# **Operate a Computer and Printer**

# **1. Operating System Platforms**

### 1.1 Welcome



#### Notes:

Welcome to how to Operate a Computer and Printer. In this learning activity you'll learn the basic skills needed to use a computer and printer.

### 1.2 Learning Objectives



#### Notes:

After successfully completing this activity, you'll be able to:

- Demonstrate the steps involved in starting and shutting down a computer.
- Identify the purposes of computer hardware components such as the system unit, monitor, printer, keyboard, mouse or touchpad, and USB ports.
- Demonstrate the steps involved in printing a document.

### 1.3 Start Up/Shut Down



#### Notes:

You may have used computers in a public library or classroom where someone else was responsible for turning them on and off.

It's important for you to learn how to properly turn the computer on and off. Starting a computer is similar to starting any other electronic device because you push the power button and release it. Turning a computer off is not the same as just pushing a button. There are a series of steps you must follow to turn the computer off.

### 1.4 Power Source



#### Notes:

First, let's learn how to start a desktop computer.

Before starting your computer, make sure the computer is plugged into an appropriate power source. If you're using a desktop computer, make sure that both the computer tower and the monitor are plugged in.

### 1.5 Power Button



#### Notes:

Now that we know it's plugged in, let's look for the power button.

A computer's power button is a circle with a superimposed line. It combines the universal symbols for on and off, 1 and 0, into one symbol that indicates when a computer's power is on and off.

Most computers offer a power save mode where they appear to be off but are really just in sleep mode. Before pressing the start button, it's always a good idea to wiggle the mouse to see if the computer wakes up.

If your computer is off instead of in sleep mode, you will need to start it. Some computers are started by pressing the power buttons on both the computer tower and the monitor while others just use the power button on the tower.

The monitor illuminates and the computer tower's lights flash. During the start-up process it's normal to hear some whirring sounds from the computer tower.

Wait for the entire startup process to finish before using your computer. You'll know startup is complete when your mouse cursor appears on-screen in the arrow shape.

## 1.6 Laptop Power Source



#### Notes:

If you're using a laptop computer, make sure either the battery is charged or it's plugged into a power source.

Laptop computers are designed to be mobile so each laptop computer contains its own battery.

Plugging a laptop into a power source charges the battery, which enables it to run for a limited amount of time without being plugged in. Laptop batteries are designed to be recharged over and over again.

## 1.7 Laptop Start Up



#### Notes:

The battery is your laptop computer's power source. The laptop computer runs on battery power just like a flashlight does.

Locate the laptop's power button. Press and release the power button to start the laptop. Unlike a desktop computer, your laptop only has one power button.

You'll see the monitor illuminate and the lights flash on the laptop's computer case. During startup it's normal to hear some whirring sounds. It's important to wait for the entire startup process to finish before using your laptop. You'll know the startup is complete when your mouse cursor appears on-screen in the arrow shape.

### 1.8 Practice Shut Down



#### Notes:

Select the correct answer.

### 1.9 Practice Starting a Computer



#### Notes:

Alice made sure both the computer tower and monitor are plugged in to a power source. Help her turn the computer on.

Press and release the power button on the monitor to start the monitor.

Press and release the power button on the computer tower to start the computer.

### 1.10 Shut Down a Computer



#### Notes:

Shutting down a computer is a bit more complicated than starting it up and following the steps requires some practice. Following the point-and-click shutdown steps means your computer stores files properly and keeps running smoothly.

Some important rules to remember include:

- Don't unplug the computer while it's running.
- Don't hold the power button down while the computer is shutting down.

If your computer freezes and isn't able to turn off by itself, you may need to press and hold the power button. This is called a hard shutdown or reset.

If your computer stops working and gets stuck, press and hold the power button until you hear the computer stop and you see the screen go blank. Shutting a computer down in this way may cause an error message when you turn the computer back on.

### 1.11 Shut Down Windows 7



#### Notes:

There are four point-and-click steps to shut down a computer in the Windows 7 operating system.

