, called a URL (Uniform Resource Locator) or Web address. For example, the home page for the Weather

Channel Web site has <http://www.weather.com> as its Web address. Many Web page addresses begin with http://.

- Http (Hyper Text Transfer Protocol), is a protocol for your computer to send the request that the Web server can understand how to respond to your request.

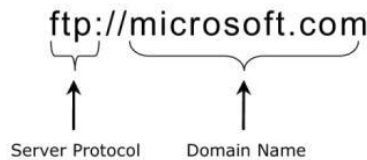


Most browsers and Web sites do not require the http:// and www portions of the Web address. For example, typing weather.com instead of the entire address, still accesses the Web site.

Web browser communicates with any server connected to Internet depend on what uses protocol portion of URL.

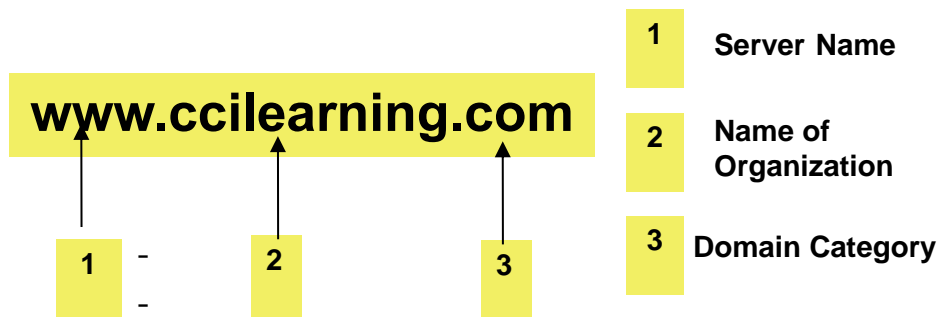
For

example:



- FTP(file Transfer Protocol) is an Internet standard that permits file uploading and downloading with other computers on the Internet.
- An FTP server is a computer that allows users to upload and/or download files using FTP.
- An FTP site is collection of files including text, graphic, audio clips, video clips, and program file that stored on an FTP server.

Identifying Web Site Types:



- **Server Name:** Identifies server type (www indicates a Web server)

- **Name of Organization:** Identifies organization owning server
- **Domain Category:** Identifies server's information domain

Common domain categories and types of Web sites:

- .com Commercial site where organization is selling service or product
- .net Another type of commercial Web site, usually managed by ISP
- .edu Educational institution
- .gov Government agencies
- .org Non-profit organization

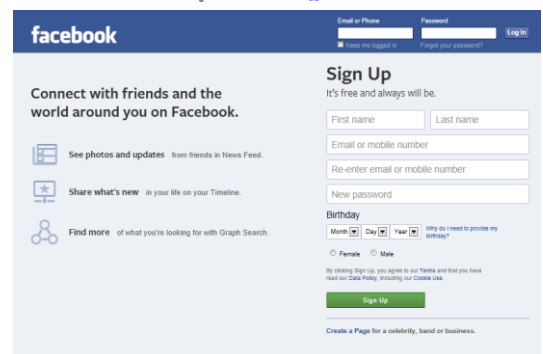
Domain categories sometimes identify country where Web site hosted. For example: www.philips.com.au is the domain for philips Australia.

Identifying Web Site Types:

“Search sites”: The most popular Internet search engine is Google.



Google.com.om offered in: العربية

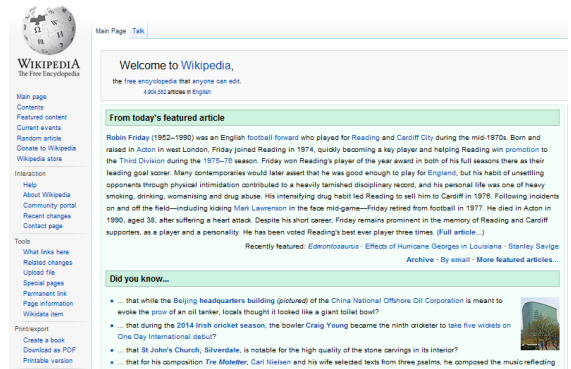


“Social networking sites”: This is new kind of websites which people use to exchange views with friend and to make new friend online.

“Blogs”: A blog, short for Weblog, are online journals where people can “share” information, opinions or ideas on certain topics.



Wiki site is a websites designed to allow visitors to use their browser to add, edit, or delete the site's content. Wikis are often used to support collaborative writing in which there is a community of interested contributors. Wikipedia is one of the most popular wikis.



Web portals is a website that offers a variety of Internet services from a single location. It offer the following free services: search engine , e-mail , sports and weather, shopping online, news, sports and weather.



Identifying Other Web Page Elements:

ActiveX	Programming tool that enables Web designers to include interactive applications in Web pages such as present animation, display graphics, provide interactive games, and much more.
Cookies	Data files that are stored on hard drive from websites you have visited.
Digital Certificates	Depend on encryption technology and used to identify parties in e-commerce transaction as valid.
Encryption	Ensures unauthorized individuals not able to obtain personal or financial information you submit with order.
FTP	Send large file via File Transfer Protocol site; type of storage location.
Podcast	Personal On Demand broadCast is recorded audio stored on a Web site that can be downloaded to a computer or portable digital audio player such as iPod.
Really Simple Syndication (RSS)	Uses to distribute content to subscribers. It is Similar to mailing list you might subscribe to, using that site's "RSS feed"; information distributed in standard XML format to view it in various programs, including e-mail. News Websites use RSS to publish headlines and stories.

Secure Socket Layer (SSL)	Public key scrambles text to make it unreadable; other party applies private key to encrypted file to unscramble and convert to original document. SSL requires the client have a digital certificate. Once the server has digital certificate, the Web browser communicates securely with the client. Web addresses of pages that use SSL typically begin with https, instead of http.
Web Cache	Cache on Web is way to increase speed you can access files on Internet by reducing bandwidth usage and server load.

Review Questions

1. An example of why you might want to restrict access to certain aspects of the Internet could be to:
 - a) Control where students or young children can go when online
 - b) Control where employees can go when online
 - c) Prevent downloading of files
 - d) Any of the above
 - e) a or c

2. When you create personal documents on a computer at school or work, the documents belong to you.
 - a. True
 - b. False

3. In addition to checking with the school administrator as to how you may use a school computer, where else could you check?
 - a) The school library or librarian
 - b) Reference books about computer use
 - c) Your parents
 - d) Your lawyer
 - e) Any of the above
 - f) a or b

4. What are some ways you can protect your privacy while online?
 - a) Do not fill in any forms where you may not be interested in getting information from the company.
 - b) Use an alias when on public forums or blogs.
 - c) Do not check the option to receive information from marketing partners of the company.
 - d) Any of the above
 - e) a or b

5. What are some ways you can share your information with others?
 - a) Volunteer to teach someone about computers.
 - b) Volunteer to help at a telethon by inputting data such as names and donation amounts.
 - c) Provide technical support for family members.
 - d) Any of the above
 - e) a or c

Reference

<http://stylecaster.com/best-free-blog-sites/>

<http://www.wikihow.com/Image:Create-a-Simple-Webpage-Using-Notepad-Step-12.jpg>

<https://www.apicasystem.com/wp-content/uploads/2014/08/web-browsers.png> (Web browser page)

