Computers for Beginners

Learning Objectives:
- Identify basic parts of computers: external and internal
- Identify desktop, icons, components of a window
- Demonstrate use of a mouse: scrolling and clicking

1. Computer Parts

The **computer** is the box (sometimes called a tower) containing all the necessary parts that make your computer operate, including the Central Processing Unit (or CPU), which is the 'brain' of the computer, and usually a hard drive for storage.

*Locate the power button. PLEASE DO NOT PUSH IT!*

The **monitor** is the screen which shows you visually what the computer is doing inside.

*Turn the monitor on/off*

**All-in-one** computers contain the CPU and screen all in one unit.

**Keyboards** come in various shapes and sizes and are one way you communicate with the computer. They resemble typewriter keys and work in much the same way. Notice the letters and numbers on the keyboard. It is arranged like a typewriter with a few different keys.

- One of the different keys is the **Enter** key. After you type something, pressing the **Enter** key send that information to the computer.
- Another key that might be new to you is the **Backspace** key. This key is used when you make a mistake while typing. When you press the **Backspace** key, it will go back and delete the letter you just typed.
A **mouse** is the other common device used to communicate with the computer. Moving the mouse around on your desk causes a **cursor** to move around on the monitor. The cursor acts like a virtual finger allowing you to select items on the screen by clicking or double-clicking a mouse button.

**Mouse Clicking Guidelines:**

- **Single-click** - Press the left mouse button once. This is used for Windows pull-down menus, the Start menu, and Internet links (just to name a few).
- **Double-click** – Press the left mouse button twice quickly without moving the mouse (Hint: it’s the same tempo as a knock-knock joke). This is used to open a program from the desktop or to open a file.
- **Right-click** – Click the right mouse button once. This activates a short-cut menu that provides quick access to frequently used features. If you accidentally hit the right mouse button and the menu comes up, move to a blank area on your screen and click the left mouse button once—it will go away.

Usually when you purchase all of these computer parts at a store, it is referred to collectively as a **system**. These computer parts are also called **hardware**, which just refers to the physical components of the computer.

The parts discussed so far have been part of a **desktop** computer system. You can also buy a **laptop**, which is a smaller and lighter computer which you can easily carry with you. Laptops combine the computer, monitor, and keyboard in a single unit, and they usually have a **touchpad** instead of a regular mouse.

Regardless of whether you buy a desktop or a laptop, they will include the following important elements:

- **Operating System**: The operating system allows hardware and software to work together. It controls the memory needed for computer processes, manages disk space, controls external devices, and allows you to communicate with the computer without knowing exactly how a computer works. **Without an operating system, a computer is useless**. The most common operating system is **Windows**. Most PCs purchased today include Windows 10. Other popular operating systems include Macintosh OS X and Linux.

- **Applications/software**: Programs used for a specific purpose. When you buy a system, chances are it will have some basic software pre-installed. You can buy many different kinds of software to suit your needs. These include:
• **Word processing programs:** Microsoft Word, WordPerfect, Works
• **Internet browsers:** Internet Explorer, Mozilla Firefox, Google Chrome
• **Desktop publishing programs:** Publisher, Print Shop, InDesign
• **Spreadsheet/accounting programs:** Microsoft Excel, Quicken

2. **The Desktop, Taskbar and Start Button (menu)**

• **Desktop:** The desktop is the on-screen work area in which windows, icons, menus, and dialog boxes appear. It appears once the computer has finished starting up. On the desktop there are several small pictures called **icons**—small images displayed on the screen to represent a program or file. Double-clicking on an icon is the easiest way to launch an application.

![Windows 10 Desktop](image)

• **Taskbar:** The bar that contains the **Start** button and appears by default at the bottom of the desktop. You can add frequently-used program shortcuts to the taskbar.

• When you press the **Start** button, you will see a list of frequently used **Programs** as well as easy access to files and other common actions. It’s also the button to click when you want to turn your computer off. You can also press the Windows button on your keyboard.

• **Note that the start button is different in Windows 7, 8, and 10,** but the start button is always located at the left end of the taskbar.
3. Basic Components of a Window

- **Practice:** Using the left mouse button, double-click on Firefox (or another browser) to start the program in a new window.

- A window is a portion of the screen where applications and processes can be run. You can open several windows at once.

- Most windows have these components:
  
  - **Menu Bar or menu icon:** Contains all the commands and functions for the window.
  - **Minimize button:** Places the window on the taskbar—does not close the program. To open the window again, click on it from the taskbar—the gray bar across the bottom of your screen.
  - **Maximize button:** Makes the window full size. When a window is maximized, the button changes to two small squares instead of one large square. This is the Restore button. Click on it and the window will go back to the original size.
  - **Close Button:** Closes the window.

4. Scrolling

Sometimes you can’t see all of the information on a page and you need to scroll up or down to see everything. On the right side of the screen, there is a vertical bar
with arrows on the top and bottom. This is the scrollbar. It allows you to move up and down to view items that are hidden by the limitations of the screen size.

**Four ways to use the scrollbar:**
1. To move one line at a time, click on the arrow at the top or bottom.
2. To move one screen at a time, click on the space above or below the darker gray scroll button.
3. To move anywhere within the document, place the mouse pointer over the scroll button. Hold down the left mouse button and move the scroll button up and down the bar. Release the left mouse button when you have reached your desired location.
4. The roller wheel, located in the center of the mouse, can be used to scroll up and down a document.

### 5. Starting Up and Shutting Down

At the library, the public computer are already turned on. You can just type in your library card number, and you’re ready to go! When you are using a computer at home, though, it is important to turn it on and off correctly.

Turning a computer on is as simple as pressing the power button. The computer may take a few minutes to start up as it goes through all the necessary processes of loading Windows, the operating system. You will know the computer is ready to use when you see the desktop.

Shutting down a computer properly is a bit more complicated than just pressing a button. Computers require a specific shutdown procedure to avoid the loss of data.

To shut down, you should first close any programs you have been using. Then, click on the start button in the lower left-hand corner of the screen. This will bring up the Start menu. At the bottom right corner of the menu is the Shut Down option. Once you click this button, the computer will turn off right away.

**Again, there is a difference between shutting down in Windows 7 versus Windows 8 and Windows 10:**

In **Windows 7**, click the Start button and then ‘shut down’ (DO NOT DO NOW):
In Windows 8, click the Start button and then the power icon (DO NOT DO NOW):

In Windows 10, click the Start button and then the power icon (DO NOT DO NOW):

Please never shut down a public computer at the library. When you are finished using a library computer, just click End Session at the bottom right to log out and leave the computer ready for the next patron.

If instead of shutting down, you simply want to restart or log-off, click the arrow next to the ‘Shut down’ button for those options (Windows 7) or below ‘Shut Down’ in Windows 8 or Windows 10.

For Further Learning:

- **New User Tutorial at www.mesacountylibraries.org** To practice on your own after class, ask a library staff member (or someone at home) to help you get to our website at www.mesacountylibraries.org. Click on ‘Services’, and then ‘Computers and Technology’, then ‘Technology Guide’ which can be found under the Tutorials heading. Once there, look for the ‘Computer Basics’ box, click on ‘New User Computer Tutorial’ and follow the instructions.

- Getting Started II, the next class in the library’s Getting Started series, focuses on working with computer files. Check our event calendar or ask a staff member for the next date for this class.

Portions of this tutorial were borrowed from University Heights Library, OH, and Wheaton Public Library, IL.