Computer Basics

Lesson Plan

Summer 2019

CWS

**Computer Basics**

Estimated Lesson Time: 90 minutes

**PREP WORK:**

* Read handout on Computer Basics
* Get to library early to test for technology failures
* Pull up the Typing Club activity

<https://www.typingclub.com>

* Pull up the Mousing Around practice on each computer

<http://www.pbclibrary.org/mousing/intro.htm>

* Make you have enough copies of the handouts and the feedback forms

\*\*\*The library will print handouts for us.

**OBJECTIVES:**

* Identify basic parts of a computer (Mouse, Keyboard, Monitor, USB Port)
* Differentiate between software and hardware
* Be able to turn a computer on and shut it down
* Use and understand the different functions of the mouse
* Understand the basics of a keyboard

**LESSON OUTLINE**

1. **Introduction:**

* Introduce instructor, students, goals for the class
* Let students know they can take phone calls, but remind that to put phones on vibrate and answer them outside of class
* Inform students, they can leave for the restroom anytime—No need to ask
* Show/tell the class timeline/objectives to students
* Icebreaker Question: What is your experience with computers? What would you like to learn about computers?

1. **What is a Computer:**

Test for knowledge: Ask the class what is a computer?

One of many different answers you could use/receive:

On any given day, you will encounter computer systems in much of what you do, even if you don’t realize it. The television channels you watch, the radio stations that you listen to, the car that you drive in, and even the cash register at the local grocery store are all controlled in some way by computer systems. They help us perform tasks, keep track of information, and even control the airplanes that fly above us. Throughout the course of this class, you will learn about how computers work, how to perform simple tasks, and more

1. **Different parts of the computer:**

Hardware

* **The Monitor:** The monitor looks like a television screen and is where you see what is happening on your computer. By using shadows and graphics with over a million different colors, much of what you see will appear 3-dimensional. Think of this as the ‘face’ of the computer.
* **The CPU (Central Processing Unit**): The CPU houses the machinery that allows your computer to work. Think of this as the ‘brains’ of the computer. This component looks very different in desktops and laptops, but it works the same.
* **The Keyboard:** The keyboard is one of two ways to interact with your computer. The keys should mostly mimic a traditional typewriter.
* **The Mouse:** This is the other way to interact with your computer. Most mice have two buttons—a right and a left button—and a scrolling wheel.

Software

Software consists of programs that we use to interact with the computer. You can’t physically. touch software like you can the keyboard, but you can still interact with it. A word processing program like Microsoft Word is a piece of software that you could use to type a grocery list. Games that you play on your computer or your phone are also considered software—it doesn’t have to be work-related.

Software comes in two main parts, the operating system and programs.

* **The operating system (OS):** is like the foundational software needed for everything else in the computer to function properly (software, hardware, etc).

Windows, Mac OS, and Linux (among others) provide a way for us to communicate with the computer, save files, use the mouse and keyboard, and all the basic operations of the computer. Mobile devices like smartphones and tablets also have their own OS.

*Metaphor:* The OS is like the autonomic nervous system. You don’t need to think about breathing, or about your heart beating, it just works. The OS controls the basic functions of the computer so you don’t have to.

* Show desktop – this is like the “home base” of OS.

*Note: Students might be used to using a different OS and that’s okay. The skills they learn in this class can be carried over and applied to most computers.*

* **Programs:** (also known as Applications) are built to perform a specific task – like write documents or make a spreadsheet and they “live” within the operating system.

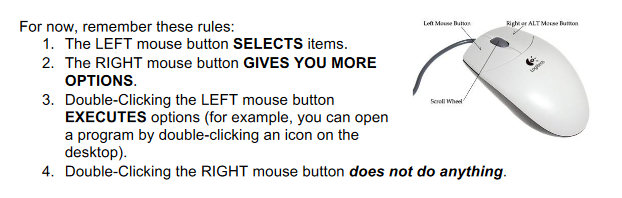
1. **The Desktop**

The Desktop is what you’ll see when the computer first starts. This is your home base for opening programs and finding files. *Show students the following items. Invite them to click around on each item as you review it.*

* **Icons:** shortcuts to programs (or files and folders), like little keys that open up different programs or places on your computer.
* **Start Button/ Menu:** where you go if you can’t find the programs you want on the desktop.
* **Taskbar:** shows us all the programs we have open and allows us to switch between them.
* **Notification Area:** allows us to view programs that are running in the background as well as shows important messages about computer updates.
* **System Tray:** shows the time, date, and speaker icon.

*Demo: Switching between programs using the taskbar. Show how icon in taskbar is same as icon on desktop.*

1. **Using the Mouse**

One of the most difficult things to learn when first beginning to use a computer, is how to use the mouse. It takes coordination, precision, and patience. Fortunately, the more you practice, the easier it will become.

**Activity:** Ask students to find a partner to work with in the class. Then direct the students to open up the Mousing Around activity that you have already pulled up on each of the computers. Students are told that from now until the end of the exercise they will be working with their partner to complete the Mousing Around exercise. (Generally I end after “Beyond the Basics, but if you have an advanced group, I invite you to continue)

The Mousing Around exercise will allow them to practice using the mouse. Each screen offers instructions for how to perform a specific computer task using the mouse. Students may NOT move to the next screen until both people in the partnership are able to complete the task. I encourage students to read the directions on each screen out loud.

1. **Using the Keyboard:**

Review the home row keys and typing hand positions. ****

**Backspace:** This key deletes letters backward.

**Delete:** This key deletes letters forward.

**Shift:** This key, when pressed with another key, will perform a secondary function.

**Spacebar:** This key enters a space between words or letters.

**Tab:** This key will indent what you type, or move the text to the right. The default indent distance is usually ½ inch.

**Caps Lock:** Pressing this key will make every letter you type capitalized.

**Control:** Pressing this key, when pressed with another key, preforms a shortcut.

**Enter:** This key either gives you a new line, or executes a command (pressed in a word processing program, it begins a new line).

**Number Keypad:** These are the exact same numbers at the top of the key board. Some people find them easier to use in this position.

**Arrow Keys:** Like the mouse, these keys are used to navigate through a document or page.

**Activity:**

Open Typing Club. Demo the first lesson together. Then encourage students to take the placement test. Students are able to create an account with this site. They can return to this lesson if they wish.

1. **Closing**

* Briefly review what information we just covered in class (What is a computer? What are the Computer parts? Hardware vs. Software, Desk Top, Mouse Basics, Keyboard basics
* What questions do you have about what we just learned?
* Inform them of what information will be covered in the next workshop
* Thank them for coming & ask them to fill out the feedback form