Unit 8: Using the Internet

Lesson 45: Using a Web Browser

Objectives

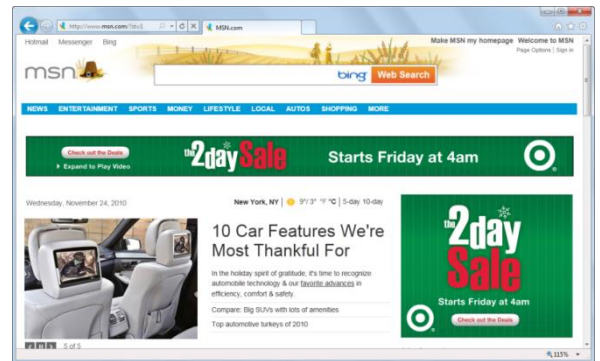
- starting Internet Explorer
- navigating around the Web browser
- entering a Web site address
- refreshing a Web page
- navigating around a Web page
- using hyperlinks
- working with bookmarks
- checking the history

Using Microsoft Internet Explorer

To access web resources, you need special application software called **a web browser**. **Web browser** is application program designed to help user access information by displaying pictures, text, and animation in an interactive manner. To view web page you need to use a web browser such as Internet Explorer, Mozilla Fire Fox, Safari, Opera or Google chrome.

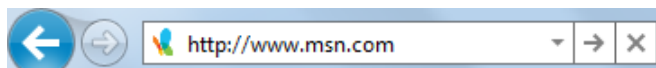
To start Internet Explorer:

- Click **Start**, point at **All Programs**, then click **Internet Explorer**
- Click  **Internet Explorer** in taskbar



Using the Address Field

Use Address bar to locate resources on World Wide Web.




Address:

Displays Web site currently being viewed or enter address for different site; use arrow to view and select from list of sites previously visited.

Refresh/Go:

Click  to re-display or refresh contents of Web page.

Click  after typing in Web site address to go to that site.

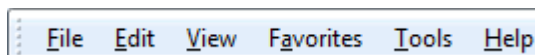
Stop:

Click  to halt downloading of information for Web page.

Using the Menu Bar

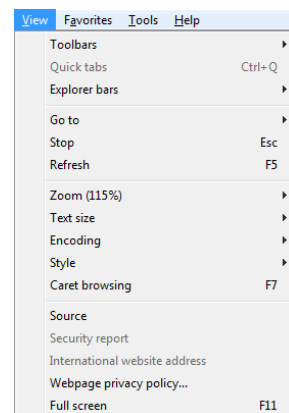
Menu Bar is a list that handy to locate specific commands not commonly used. By default, Menu bar does not appear, but you can turn it on:

- Press **(Alt)** or **(F10)** to display menu whenever you want menu command.



-To select or activate commands:


- Press **(Alt)** or **(F10)** and underlined letter for menu, then press underlined letter for command
- Point and click menu choices
- Use keyboard shortcut for command



Using the Tabs


Tabs allow you to have more than one web page at the same time. In each tab you can open a separate web page and easily can switch between them by clicking on the tab.

To create new tab:

- Click  (**New Tab**)
- Press **ctrl +T**
- right-click active tab and click **New tab**
- If menu bar displayed, click **File** and click **New tab**

To remove tab, click  (**Close Tab**) in that tab

Understanding Hyperlinks

Hyperlink or link connects you to other documents containing related information –text files, graphic images, audio, and video clips. Links may not immediately appear visible on screen until you point mouse on them, if cursor changes to  , this is hyperlink.




Click item to jump or link to another page in Web site or different Web site, may open new window or tab to display new Web page or Web site.

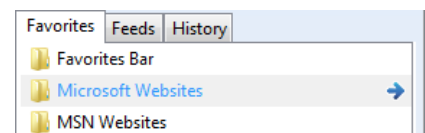
Working with Favourite

Favorite button allows you to save sites that you frequently visit, but you don't want to remember the URL each time. It can be called bookmark. You can share your favorites with others online such as social networking sites, where you save the bookmarks and then apply keywords for that bookmark. This is known as social bookmarking and works like resource center where people can find addresses for sites devoted to particular topics.


To display Favorites Center:

- Click  **(View favorites, feeds, and history)**
- Press **Alt** + **C**

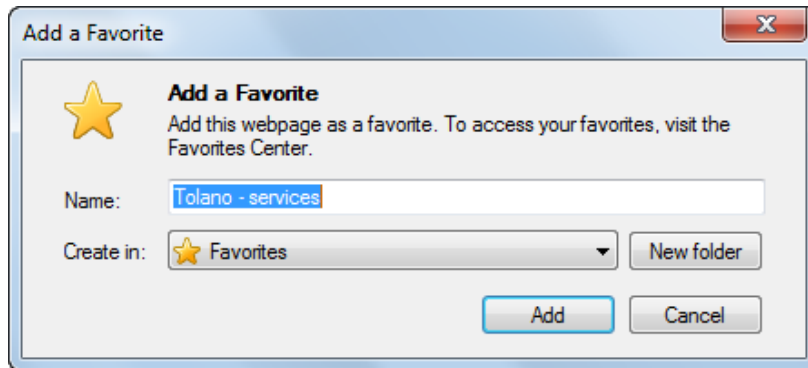
You can organize bookmarks into folders, move or remove them. Also, you can Expand or collapse folders by clicking folder. It can have Web browser place each link in folder as separate tab by clicking arrow next to folder.



You can try bookmarking a few websites .To add Web site to list of favorites:

- Click  **(View favorites, feeds or history)** and click **Add to favorites.**
- On Menu bar, click **Favorites** and click **Add to favorites.**

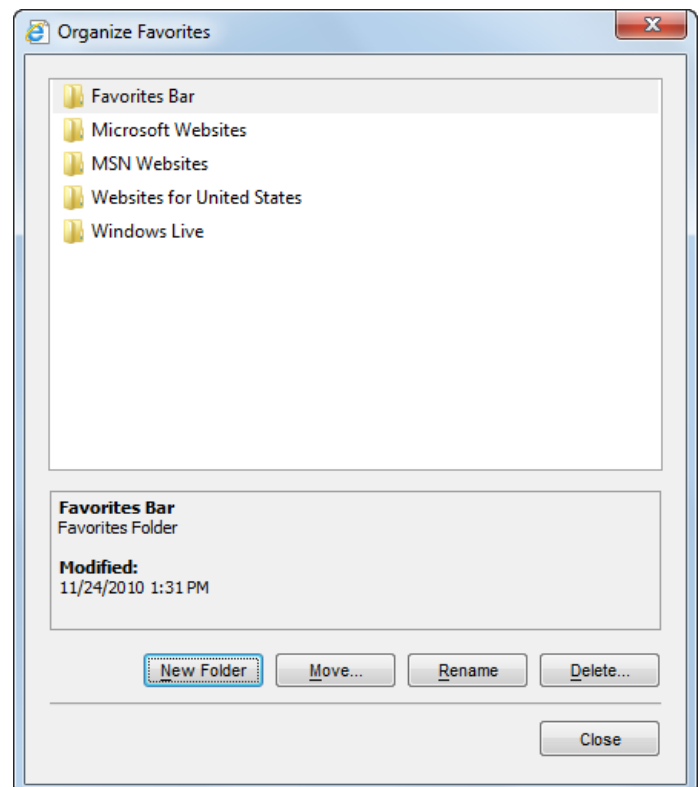
- Press **CTRL + Z**.



