

Understanding Your Computer:

basic terminology and skills

Types of Computers:



desktop



laptop



tablet

Hardware

Hardware refers to the physical pieces of the computer. This includes the hard drive, CPU (central processing unit), power supply, and case.

The hard drive is the physical place in which all information is stored on the computer. This storage space is limited.

Each file and program on the computer takes up space on the hard drive. The amount of space is measured in bytes, kilobytes (KB), megabytes (MB), gigabytes (GB), and terabytes (TB). Each measurement is 1,000 times larger than the previous. For example, 1 KB is approximately equal to 1,000 bytes and 1 MB is approximately equal to 1,000 KB.

Different types of files are different sizes. A typical document may be 20 KB in size. A typical picture may be 1 MB in size. A typical song may be 4 MB in size. Programs are typically much larger in size.

Software

Software refers to the things the computer runs or does. This includes all of the programs and apps on the computer. Common programs include Microsoft Word and Internet Explorer.

The Operating System (OS) is the software that makes the computer work. Windows 8 is one example of an operating system. While the computer turns on, the operating system boots so that the computer will work.

Starting the Computer

The computer's power button is often designated by the following symbol:



Press the power button once to boot or turn on the computer. Do not hold down the button; simply press it and let go. While the computer is booting or turning on, do not press any other buttons.

After the computer has booted or turned on, you may be prompted to enter a password. Do so to log in to the computer.

After booting or turning on, the computer is ready to be used. For computers running iOS or older versions of Windows, the desktop appears. For computers running Windows 8, the Metro appears. To get to the desktop on Windows 8, look for the rectangle labeled “Desktop” and click on it once using the mouse. The desktop has two main features: the icons and the taskbar.



icons



taskbar

Each icon represents a different program on the computer. The taskbar contains icons of frequently-used computer programs for easier access. Programs can be opened using the icons on the desktop, the icons on the taskbar, or the search function in Windows 8.

The Mouse

The mouse moves the cursor which typically appears as an arrow on the screen. There are three main kinds of mice available.



Each type of mouse serves the same function. The type of mouse chosen is often simply a matter of current availability and personal preference.

Pointing with the mouse refers to moving the mouse so that the cursor is touching an object on the screen. Clicking with the mouse refers to moving the mouse so that the cursor is touching an object on the screen and then pressing the left mouse button once unless otherwise specified.

The cursor takes three main shapes, each with a different purpose and function.



arrow shape
indicates a normal cursor



pointer finger
indicates something will open



i-beam (line)
indicates a place to type

Variations on clicking with the mouse add to its functionality.

- Left clicking refers to pressing and releasing the left button on the mouse.
 - Left clicking is used to select an option.
 - It is also used to open a program using an icon on the taskbar.

- Right clicking refers to pressing and releasing the right button on the mouse.
 - Right clicking is used to display a menu.
 - Right clicking in different places on the screen and within different programs will result in different menus being displayed.
- Single clicking refers to pressing and releasing the left button on the mouse once.
 - Single clicking is used to select an option.
 - It is also used to open a program using an icon on the taskbar.
- Double clicking refers to pressing and releasing the left button on the mouse twice in quick succession.
 - Learning the timing of double clicking is often challenging at first. This skill becomes easier with repeated practice.
 - Double clicking is used to open a program using an icon on the desktop.
- Dragging refers to holding the left mouse button down and then simultaneously moving the mouse.
 - To drag, first click with the left button of the mouse. Do not let go of the button. Next, move the mouse while continuing to hold down the button. To stop dragging, let go of the button.
 - Dragging is used to move and select things.

Opening or Running Programs

Running a program is another way of saying opening a program. Programs are opened in different ways depending on the location of their icons and the type of cursor which appears when pointing at the icon.

- Double click on a program's icon to open it if the icon is located on the desktop and the cursor is an arrow.
- Single click on a program's icon to open it if the icon is located on the desktop and the cursor is a pointer finger.
- Single click on a program's icon to open it if the icon is located on the taskbar.

Each program runs in a separate window. Computers can multitask, and having more than one program open at a time is okay. Program windows can be moved around for ease of viewing and accessibility.

Programs in older versions of Windows can be located by opening the start menu at the bottom left of the taskbar. In Windows 8, programs whose icons are not located on the desktop or taskbar can be opened as follows.

- Open the charms bar. To do this, hold the Windows button and press C on the keyboard. This opens the charms bar along the right side of the screen.
- Click on the magnifying glass at the top of the charms bar to begin your search.
- Type the name of the desired program.
- Single click on the program's icon when it appears on the left side of the screen.

Windows

The underscore at the top right of a window is the minimize button. Single clicking on this button hides the window in the taskbar. This minimizes the program but does not close it. The program's window is simply hidden from view while the program continues to run.

Windows which have been minimized can easily be restored. Look at the taskbar at the bottom of the desktop. Hovering over a lit icon with the mouse causes a small preview window to appear. Single click on the small preview window to restore the program.

The single square at the top right of a window is the maximize button. Single clicking on this button makes the window expand to encompass the entire screen. When a program's window is maximized, this button changes into a double square. Single clicking on this button makes the window smaller once more. This is referred to as restoring down the window.

The x at the top right of a window is often red and is the close button. Single clicking on this button closes or exits both the window and the program.

Windows can be dragged around on the screen for easier viewing. Clicking on a window brings it into focus, which means that the window is brought in front of any other windows currently in view and the top bar of the window is highlighted in blue.

Windows can also be resized. To resize a window, first hover over one of the window's corners until the cursor turns appears as a double-ended arrow. Drag the corner until the window is the desired size and then let go of the left mouse button.

Typing

The i-beam cursor indicates a place to type. Single click while the cursor appears as an i-beam to place the cursor in the location in which you would like to begin typing. A cursor which looks like a blinking vertical line should then appear on the screen. After this happens, you may begin typing.

Turning off the Computer

Turning off the computer is referred to as shutting down the computer. Before shutting down the computer, first close all open programs and windows. Be certain to look for any highlighted icons on the taskbar indicating minimized programs.

After all programs are closed, open the charms bar by holding down the Windows key and pressing C on the keyboard. The charms bar should now be opened along the right side of the screen. Single click on the gear near the bottom of the charms bar to open the settings menu. Single click on the power icon near the bottom of the charms bar to open the power menu. Single click on "Shut down." The computer will then shut down and turn itself off completely.

Tips

- The computer can multitask. Having more than one program open at a time is okay.
- Be gentle with the mouse. Clicking too hard often registers as clicking and dragging.
- Be patient with the computer and yourself.
 - The computer often does not process information as quickly as we would like. Wait a minute before clicking again to take an action.
 - Learning to use any new technology takes time and practice. Remember that the learning curve for beginning computer users is often larger than expected. With time and practice, computer skills often become second nature.
- Do not be afraid to ask for help.

Mouse Practice

The following websites can be used to practice mouse skills.

- <http://www.seniornet.org/howto/mouseexercises/mousepractice.html>
- <http://www.mouseprogram.com/practice.html>
- <http://www.pbclibrary.org/mousing/games.htm>