

PC LITERACY I

TOPICS COVERED IN THIS CLASS

- Computer Terminology and Components
- Turning On/Off the Computer
- Introduction to and Practice with the Mouse
- Introduction to and Practice with the Keyboard
- Navigating the Desktop and Opening Programs
- Computer Storage and Other Computer Hardware



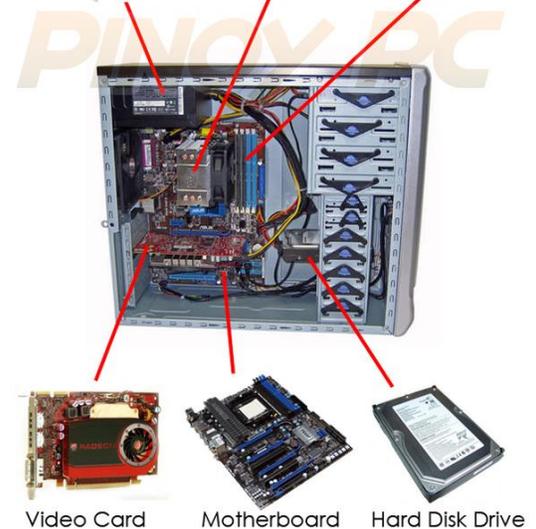
PARTS OF A PC

PC stands for personal computer. The **hardware** of a PC includes the system unit (and the physical processing components within the system unit), and any peripheral devices. **Peripherals** are hardware components that connect to the system unit such as the mouse, keyboard, monitor (display screen), and many others.



INSIDE THE SYSTEM UNIT

The **System Unit** (also known as the computer case, tower, base unit, etc.) can be smaller than pictured above and may be laying down or hidden away (as in the EBPL training lab). It contains components such as the power supply, storage drives, and the motherboard. The **motherboard** contains the **Central Processing Unit** (which performs most of the calculations which enable a computer to function), as well as memory and graphics cards.



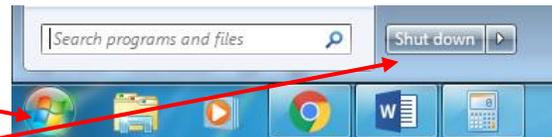
TURNING ON THE COMPUTER

If the screen is black, the computer or monitor maybe turned off, or the computer may be in “sleep mode”.

- If a computer is turned off, or “shut down” you must press the power button on the system unit and the monitor to turn it on.
- If a computer is in sleep mode (the power buttons on the system unit and monitor are lit up, but nothing is displayed on the screen), click the mouse or press a key on the keyboard to “wake up” the computer.
- If the power button is lit on the system unit, but not on the monitor, press the power button on the monitor to turn on the screen.

SHUTTING DOWN THE COMPUTER

- To shut down the computer, click the **Start Button** from the Taskbar (*more on these later*) and click **Shut Down**.



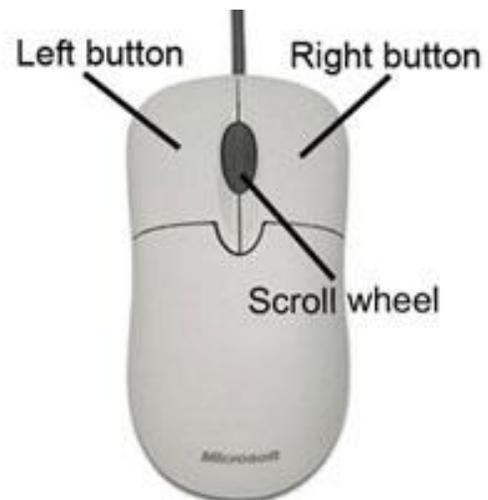
USING THE MOUSE

MOUSE BASICS

The mouse is the handheld device which transmits your commands to the computer by controlling the movement of the cursor or pointer on the screen. As you move the mouse, the pointer on the screen moves in the same direction.

PARTS OF A MOUSE

A modern mouse typically has a primary button (the left button), a secondary button (the right button) and a scroll wheel between the two. A mouse may have a connection cable, or may be wireless. The scroll wheel on some mice is also a clickable button which performs different actions depending on what program is running.