To access Web site, click it in Favorites list.

To organize Favorites Center:

- Activate Favorites Center and drag link to new location
- Activate Favorites Center, click arrow for **Add to favorites**, click **organize favorites**.
- Activate the Menu bar, click
- **Favorites**, click **Organize favorites**



You can then choose options to reorganize list of favorites.

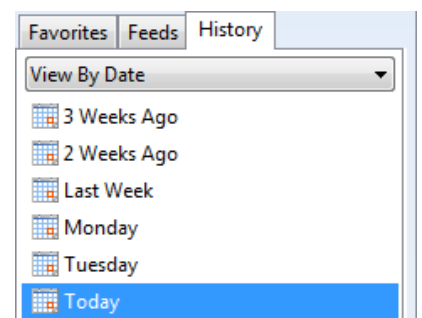
When dragging link to new location, black line appears as guide to where to place link.

Checking the History

Sometimes, you may need to return to view the contents of a page but you can't remember the website address that you last visited. The web browser has a history tool that helps you to find recently visited site. To display history, activate Favorites Center and click **History** tab.

You can also click arrow for **View by Date** to choose different view option for sites visited:

- To go to site, click site link
- To see other pages for that site, right-click link and click **Expand (to show more items inside)**.
- To collapse (**hide the items**) list of pages for site, click site link.



To delete site from list, right-click link and click **Delete**. **While**, to delete entire history:

-Click  , click **Safety**, and then click **delete browsing history**





On Menu bar, click **Tools** and click **Delete browsing history**.

Review Questions

1. Use the Address field to enter the Web site address that you want to visit.

- a) True b) False

2. Which button would you use to refresh the page on your screen?

- a) 
- b) 
- c) 
- d) 

3. Why would you want to create a new tab in the Web browser?

- a) To view the contents of a Web page in a separate window
- b) To bookmark a Web site
- c) To edit the contents of the Web page in the first tab
- d) To keep the display of the Web page in the first tab
- e) Any of the above
- f) Either a or d

4. What is a bookmark?

- a) A paper clip symbol that you can assign to a Web site to mark your place.
- b) An addition to your Favorites list so you can quickly return to this site.
- c) A link that you can set up on the Web page to go to your home page quickly.
- d) A link you can use to access help.

5. Why would you want to check the history of Web sites visited?

- a) To find a Web site of interest you visited before
- b) To see what sites other people are interested in
- c) To access Web page information entered by others
- d) Any of the above

References

1. [HTTP://www. Inconarchive.com](http://www.Inconarchive.com)

Unit 8: Using the Internet

Lesson 46: Using Information From the Web

Objectives

- Retrieving Information from a Web Page
- Using Copy and Paste
- Printing a Web Page
- Downloading Information
- Customizing the Web Browser
- Identifying Common Web Browser Errors

Retrieving Information from a Web Page

Occasionally you may want to use information or picture you find on Web site, Perhaps to complete an essay or proposal. There are many ways to obtain information; the most common method is to copy information from Web site and paste into document. To make copy of picture on Web site, right-click picture, click **Save Picture As**, and choose location to store picture.

Copyright means all material on Web site is protected and belongs to its creator; the creator may be the Web site owner or may have purchased rights to use that content. Most sites have e-mail link where so that you can ask permission to use text and graphics on that site. State clearly how you intend to use information and, even when you have permission, remember to attribute work to creator or Web site owner. The only exception is if information truly belongs to you or your company.

Using Copy and Paste

To copy and paste from Web pages, use the same procedure as with application software programs. Information can be copied from Web page and pasted into any application programs such as Word, Excel, PowerPoint, and Notepad. You must select item prior to activating commands.

To copy selected items from a Web page, use one of the following methods:

- On the Menu bar, click **Edit** and then **Copy**.
- Press **Control + C** key, or
- Right-click the selected item and then click **Copy**.

To paste the selected items into your document in another application, open the application with the document and then use the appropriate Cut, Copy, or Paste command in that application.

Exercise

Try to add sites to your favorite's center by the following steps:

1. In address field, type: www.monster.com and press **Enter**
2. Click add to favorites ,type: Monster as the name and then click **Add**

The web site has been added to your list of favorite sites.

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fax: (614) 555-6514

[London United Kingdom](#)
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tel: 032 7654 826
fax: 032 7654 974

[Sydney Australia](#)
74 Knight Avenue
NSW 2300
tel: (04) 9272 1234
fax: (04) 9272 6547

[Cape Town South Africa](#)
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tel: 555 456 1234
fax: 555 456 5422

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<p>Toronto ON Canada 102-500 Main Street M2V 1S8 tel: (614) 555-6789 fax: (614) 555-6514</p>	<p>Sydney Australia 74 Knight Avenue NSW 2300 tel: (04) 9272 1234 fax: (04) 9272 6547</p>	<p>Shibuya-ku Tokyo Japan 2nd Fl., Metro Bldg., 14-4 tel: (04) 3456-17555 fax: (04) 3456-17432</p>

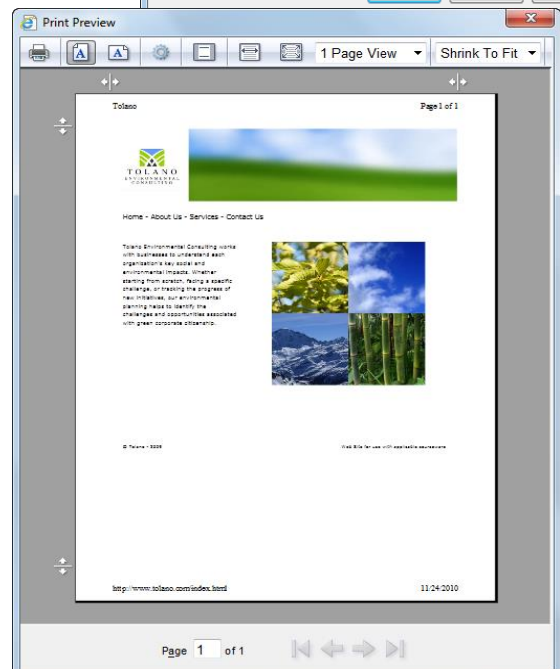
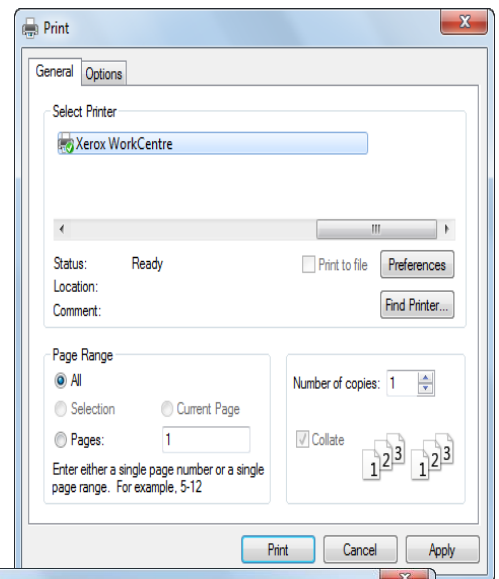
Printing a Web Page



You can also print a Web page. To print Web page:

- Click  , click **Print**, then click **Print**
- On menu bar, click **File** and click **Print**
- On Command bar, click  (Print) button or
- Press **Ctrl** + **P**




Depending on how Web page designed or what print engine being used by Web browser, hard copy may be missing certain elements visible on screen.