- 1.Click on the start button at the bottom left corner of the screen.
- 2.From the start menu, select shut down.
- 3. Wait until the monitor turns black and the computer no longer makes a humming noise.

The shutdown steps may be slightly different if you have a different version of Windows or use another operating system, but the basic idea is the same.

### 1.12 Shut Down Windows



#### Notes:

We've just reviewed the shutdown steps for a desktop computer using the Windows 7 operating system.

Many of you may be using the Windows 8 operating system. To shut down your Windows 8 system using your touch screen, swipe in from the right edge of the screen to bring up the menu tab and tap settings. If you're using a mouse instead of a touch screen, point the mouse to the lower-right corner of the screen to bring up the menu tab, move the mouse pointer up, and click settings. Using either the touch screen or the mouse, tap or click power, and then tap or click shutdown.

There are some slight differences between different Windows versions but the basic shutdown procedures are similar.

### 1.13 Shut Down Mac OSX

App Store	
System Preferences Dock	
Recent Items >	Starte Starte
Force Quit Finder NONO	
Sleep Restart Shut Down	
Log Out O MQ	

#### Notes:

To shut down an Apple computer running OS X you need to click on the Apple icon in the top-left corner of the screen and then select shutdown.

### 1.14 Shut Down a Computer



#### Notes:

Practice shutting down a Windows 7 computer.

- Press the start button.
- Select shutdown.
- Wait until the monitor is dark and the computer tower stops making a whirring sound.

### 1.15 Peripherals



#### Notes:

The various devices connected to a computer are called peripherals. A peripheral is any device that connects to, and works with, a computer. The types of peripherals include input, output, and storage. Click on each tab to learn more about each category of peripheral devices.

- Input devices interact with or send data to the computer.
- Output devices send data from the computer to the user or another device.
- Storage devices store pictures, documents, and other types of computer files.

### 1.16 Ports



#### Notes:

Peripheral devices connect to your computer through a port. Both desktop computers and laptop computers include ports.

A port is the physical connection between your computer and other computers or peripheral devices. Click on each port to learn more.

- 1.Power socket: Connects the power cord to the computer or monitor.
- 2.Ethernet port: Looks similar to the telephone port. It connects you to a network and high speed Internet. Many computers now use a wireless connection instead of the networked Ethernet connection.
- 3.USB ports: Universal serial bus (USB) ports are used to connect your computer to various devices such as external hard disks, printers, scanners, mice, keyboards, flash drives, and more.
- 4.Serial port: A serial port allows a PC to transmit or receive data. This port is less common on today's computers, but in the past it was used to connect modems, mice, and printers to your desktop computer. The serial port has been replaced with the USB and other ports.
- 5. Monitor port: Used to connect your monitor to the computer.
- 6.Expansion port: These are openings that allow you to expand your computer's functions and capabilities. For instance, if your computer didn't come with a video card, you could buy one and install it in this port.
- 7.Parallel port (or printer port): These are less common on new computers but are designed to connect an external device, like a printer, to your computer. Like the serial port, the parallel port is often replaced by a USB port.

### 1.17 USB Devices and Ports



#### Notes:

Devices that use universal serial bus (USB) connections and ports are very common. Let's look at USB devices a little closer.

USB is now an industry standard that was originally developed in the 1990s. It has since become the standard connection port for many peripheral devices including keyboards, mice, printers, and speakers. USB connectors are also very user friendly and easy to use so they're referred to as plug-and-play.

USB was designed to standardize how peripheral devices connect to personal computers. USBs function both to provide communication between the computer and the peripheral and also to supply the device's power.

USBs have replaced many earlier ports including serial ports and parallel ports as well as separate power chargers for peripheral devices.

### 1.18 USB Drives



#### Notes:

The USB drive is a storage device. A USB drive is also portable so it allows you to save your work when you're using a public or shared computer. The drive can be plugged into the USB port of any computer and you can save documents, images, and other files for later use.

