

# The Journey Inside

## Introduction to Computers

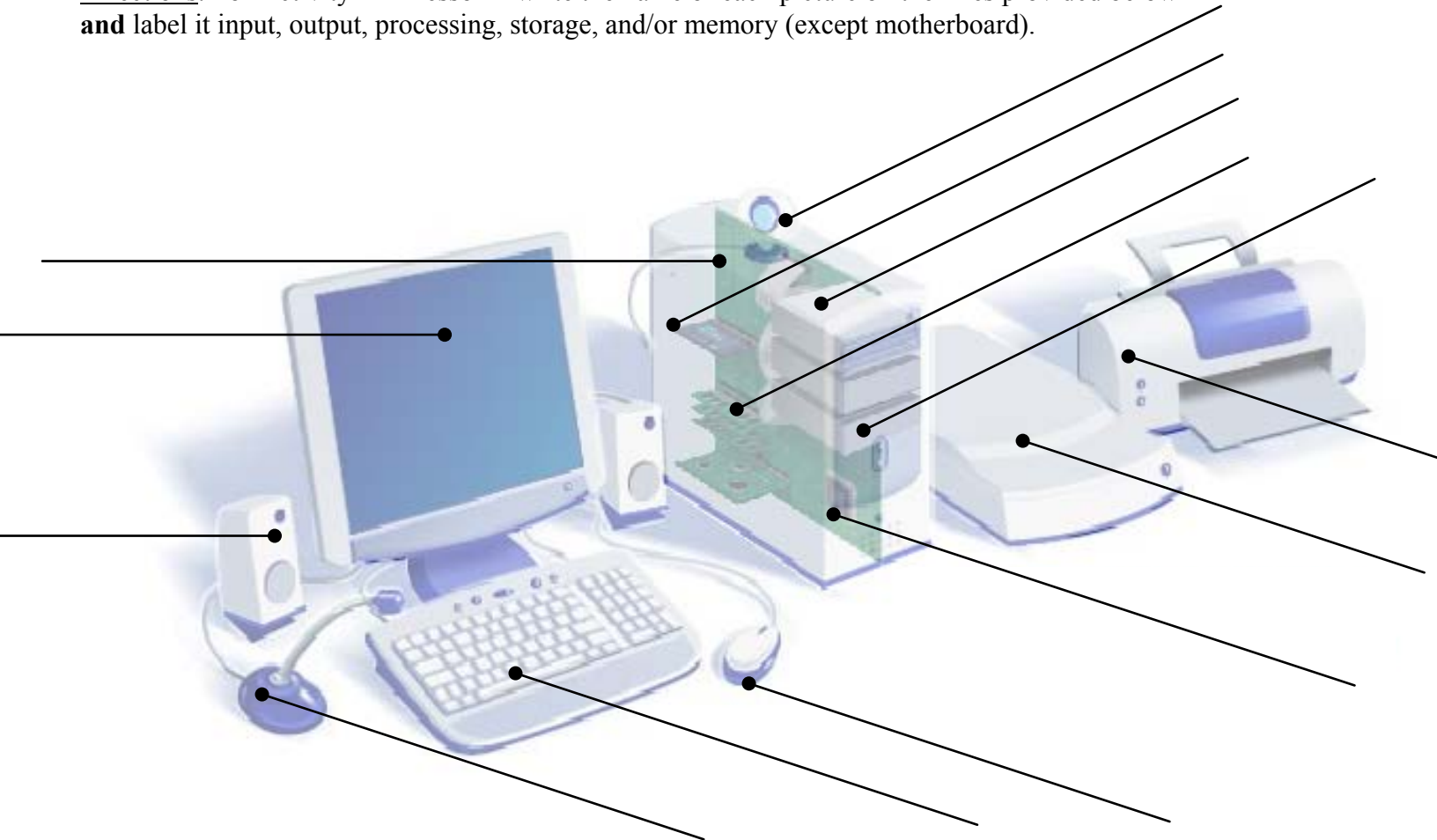
### Lesson 2: Four Components of a Computer

Directions: Use the <http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/> website to complete the units in this series. Choose Intro to Computers on the gray menu bar. Choose Lesson 2 on the left side of your screen and complete the questions below after reading the paragraph, watching the video, and completing Activity 1.

1. Both a toaster and a computer have physical parts you can touch such as the keyboard and mouse which are called hardware.
2. The computer has something that enables it to figure out what to do with the input you give it: software.
3. You can't touch software.
4. The microprocessor is the device in the computer that performs most of the tasks we ask the computer to do. The computer is unlimited in the things it can do.
5. According to the video the bread is the raw data that is input, the dial on the toaster was the information storage, toasted bread was compared to processed raw data, and finished toast was the output.