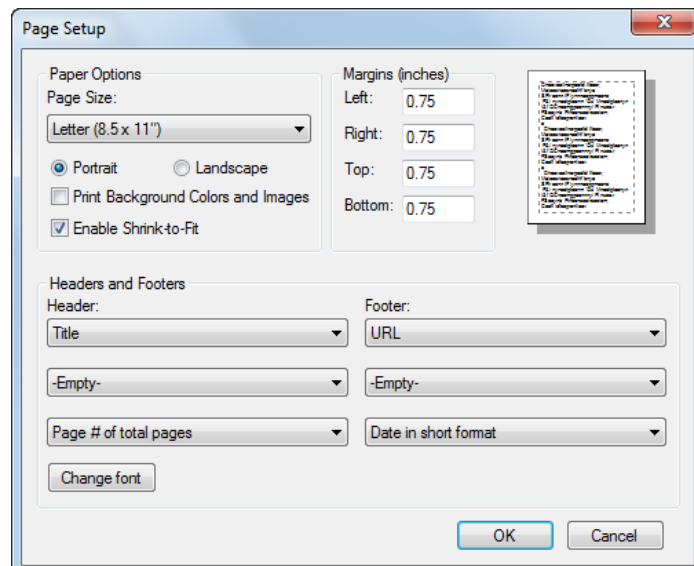
To avoid this, use Print Preview to see how Web page may appear on paper. To preview Web page:



- Click  , click **Print**, then click **Print preview**, or
- On menu bar, click **File** and click **Print preview**, or
- Click **down arrow** for  (Print) then click **Print preview**.

A toolbar is available in preview to control **how page prints**. You can change setup of page for current printer to adjust how page will print. To change page setup:

- Click  , click **Print, Page Setup**
- Select **File** and click **Page Setup**
- Click down arrow for  , click **Page setup**
- click  (**Page Setup**) on Print Preview toolbar
- To print portion of page, select portion of page, then **Print** command, and click **Selection** option in the Print dialog box.



Exercise

1. Ensure the favorite's center is open and then click the history tab.
2. Click today. (**You should now see a list of all sites visited today**)
3. Click the arrow for the **view by date** drop-down.
4. Click view by sites (Note: how the history list appear. The number

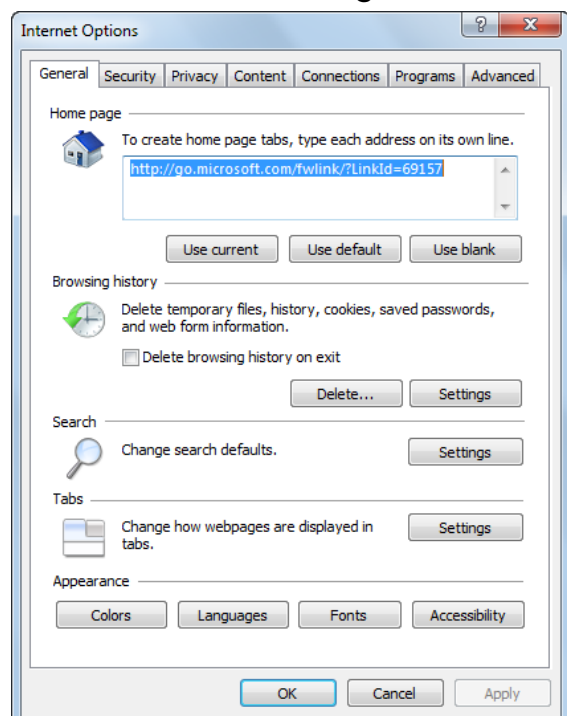
Downloading Information

Downloading refers to process of copying file from another computer using the Internet to your computer. You can download from the internet include music files, software programs, data files. Try to keep following points in mind:



- Use separate folder to store all downloaded files
- Always choose to save file to designated folder; can install later
- Always run virus scan on downloaded file before installing it!
- If downloaded file comes with ReadMe text file, be sure to read it prior to installation or use
- Video played or streamed on Web site is being downloaded from Web site owner's Web server

Customizing the Web Browser

Every Web browser comes with features that allow you to customize it.




To change or customize Internet Explorer:

- Click , click Internet options
- On Menu bar, click Tools, Internet options
- On Command bar, click , Internet options

General tab: change home page for Web browser and perform basic management of files from sites visited

Browsing history: delete information that might be gathered by spammers

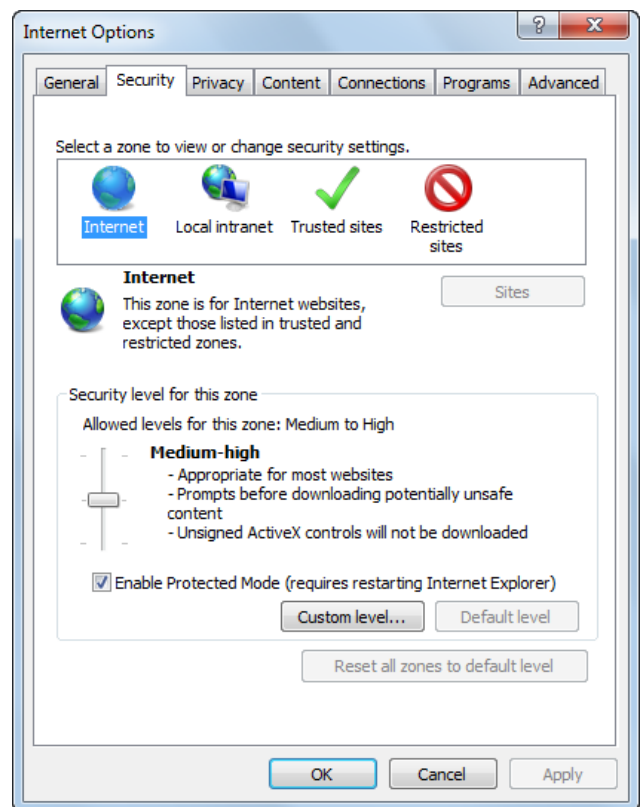
Deleting history prevents spam harvesters from finding sites that match marketing criteria; the disadvantage is that you may lose an interesting site address you did not bookmark. You can also delete the entire history using one of the following methods:

- Click , click **Safety**, then **Delete browsing history**.
- On Menu bar, click **Tools**, then **Delete browsing history**.

The Security tab helps set which options you can see while on Internet such as ActiveX or JavaScript; both of these may contain viruses that can harm your computer.