MOUSE POINTER

The pointer is a small arrow that displays and moves on the screen as you move the mouse. You can select commands and options by positioning the tip of the arrow over the desired choice and clicking a mouse button. *Note: The tip of the pointer must be precisely placed to click an object in close proximity to another object.*



TYPES OF POINTERS

Selection Pointer		The pointer in the shape of an arrow, used to select and drag icons and other graphical objects.
I-beam Pointer		The pointer in the shape of a capital I used in text processing programs to mark blocks of text and move the insertion point.
Grabber Pointer		The pointer that captures data. When you move the mouse pointer over a link (for example, on the Internet), the pointer is then displayed as the grabber, allowing the user to click on it to display the page it links to.
Insertion Point		A vertical blinking line in text-based programs which indicates where the next characters typed from the keyboard will appear on the display screen.
Busy Pointer		A pointer indicating that a process is being carried out and you cannot perform any other actions. This displays when a program is loading.

MOUSE ACTIONS

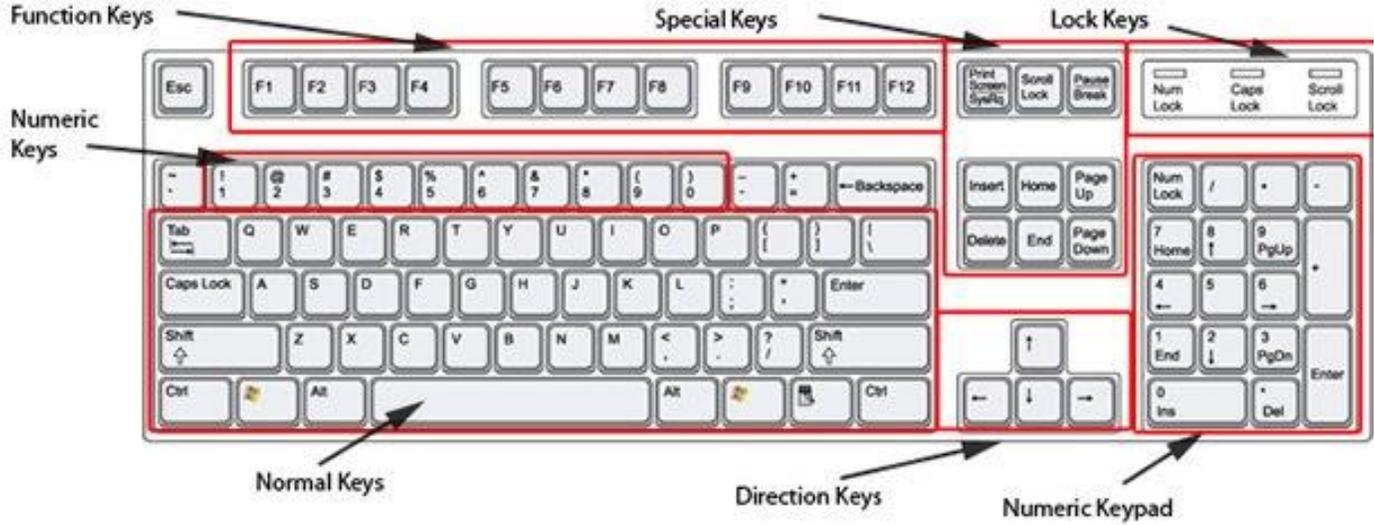
Click		Move the cursor until it is on top of the item that you want to click (a picture, a link) and then push the left mouse button down once and release it quickly. <i>Note: If instructions do not specify, "click" always means left click once.</i>
Double-Click		Click twice quickly with the left mouse button. (If the second click is not quick enough, or if the cursor moves in between clicks, then it is not a double-click.) Double-clicking is used to open things like files, folders, programs on the desktop, etc.
Right-click		Use the right mouse button to access shortcut menus. For example, if you right-click on an object, you will get a dialog box with a list of options for that object. The menu options vary based on what you right-click on.
Scroll		If a window is not large enough to display all the information it contains, a scroll bar (shown left) will appear. You can "scroll" through the contents by: <ul style="list-style-type: none"> • Clicking on the arrows at the top and bottom of the scroll bar • Clicking and dragging the box on the scroll bar • Clicking in the scroll bar area and using the arrow keys on the keyboard • Using the scroll wheel in the center of your mouse (if it has one)
Drag and Drop		To move an object to another location on the screen, click the object <u>and hold</u> the left mouse button. Move the mouse to the drop location and then release the mouse button

MOUSE PRACTICE

Double-click on the Mousercise icon on the desktop for practice clicking. This exercise covers moving the mouse, clicking, radio buttons, checkboxes, drop-down menus, scrolling and scroll-bar menus, pop-up windows, forms, highlighting, and copying & pasting.