### Activity 1: Which Does What? .....

Directions: For Activity 1 in Lesson 2 write the name of each picture on the lines provided below **and** label it input, output, processing, storage, and/or memory (except motherboard).



### Lesson 3: How Computer Get Input

Directions: Use the <http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/> website to complete the units in this series. Choose Intro to Computers on the gray menu bar. Choose Lesson 3 on the left side of your screen and complete the questions below after reading the paragraph, watching the video, and completing Activity 1.

1. Computers are information processing machines.
2. Click information processing and write the definition: Capturing, storing, updating, and retrieving data and information
3. Before you can change a sentence with your computer you first have to get the sentence into your computer.
4. Input devices are used to put information in your computer.
5. List the 4 input examples the site gave: keyboard, microphone, video camera, and mouse
6. In 1945 the first general purpose computer was built and data was input by flipping switches and plugging wires.
7. This first computer was called the Electronic Numerical Integrator and Calculator.
8. Another way scientists used to have to input data was to punch holes in cards.

### Lesson 4: How Computers Store Information

Directions: Use the <http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/> website to complete the units in this series. Choose Intro to Computers on the gray menu bar. Choose Lesson 4 on the left side of your screen and complete the questions below after reading the paragraph, watching the video, and completing Activity 1.

1. In the example given a telephone is an input and output device while an answering machine is a storage device.
2. To store the information you give the computers you use two basic kinds of storage RAM & ROM
3. Random Access Memory is for new information in temporary storage which is actively being used for processing and is constantly changed and erased.
4. Long-term storage, Read Only Memory is for information computers use again and again, such as the instructions the computer prepares itself with every time you turn it on and it does not accept new information.
5. ROM is programmed into a computer's chips so it cannot be altered or lost.
6. Name four devices computers use to store information that isn't actively being used for processing hard drives, floppy drives, Flash Drives, and ROM

**Activity 2: Different Kinds of Storage Media** .....

1. A 1.44mb Floppy disk holds 720 printed pages, \_\_\_\_\_ books, 1 floppies.
2. A 640mb CD holds 320,000 printed pages, \_\_\_\_\_ books, 444 floppies.
3. An 1.7gb DVD holds 850,000 printed pages, \_\_\_\_\_ books, 1,180 floppies.
4. An 80 gb hard drive holds 40,000,000 printed pages, \_\_\_\_\_ books, 55,555 floppies.
5. What is the definition of data? An item or items of information. Data becomes information when it is conveyed in a context that has meaning to people.
6. What is the definition of media? The physical material (whether it be paper, hard disk, CD-ROM, DVD, or anything similar) used for storing computer-based information.

**Lesson 5: How Computers Process Information** .....

Directions: Use the <http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/> website to complete the units in this series. Choose Intro to Computers on the gray menu bar. Choose Lesson 5 on the left side of your screen and complete the questions below after reading the paragraph and watching the video.

1. Computers use integrated circuits to process information.
2. The chips in DVD players, remote controls, and electronic calculator are embedded processors
3. Microprocessors are designed to do whatever the software you select instructs them to do.
4. The definition of an integrated circuit is: complete circuit on a chip, built by a chip fabrication process.
5. The definition of embedded processor is: A chip designed with a specific set of usable instructions. The user cannot change the instructions an embedded processor was programmed to understand.
6. The processor takes in raw data, performs tasks called for by the software, and it communicates with the rest of the computer through the motherboard.
7. Early computers used switches to process information which were vacuum tubes and the ENIAC had 18,000 switches?
8. The 4004 was the first microprocessor which was invented by Intel in 1971 for a calculator.

**Lesson 6: How Computers Deliver Information** .....

Directions: Use the <http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/> website to complete the units in this series. Choose Intro to Computers on the gray menu bar. Choose Lesson 6 on the left side of your screen and complete the questions below after reading the paragraph and watching the video.

1. The definition of output is: The computer-generated information that is displayed to the user in some discernible form such as a screen display, printed page, or sound.
2. Some types of output include sounds from speakers and documents from a printer.
3. What is the definition of download? To transfer files or data from one computer to another. To download means to receive; to upload means to transmit.

Name \_\_\_\_\_ Period \_\_\_\_\_

4. Explain why an mp3 player is an output device? It sends out sounds.