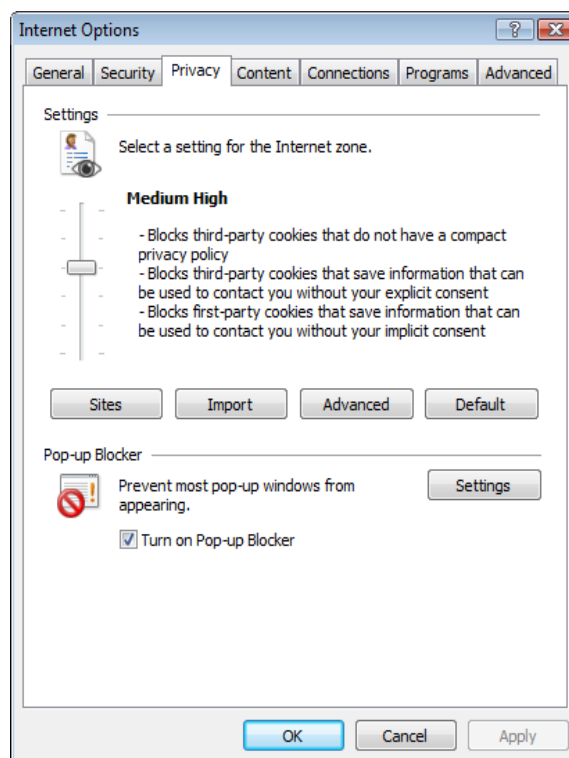
If security set too high, you will not be able to view or download certain files, and some animated or media elements on Web page may not display.

Be sure to check with network administrator (or someone



familiar with security settings) before making changes to ensure you can see or activate items.

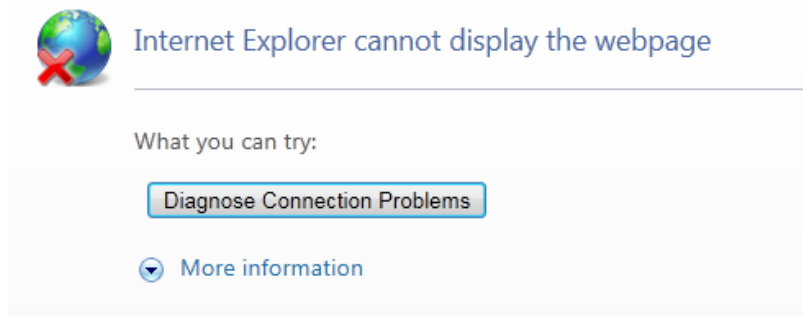
The **Privacy** tab can help decide how much information is gathered or harvested from your system. Do not set for anything lower than Medium, if high gives the most protection against cookies that are designed to provide marketing information to other Web sites. Check with network administrator or someone familiar with this option before making any changes.





Identifying Common Web Browser Errors

Occasionally error messages may appear when you try to navigate to a Web site. Some error messages are simple errors such as typing Web address incorrectly or using wrong country domain. Other errors may be result of how Web browser set up for viewing items such as ActiveX, video, downloading, and so on.

Example: check Internet is working or if Web site does not exist



Cannot read or view content; Some instance where you may have problems reading the screen due to different language or font or color scheme too difficult to see items. It could be page is slow to download or if interrupted during download. For example:  indicates picture not available for this page.

For large downloads, use  any time to stop delivery if content taking long time or if only able to see part of content.

Different Web Browser Versions

Another reason you may not be able to view the content of a Web page if using older version of Web browser, some components may not appear on Web page. Most Web designers create Web pages using version most users have installed or minimum version needed to display elements at time of construction.

Plug-in Programs

A plug-in is a program that can be downloaded to view or play file created in that program without having to buy the program. Another item you may need to download ActiveX before viewing or running specific content, which is a type of program that enables specific components to work such as downloading a file or program from a Web site.

Pop-ups



A common message that may appear on your screen is if something was blocked from displaying:

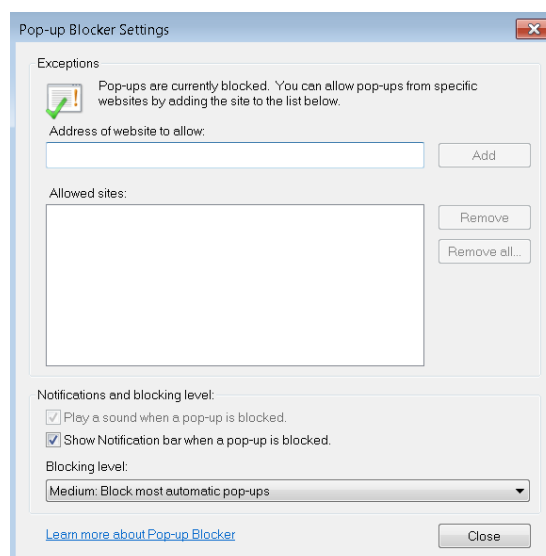


A pop-up usually appears as separate window with advertising; it is not dangerous to system, but annoying. The more places you visit on the internet, the more likely you are to see pop-up ads. When information window appears across bottom of Web page, click button to display options to deal with pop-ups on this site.



To change settings for how pop-ups appear:

- Click information window, click **Options**, and click **Settings**.
- Click , click **Internet options**, click **Privacy** tab, then **Settings**.
- On Menu bar, click **Tools**, click **Pop-up Blocker**, and click **Pop-up Blocker settings**.
- On Command bar, click , click **Pop-up Blocker** and click **Pop-up Blocker Settings**.



Security Issue

Use caution when navigating to different Web sites as there is no agency policing Internet. A common tactic used by internet is called **Phishing**. For Example : you are getting e-mail with link to Web site representing financial institution by clicking link you are sending your information Another common security issue is called **website Spoofing** that fake Web site that appears almost identical to genuine Web site offering deal that seems too good to be real.

The best way to avoid these types of activities is to not respond at all, and mark as junk mail, or work with ISP to create list of e-mail addresses to block.

Review Questions

1. What is the most common method of retrieving information from a Web page for use in a Word document?
 - a) Copy and paste the text or images
 - b) Export the text or images
 - c) Print a copy of the Web page
 - d) Any of the above

2. What does downloading refer to?
 - a) The ability to copy information to another computer
 - b) The ability to copy information from another computer to your computer
 - c) The length of time it takes to display the Web page on screen
 - d) The way the Web page was designed to display on screen

3. You should delete contents in the Temporary Internet Files area occasionally to manage and protect yourself against others seeking information about where you have gone on the Internet or your interests in general.
 - a. True
 - b. False

4. What should you consider before customizing the Security or Privacy tab?
 - a) Whether to speak to the network administrator about what changes should be made
 - b) How low or high the settings should be, based on what you want to see
 - c) How much maintenance will be required if you change these options to Low
 - d) Any of the above
 - e) a or b

5. Which security issue may involve receiving an e-mail asking you to sign on to a site to update your personal information?
 - a. Phishing
 - b. Spoofing

Reference:

- 1- Basic Computing Skills, Approved by SQU, Collage of Science.
- 2- GLOBAL SKILLS

Unit 8: Using the Internet

Lesson 47: Searching for Information

Objectives

- find items on the Internet
- search for an item on a specific Web site
- use a search engine
- narrow the search using a search engine

Finding Items on the Internet

Millions of Web servers worldwide are connected via Internet. On average, each server hosts one thousand or more web pages.