To practice at home, type <http://www.ebpl.org/mousercise/mousercisepage1.html> into your web browser and press enter. OR, search Google for *mousercise ebpl* and click on the first search result.

USING THE KEYBOARD



The keyboard is a device that allows you to transmit commands through alpha, numeric, symbol, and command keys. The keyboard consists of groups of keys as labeled above:

- **Normal Keys** include the alphabetic keys as well as keys for commands such as:
 - **Backspace**—Deletes the character to the left of the cursor.
 - **Enter**—Moves the cursor to the beginning of the next line in a word processing program; executes commands in many other programs.
Note: If you are typing in a word processing program, you do not have to press Enter at the end of every line, the text will automatically wrap.
 - **Shift**—Holding the shift key *and* a letter capitalizes the letter; holding the shift key *and* a number types the special character above the number.
 - **Ctrl, Alt, and Windows**—Holding the Ctrl, Alt, or Windows keys *and* another key is called a “keyboard shortcut”. Different keyboard shortcuts perform different commands depending on the program. For example, in most programs Ctrl+P is the shortcut for Print.
 - **Spacebar**—Puts a space between the letters you type.
 - **Caps Lock**—Makes all letters typed capitalized until turned off.
 - **Tab**—Indents the cursor in a word processing program; moves the cursor to the next entry in a form in many other programs (Shift+Tab moves the cursor back one field).
 - **Esc (Escape)**—Used to cancel out the current task.

- **Numeric Keys**—Number keys positioned along top of the normal keys; when combined with the Shift key, these keys will type special characters such as ! \$ or &.
- **Function keys**—F1 through F12 perform varying functions depending on the program. In most programs, for example, **F1** displays the Help window.
- **Special Keys**—perform various functions to move the cursor and add/remove characters
 - **Insert**—Toggles (switches) between Insert mode and Overtyping mode. Insert mode (which is the default) causes new text that is entered to appear in front of any existing text while overtyping mode causes new text that is entered to overwrite any existing text.
 - **Delete**—Removes the characters located to the right of the cursor (opposite of backspace).
 - **Home/End**—Moves the cursor to the beginning/end of a line in a word processing document; On a web page (or when combined with the Ctrl key in a word processing document) Home/End moves you to the top/bottom of a document.
 - **Page Up/Page Down**—Moves up/down one page at a time in a word processing document or on a web page.
- **Lock Keys**—Lights that indicate whether Num Lock, Caps Lock, or Scroll Lock are on
- **Direction Keys**—Move the cursor up, down, left, or right on the screen
- **Numeric Keypad**—Number keys positioned like a calculator, typically used for data entry. To use these, Number Lock (labeled **Num Lock**) must be turned on.

KEYBOARD PRACTICE

Double-click on the Typing Paragraph Practice icon on your desktop. The first lesson paragraph about the Cuban Storm contains letters, numbers, capitalization, and punctuation to help you practice basic keyboarding skills (*Hint: Hold Shift and press the letter to capitalize it*). To continue practice at home, type <https://www.typing.com/student/lessons/384/paragraph-practice> into your web browser and press Enter.