Once you're done working you can take the USB drive out of the USB port. Now you have all your files stored on a portable device and you can load them into a new computer.

USB drives are also called flash drives and thumb drives.

### 1.19 Other Port Types



#### Notes:

Some computers have an external bus that supports very fast data transfer rates. These ports also allow you to simultaneously connect multiple devices to your computer.

While these ports are a step up from the traditional USB port, they're also more expensive. USB 3.0 is the newest version of the universal serial bus and can transfer data more than 10 times faster than the standard USB drives.

If your computer has ports you don't recognize, you should consult your computer manual for more information.

# 1.20 Matching Drop-down



#### Notes:

Match the cable to the correct port.

### 1.21 Print a Document



#### Notes:

Printing is an essential computing tool. You'll need to print out assignments, papers, resumes, and job applications. While each word processing program and application works differently, each one allows you to print the on-screen content.

Let's look at some general instructions for printing out material.

### 1.22 Print a Document



#### Notes:

These general steps will help you print out any document.

- 1.Make sure your printer is plugged in, turned on, and connected to your computer. Today, most printers have a USB connector. Some newer printers may use a wireless connection instead of a cable. Consult your printer's instruction manual for complete instructions on setting up your printer and for any additional questions.
- 2.You can print from an open document or file. To practice printing, open a new document and type some random text. If you wish to print from a web page, open your web browser and go to the page.
- 3.Locate the word file or the Office button located in the upper left-hand corner of the screen. If you're printing a web page, look for a printer icon or right-click anywhere on the page to bring up a context menu.
- 4.Select print from the drop-down menu or the context menu.
- 5. Click print. The document will print out from your printer.

### 1.23 Practice Print a Document



#### Notes:

 Alice needs to print out an assignment for her English class. Her printer is plugged in, turned on, and its USB cable is connected to the USB port in the back of the desktop tower. Alice is ready to print her document. Double click on the file to open the document, Click on file in the upper left-hand corner, Click on print on the drop-down menu, and Click on print to print the document.

# 2. Review & Wrap-Up

### 2.1 Review & Wrap-Up



#### Notes:

In this learning activity we:

- Introduced you to a computer's start up and shut down procedures.
- Learned that peripheral devices are connected to your computer tower or laptop through ports.
- Looked at some general directions for printing a document, file, or Web page.

# 3. Check Your Knowledge

## 3.1 Turn Computer On



#### Notes:

Alice made sure both the computer tower and monitor are plugged in to a power source. Help her turn the computer on.

# 3.2 Multiple Choice

Check Your Knowledge	Glossary
A is a special outlet on a con a cable or plug on a peripheral devic tower or laptop.	nputer used to connect e to the computer
OPort	
O Monitor	
O Printer	
C Keyboard	

#### Notes:

A \_\_\_\_\_ is a special outlet on a computer used to connect a cable or plug on a peripheral device to the computer tower or laptop.

## 3.3 Checkbox

Check Your Knowledge	Glossary 3.3
Which of the following are peripheral that apply.	devices? Select all
Monitor	
USB Drive	
Start button	
Keyboard	

### Notes:

Which of the following are peripheral devices? Select all that apply.

### 3.4 True/False



#### Notes:

Alice needs to work on her class assignments both at home and in the computer lab at the college. She can use a USB drive to store and transport the assignment file from one location to the other.

### 3.5 Print Resume



#### Notes:

Alice needs to print out a copy of her resume to take with her to a job interview. The printer is plugged in, turned on, and the USB cable is connected to the USB port in the back of the desktop computer tower.

Click on the icons, buttons, and menu items on the screen to open the document and print the resume.

### 3.6 Turn Computer Off



#### Notes:

Help Alice shut down her computer.

## 4. Conclusion

### 4.1 Conclusion



#### Notes:

#### Congratulations.

You have completed: Operate a Computer and Printer.