No organization monitors information on Internet, which mean you will find both good and questionable information there. Use your own discretion to determine what is appropriate viewing or what information is valid.



One of the main purposes of a creating a Web site is to share information with others. To find information from any of the following types of Web site, use the **search field** provided on the site. This field is usually across the top or left of every page:

- Business web sites: pages describing company and its products or services, as well as feedback or online purchases. Depending on the business, there may also be pages with interactive and entertainment areas.
- Government web sites: pages for each department, and additional pages with links to files or forms for download, or lists of resources and contacts to other organizations that deal with this government agency.
- Social networking sites: Enable those who sign up to share photographs, games, and videos, chat online, post simple messages.(e.g. Facebook)
- Weblog sites: allow individual to enter comments or information for specific topics. These sites provide an easy way to create or modify content and share it.

- Wiki sites: sources of information and provide tools where individuals add or change information on that site (e.g. Wikipedia)
- Multimedia sites: allow individual to upload photos, podcasts, videos, etc. (e.g. YouTube).
- News feed sites: distributes press releases as stories occur rather than at set times on television, radio, or in print.
- Reference: links on individual Web sites or part of search engine. Many of the aforementioned types of web sites include a page with links to other pages or sites providing information on the same topic.

Also consider **traditional** sources when researching information such as the public library or a local university.



Searching a Specific Web Site

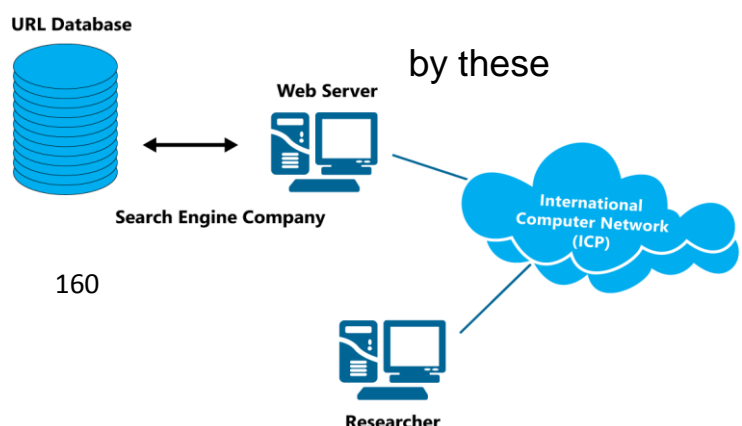
One of the fastest ways to search for information is to use the **search engine** or **search field** on particular Web site.

Any criteria you enter in a particular Web site's search field provide results from this Web site **only**. The location of search field varies from site to site, although it is generally near the top of Web page.

Using Search Engine Technology

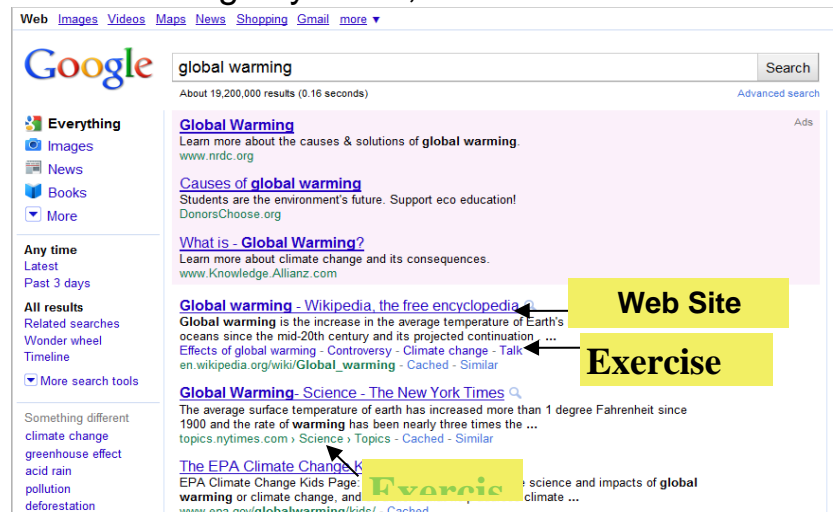
A search engine web site Specializes in making it easy to find information on a topics anywhere on the Internet (e.g. Google™, Ask®, Bing™, Yahoo®).

Although the services provided companies vary, they all use similar technology. The search engine consists of database of






Internet URLs. Each record in database includes **URL**, **short description**, a **title**, **keywords**, and other site information. Users access the URL database via the company's web site, as shown in the diagram at right.

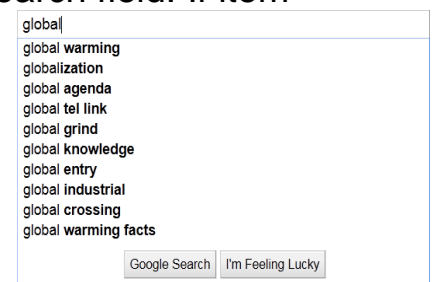
A search field on the search engine web site works similar to one on organization's Web site. The difference is search engine searches its database, compiles list of records matching keywords, and returns list formatted as Web page, which may look similar to this diagram.



Using Search Engines

To start a search, enter your search criteria or **keywords** in search field on search engine's Web page. Depending on your web browser, the option selected, and whether the keywords you enter are similar to any you have entered previously, as you begin to enter text a list will appear below the search field. If item matches what you want to find, you can select it in one of the following ways:

- Click item
- Use  or  to move to and select item, then press 



Once text appears in search field, press or click button to right of search field to begin search. This is referred to as an **Auto complete** option When Web browser set to remember all entries until deleted.

Narrowing the Search

You can narrow search using specific keywords

And (+)	Include documents only with all search terms; put quotation marks around phrase or group of keywords looks for occurrences of those words together.
Or	Search for documents that include one or another of search terms.
Not (-)	Use in conjunction with “and” to exclude certain results from search.

Review Questions

1. When you are looking for specific information, you should also include offline sources so you can gather information from a variety of sources.

- a. True
- b. False

2. When the search engine displays a list of Web sites that match your search criteria, which part of the Web site information is a link you can click to go to that Web site?

- a) Title
- b) Description

- c) URL
- d) Any of the above

3. When looking for information on a Web site, what is the easiest method to find that information?

- a) The Search button
- b) The Search field
- c) Clicking a link from the table of contents
- d) Clicking the About Us link

4. To narrow the search to find pyramids that do not include the Egyptian pyramids, which tool would you use in the search criteria?

- a) “and”
- b) “and not”
- c) “not”
- d) “or”

Unit 8: Using the Internet

Lesson 48: Qualifying the Information

Objectives

- evaluating the Information
- identifying Ethical Issues

Evaluating the Information:

Do not assume that information presented on the Web is correct or accurate. Any person, company, or organization can publish a Web page on the Internet. No one oversees the content of these Web pages. You have to follow the guidelines for assessing the value of a Web site or Web page before relying on its content.

- A reputable institution should support the Web site without bias in the information. Web sites of well-known organizations usually present accurate information
- The Web site should be written at an appropriate level. Look for obvious errors in facts, statistics, grammar, spelling, or language use.
- The Web site should list the author and the appropriate credentials. To determine accuracy by checking author's and publisher's qualifications.
- The Web site should be well organized and the links should work.
- The information on the Web page should be current.
- The pages at the Web site should download quickly and be visually pleasing and easy to navigate.