NAVIGATING WINDOWS

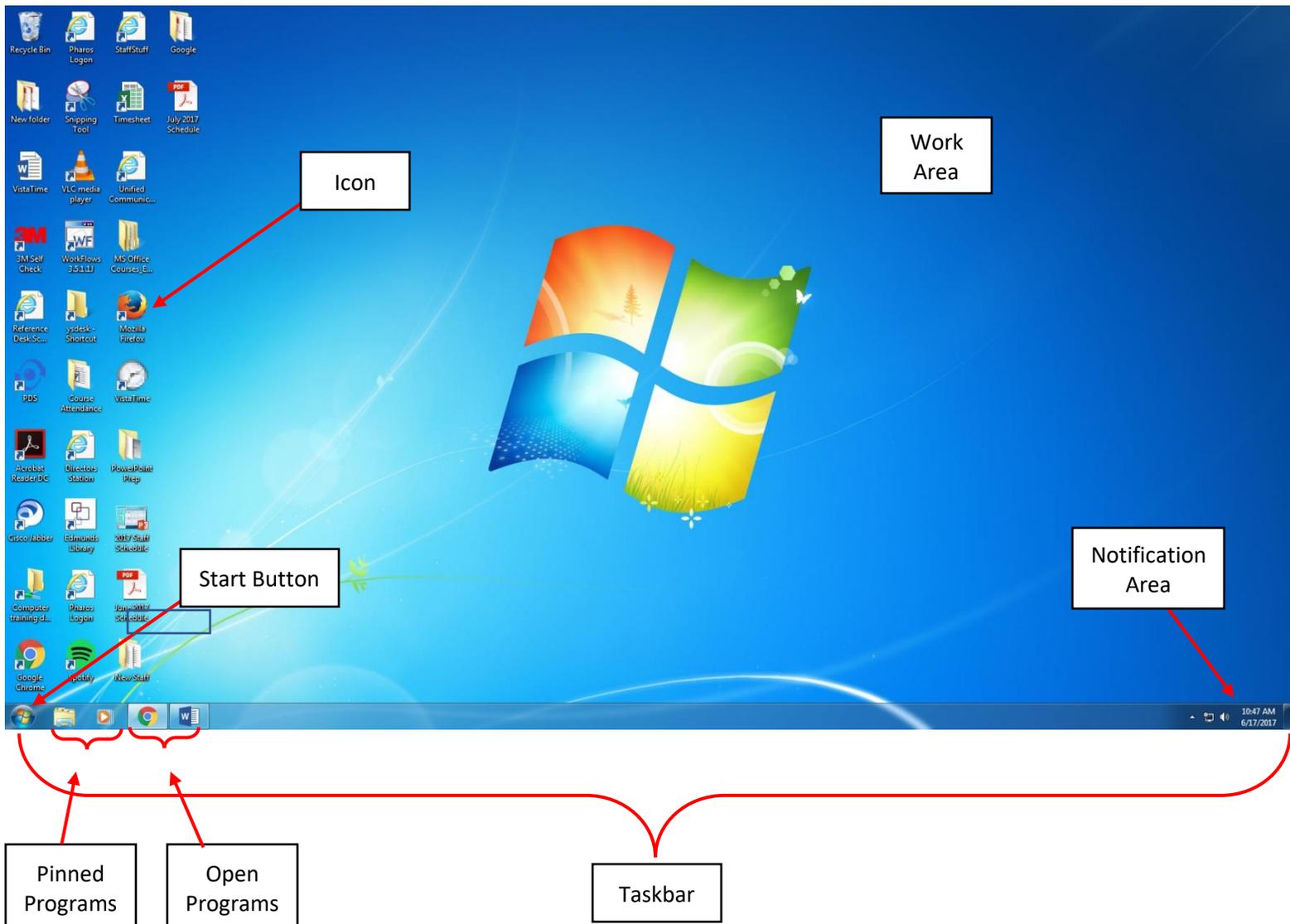
EBPL uses a Windows operating system. An operating system is the system that supports a computer's basic functions and manages computer hardware (physical components) and software. Software consists of the data (or computer instructions) that contains all information processed by computer programs and applications.

THE DESKTOP

The desktop is the onscreen display in the Windows operating system which consists of the Work Area, Start Button, Task Bar, and Notification Area. The **Work Area** has **Icons** which are graphics or pictures that represent a program, application, or web link. Double-click on an icon to open a program.

The **Start Button** is the Windows logo button in the bottom left of the desktop. It displays the Start Menu which contains settings options, access to the programs on the computer, and options for shutting down.

The **Task Bar** is the bar running along the bottom of the screen which displays the Start Button, icons for programs that are currently open, “pinned” programs, and the Notification Area. The taskbar can have several programs open and running at one time (known as **multitasking**). In addition to being able to perform functions in each program, the user can transfer data from one program to another. The taskbar can be customized by pinning programs that are used most frequently for easy access. The **Notification Area** displays the date, time, audio, Internet connection, and other status notifications.

