What's Inside A Computer?

Subjects

- Arts & Humanities
  --Language Arts
- Educational Technology
- Vocational Education
  -- Computers

Grade

- 3-5
- 6-8
- 9-12
- Advanced

Brief Description

Students draw a picture of what they think a computer looks like inside. Then they explore more!

Objectives

Students will

- explore the inside of a computer.
- learn the function of each part of a computer.
- learn the definitions of unfamiliar computer terms.
- complete a worksheet of definitions of computer parts.

Keywords

technology, computer, vocabulary

Materials Needed

- computer with Internet access
- Click-N-Learn Web site Whatis.com Web site
Lesson Plan

Invite students to draw a picture of what they think the inside of their computer looks like. Encourage them to show what they think makes the computer work.

Then have students explore the grade-level appropriate computer at Click-N-Learn. As they read, encourage students to make a list of any words or terms they do not understand. Have them to go to Whatis.com to look up the words on their lists.

Note: The part of this lesson described above might be completed with students gathered around a single classroom computer, with a projected image of the Web site as the whole class explores it together, with students working at individual computers in a lab setting, or with students working individually at a learning center computer.

Next, write a list of words on a board or chart and have students write a one-sentence definition for each word. You might use the words below, or create your own list of grade-appropriate terms:

- motherboard
- chipset
- BIOS
- operating system
- memory

Then ask each student to create his or her own personal dictionary of computer terms. The five terms you provided for the activity can be the start of that dictionary. Encourage students to add to their lists of terms and definitions throughout the year as they learn more about computers and other technology.

Assessment

Students will provide correct definitions for each of five words in the activity.

Answer Key: (Definitions from Whatis.com.)

1. A *motherboard* is the physical arrangement in a computer that contains the computer's basic circuitry and components.
2. A *chipset* is a group of microchips designed to work as a unit in performing one or more related functions.
3. *BIOS* (Basic Input/Output System) is the program a computer's microprocessor uses to get the computer system started after its turned on.
4. An *operating system* (sometimes abbreviated as "OS") is the program that manages all the other programs in a computer.
5. *Memory* is the name for the electronic holding place for instructions and data that a computer's microprocessor can reach quickly.
LANGUAGE ARTS
English GRADES K - 12
NL-ENG.K-12.8 Developing Research Skills

TECHNOLOGY
GRADES K - 12
NT.K-12.1 Basic Operations and Concepts
NT.K-12.5 Technology Research tools

Lesson Plan slightly modified http://www.educationworld.com/a_lesson/02/lp285-01.shtml
Title – Computer Parts
Primary Subject - Computers / Internet
Grade Level – K-3

Technology Standard:

Students will demonstrate an understanding of the nature and operation of technology systems.

Purpose:

This lesson teaches young students about the parts and functions of the computer by comparing them to body parts and their functions.

Materials:

- Growing Through Technology website - Katie’s Computer section
  http://www.growing.course.com/level_K/computer_parts/index.html
- computers
- Kidspiration

Procedure:

- Have the children click on a part of the computer on the aforementioned website. You could just point to the parts of the classroom computer, but this website makes it more fun.

- After they have heard what the part of the computer is called and what it does, talk about what part of our body does a similar job. The parts we have come up with are:

<table>
<thead>
<tr>
<th>Monitor</th>
<th>eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Unit</td>
<td>brain</td>
</tr>
<tr>
<td>Speakers</td>
<td>ears</td>
</tr>
</tbody>
</table>
I explain that the printer is not part of a computer, but it works with the computer. I put on my glasses and ask the students if the glasses are part of my body. When they say no, I tell them that even though they are not part of my body, they work with my body to help me see better.

After learning about the parts of a computer, I have them open a prepared Kidspiration document with a picture of a computer. The library is set to the body parts. The students then drag the body part to the computer to show what each part of the computer does.
Title - This is the Computer
Primary Subject - Computers / Internet
Grade Level - Pre-K/K

Students will learn computer basics by learning a rhyme that I made up to teach the parts of the computer.

THIS IS THE COMPUTER

This is the Monitor,
Our work we can see.
This is the Mouse,
It doesn't eat cheese.

This is the Keyboard,
with numbers and letters on the Keys.
These are the Headphones,
be careful please.

This is the C.P.U.,
its brains we will use today.
Put all these parts together,
get ready it is time to play.

Lesson slightly modified
http://www.lessonplanspage.com/CThisIsTheComputerOriginalPoemPK.htm