Identifying Ethical Issues:

Copyright: is a legal concept that gives content creators the right to control use and distribution of their work. Materials that can be copyrighted include paintings, books, music, films, and video games.

Fair Use: Can use portions of copyrighted information for purpose of criticism or comment without seeking permission

Trademark: is like copyright except that it applies to name, symbol, design, or image.

To use information from Web site:

- Send e-mail asking for permission to use information and describe how intend to use
- Quote information accurately and give owners credit

Plagiarism: is the illegal and unethical representation of some other person's work and ideas as your own without giving credit to the original source. Examples of plagiarism include cutting and pasting web content into a report or paper.

Libel: is when you make untrue statement in writing that "defames" another person's character or reputation.

Review Questions

1. Fair use is the doctrine that permits you to use portions of copyrighted information for the purpose of criticism or comments without seeking permission.
 - a) True
 - b) False
2. Plagiarism occurs when someone copies text from a Web site and then does what?
 - a) Pastes the information into a marketing document
 - b) Claims they wrote the text

- c) Changes the words a bit and then claims it as original works
 - d) Any of the above
 - e) b or c
3. How can you check the authenticity of information provided on a Web site?
- a) Check who the author is.
 - b) Check who the publisher is.
 - c) Check for links to other sites about the author, publisher, or company.
 - d) Check for any affiliations associated with this Web site.
 - e) Contact the author or publisher directly.
 - f) Any of the above
4. How have computers made an impact in education?
- a) Courses can be taken online instead of at the school.
 - b) Technology allows students to communicate with each other online instead of in person.
 - c) Critical thinking can be promoted as it gives students a chance to solve real world issues.
 - d) Any of the above
- 5) How have computers been beneficial to people with disabilities?
- a) A person with disabilities can communicate with anyone in the world using a variety of tools.
 - b) Devices can be incorporated into equipment which respond to a verbal prompt.
 - c) Services can be free.
 - d) Any of the above

e) a or b

Unit 8: Using the Internet

Lesson 49: The Risks of Computing

Objectives

- Preventing loss or damage to the computer.
- Establishing a safe working environment.
- Using ergonomics to set up the correct workstation.
- Recognizing and protecting your computer from software threats.
- Understanding what viruses are and how to prevent them from damaging your computer.

Protecting Your Data or Computer

We are all concerned with having a safe and secure environment in a computer. Computer security risk is any event or action that could cause loss of or damage to computer information, hardware, and software from unauthorized uses. Many security risks that face our work environment of a computer:

Theft

Theft can take many forms –of hardware, of software of data, of computer time. This involves stealing equipment of a computer, stealing software media intentionally erases programs or illegally copies a program, wasting time use of a computer and someone stealing personal or confidential information. To protect your environment work from theft, Can purchase systems to lock computers in special cabinets or use durable cables to tie them to desk. You also can use Video camera surveillance is very effective for areas with large number of computers like central offices and network rooms. And be carefully, do not leave portable devices unattended at any time when in public areas.

Damage

Refers to physical harm caused to the computer in such a way as to impair its value, usefulness, or normal function. To protect your computer from damage, avoid temporary setups as likely to become more permanent than intended. Place monitors on stable desks and position wiring appropriately. Ensure system unit positioned on flat surface with ample space behind and around for air circulation. Regularly remove any dust buildup in computer and fan. Position all wires so people do not trip over them. Do not expose computer devices to extreme heat or cold, or moisture. Be careful how handling devices to not inadvertently damage them.



Data Loss

You may lose data through result of hackers, hardware failure, power spikes, accidental deletions, or disgruntled employees. If you provide a critical service, you should have an emergency plan to cope with incidents that cause major loss to your system. This includes having the proper security requirements on the network such as firewalls (software or hardware protects a network resources from intrusion by users on another network), enabling password on wireless routers, and a program to identify all authorized network users. If you deal with portable devices (notebook, PDAs...), keep device near you when in public. Always use passwords to protect documents or data, and keep passwords in separate location.

Backups

Backup refers to a duplicate of a file, program, or disk that can be used if the original is lost or damaged or destroyed. You should back up data regularly and store copies in separate location. You only need to back up data files. It is important for each organization to have backup strategy and should consider that the Data should be backed up on removable media. Also, the more critical the data, the more often it should be backed up. More network servers are backed up at least once daily. If users store data files on local drives, encourage them to make copy on server for daily back up or create backups of their own .When working with files, encourage users to save files frequently to ensure no data loss. Many large companies build in backups as part of disaster and recovery plans.

Power

Computers are vulnerable to outages and surges, in event of power outage, computer shuts down and not damaged. However, you may lose your data you worked on last saved your work. Uninterruptible power supply (UPS) provides some protection against total data loss due to power surges. A reliable power bar with surge protection can be useful as first line of defense. Be sure not to plug too many things into power bar.



Understanding the Risks of Losing Data

There are many risks that could cause a loss for data. Hacker is someone who gains unauthorized access generally to:

- steal information with intent of selling it
- destroy data resulting in company's inability to deliver products, services, or projects on time
- Change information, causing embarrassment or to negatively affect company's reputation.

You can protect your data against hacker with password that:

- Is logical enough to remember but not obvious for someone else to guess.
- Not nickname or name of your spouse, child, or favorite pet
- Is combination of letters and numbers
- Changes on regular basis

Use different passwords for confidential files or access network or Internet. Work with security consultant to do risk assessment and security plan.

Preventing Personal Injuries

Many measures that can be taken to make a workstation safe for long period of time. You have to consider the following:

- Work surface should be stable and everything on work surface should be resting flat.
- Monitor and keyboard should be directly in front of you.
- Top of monitor should be about 2-3 inches above your eyes
- Ensure you have natural light with screens that enable you to reduce glare or reflection on screen.
- Place documents that you will look at as you type in document holder next to the monitor.
- When seated, position arms so wrists are straight and flat, and arms close to body
- Keep feet flat on floor or use foot rest
- Take regular breaks to move about, stretch, and give eyes rest

Note that: These guidelines also should be applied to notebook users. Many products designed as ergonomic, although some are gadgets rather than ergonomic product. Always check and test ergonomic products to determine its validity and ensure there is research to support value of product.



Identifying Software Threats

There are many common threats that can effects the computer. They come in different forms like viruses, worms, and spyware. You can use numerous tools to protect computer against these threats.

Spyware

Is a program placed in a computer without user knowledge designed to collect information about you, about where and what you are browsing on Internet without your permission. The purpose of this program is usually to identify you as target for sales of product or service that often is not real.

Understanding Viruses

A computer virus is a potentially damaging computer program that affects, or infects a computer negatively by altering the way the computer works without the user knowledge or permission.