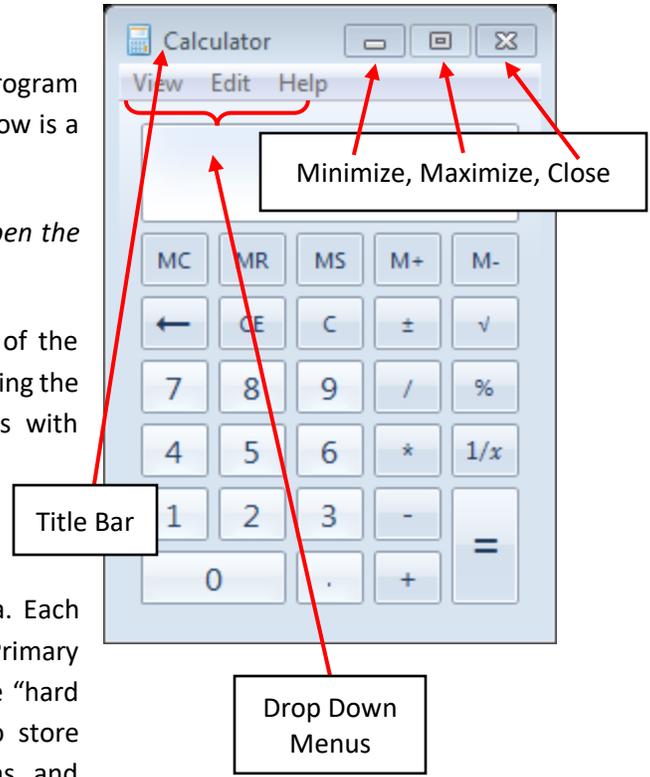


OPENING A PROGRAM

Double-click on an icon on the desktop, OR select the program from the start menu to open a program window. A window is a rectangle that displays the contents of the program.

*Example: Click the **Start Button** and click **Calculator** to open the Calculator program.*

Most windows have a title bar that displays the name of the program, and options for minimizing, maximizing, and closing the window. A program may also have drop down menus with command options.



COMPUTER STORAGE

Drives are the storage devices used to hold digital data. Each drive is assigned a letter, for example, an A: B: or C: drive. Primary storage, or memory, is stored internally on the CPU. The “hard drive” is the primary drive that the computer uses to store information including the operating system, programs and application software, and data files you have created. Secondary storage is stored externally on a peripheral device such as a disk (ex. CD or DVD), external hard drive, or USB “flash” drive (shown below).



Data can be stored on a secondary storage device such as a flash drive for transport and use on another PC. For example, a user can connect the flash drive to one PC, and save documents, pictures, and videos to the drive. Then, the user can disconnect the flash drive and bring it with them to another PC in a different location and connect it to have access to all the documents, pictures, and videos saved on the flash drive.

CLOUD STORAGE

In addition to hardware storage options, many providers now offer web storage services called “cloud storage” in which the digital data is stored online, or “in the cloud”, and can be accessed from any device with Internet access.



OTHER COMPUTER HARDWARE

As previously mentioned, peripherals are input/output devices that connect to the system unit and transfer information to and from the computer. The mouse, keyboard, monitor, and secondary storage devices such as disks and flash drives are all peripherals. Other peripherals include:

- **Printer**—makes a paper copy of the information that you have created in a program or gathered on the Internet.
- **Scanner**—makes a digital copy of a hard (paper) copy of information. The device “scans” the information from the paper onto the computer and creates a digital display of it on screen.
- **Speakers**—outputs audio (songs or other recordings) that can be heard by the listener.
- **Webcam**—records or streams video to the Internet; can also be used for video chat sessions (ex. Skype)
- **Digital Camera**—captures images digitally which can be imported into the computer to be published online, shared, edited, or printed.



CONNECTING TO THE INTERNET

A **modem** is a hardware device that allows the transfer of digital data through communication lines (ex. telephone, cable) connecting you to a network. A modem can be internal or external, wired or wireless. The computer transmits information to the modem, which transmits information back and forth between you and your Internet Service Provider’s modem. When multiple computers connect to a network through their modem, they can share information on the Internet.