Or it indicates Computer program that moves from computer to computer by attaching itself to other files. Generally it is not harmful to computer directly although some are very destructive and can ruin data. All viruses come into computer through files shared on network or Internet. Common type appears as e-mail from someone with valid e-mail address with attachment. However, Opening attachment actually releases virus which then sends copies of itself out to everyone on contact list. New virus programs created regularly, because of that it is important to understand what is a virus, how does it work and how to protect your computer against it. Virus program divided to several types (boot sector, program or file, Macro, and multipartite), that could attack your system:

Boot sector	Infects system when read from infected boot disk; virus writes to master boot sector which loads into
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	computer's memory.
Program or File	Part of file used to start program which loads into computer's memory.
Macro	Looks like macro file that runs in specific program, but actually attaches to default settings which infects every new or open file in that program.
Multipartite	<p>Similar to boot sector or program except it generally infects both areas. Two most common malicious program types:</p> <p>Worms: Duplicates and sends to anyone in recipient's contact list. For example, in memory or on a network, using up resources and possible shutting down a computer or network.</p> <p>Trojan Horses: Remains "hidden" and harmless until triggered by action.</p>

How can you notice viruses are existing in your computer?

By considering the following indications:

- See messages, prompts, or displays never seen before.

- Notice computer seems to be running slower or suddenly having problems with programs.
- Certain software applications no longer work.
- Hear random sounds or music never heard before.
- Names of disks or files seem to have changed, but you did not do it.
- Computer seems to contain more or fewer files than before.
- Error messages indicating file is missing, usually a program files.
- You get messages with attachments from people you do not know.
- You begin to get many messages with attachments from people you know but the subject line has a “RE:” or “FW” prefix, even though you have not sent those people anything.

How can you protect your computer against viruses?

- When you put flash drive or CD into drive, use antivirus program to scan portable device, even if there are no programs on it.
- If you receive e-mail with attachments, never open attachment without first scanning.
- If you suspect virus on your system, try going to antivirus program’s Web site and running online scan of computer. Web site scan program contains all latest protection patterns and should be able to catch anything on your system but not included in antivirus program.

- You can also take computer to technical specialist to work with you to scan drives in system for any potential viruses, and then look for resolutions to remove or quarantine the viruses.

Removing viruses from the computer

When antivirus program running, it scans files you select and when it finds virus or threat, will notify you and give option to quarantine or remove . If choose quarantine, file with virus put in quarantined or vault area where it is prevented from infecting other files. If choose to remove file, antivirus program permanently deletes this file from your system.

If the antivirus finds virus that cannot be removed, it will still quarantine file. Make note a virus name and go to antivirus program's Web site to find removal tool.

Occasionally look at virus history on your computer, go to quarantine and delete files there.

Review Questions

1. What should you avoid when using a portable computer device?
 - a) Leaving your PDA on a hot, sandy beach

- b) Leaving your password-protected notebook in your college dormitory room
- c) Carrying your cellular phone while getting into a hot tub
- d) Any of the above
- e) a or c

2. You can set up a safe working environment by:

- a) Ensuring no cables or wires cross a common pathway for people to trip over
- b) Ensuring the computer and monitor sit on a stable platform
- c) Using a power bar that has surge protection
- d) Any of the above
- e) b or c

3. What are some strategies you can apply to prevent your password being discovered?

- a) Change it on a frequent basis
- b) Use a combination of letters or numbers
- c) Use a logical but less obvious word
- d) Use different passwords for files and logon IDs
- e) Any of the above

4. If you do not have an antivirus program installed on your system yet, you can go online to the Web site of an antivirus program developer to use their online scanning tool.

- a) True b) False

5. Which is an area of concern when working with computers?

- a) Wrist
- b) Blood Flow
- c) Repetitive Motions
- d) Back Strain
- e) Any of the above
- f) a or c

Unit 8: Using the Internet

Lesson 50: Using the Internet Responsibly

Objectives

- Restricting Access.
- Protecting Yourself
- Keeping Up with Technology

Restricting Access

As there is no quality control of information on the internet, it may be necessary to restrict access to specific information such as adult Web site and chat rooms during office hours. Other companies may monitor employee activity using security measures to prevent unauthorized access such as firewall or logon restrictions. For the home or school user, there are several companies that provide special software to restrict Internet access, or restrict access to certain type of sites. These are internet filter software programs that can be used to block access based on keywords entered into the software. On a personal level, you can provide certain level of access control by setting options on browser by using internet filter software programs. In a School or business may have set policies regarding access to sensitive or important files and folders on network. This includes settings access rights that allow an employee to view a document but not edit or delete it. There needs to be balance between ability to find information freely, versus avoiding potentially illegal or unethical behavior such as bullying, harassment, or criminal activities.

Protecting Yourself

How safe you feel making transactions when buying something online will determine how much e-commerce or online shopping you conduct. Many Web sites have taken appropriate steps to protect their customers but there are additional steps you can take to protect yourself:

- Do not give out credit card information indiscriminately.
- Be sure Web site is of reputable company.

- If company offers deal that seems too good to be true, research that deal.
- If receive e-mail or see advertisement asking for contributions to worthy cause or need you to update information, check validity of charity or financial institution.
- When registering with sites for more information, use e-mail address from web-based program to reduce number of potential future junk messages.
- Do not share any logon IDs or passwords for any Web sites.
- Occasionally change profile information and password.

Protecting your privacy refers to any personal information about you that may be accessible to others online. Some other steps you can take to protect your privacy include:

- If you begin to receive a lot of junk mail, delete cookies.
- Delete history for sites you visited.
- Set up separate e-mail address for non-personal items, and use alias instead of name.
- Do not leave computing device with personal information displayed in public area.
- Purchase third-party software that directly addresses privacy issues.
- When on Internet, use common sense.
- Wide range of sources on Internet that discuss and explain privacy issues more thoroughly and offer suggestions on how you can protect yourself and your family when living online.

Keeping Up with Technology

Even if you are not interested in technology, as an end user, it is important to be aware of what technological changes are and how they may affect how you use computer online. Not all updates and patches are needed for every software program but subscribing to automated notices for updates beneficial as these can fix a problem you may be experiencing. The most critical updates to keep up with are updates to your antivirus program or other protection software.

It can be interesting to read about new technology and how it might benefit you, company, or family. Some ways to stay informed of advances in technology include:

- Subscribe to online newsletter that deals with technology
- Purchase or subscribe to printed versions of magazines or periodicals dealing with technological advances in computer industry
- Subscribe to online technology newsletter generated by local university or college
- Listen to news reports or read technology section of local newspaper to see what products may be featured, and read expert opinions about them



Review Questions

1. An example of why you might want to restrict access to certain aspects of the Internet could be to:
 - a) Control where students or young children can go when online
 - b) Control where employees can go when online
 - c) Prevent downloading of files
 - d) Any of the above
 - e) a or c

2. When you create personal documents on a computer at school or work, the documents belong to you.
 - a. True
 - b. False

3. In addition to checking with the school administrator as to how you may use a school computer, where else could you check?
 - a) The school library or librarian
 - b) Reference books about computer use
 - c) Your parents
 - d) Your lawyer
 - e) Any of the above
 - f) a or b

4. What are some ways you can protect your privacy while online?
 - a) Do not fill in any forms where you may not be interested in getting information from the company.
 - b) Use an alias when on public forums or blogs.
 - c) Do not check the option to receive information from marketing partners of the company.
 - d) Any of the above
 - e) a or b

Reference:

- 1) Basic Computing Skills, Approved by SQU, Collage of Science.
- 2) GLOBAL SKILLS