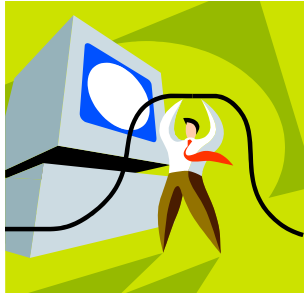


Computer Hardware



Essential Questions

- WHAT ARE THE PARTS OF A COMPUTER?
- WHAT DOES EACH COMPUTER PART DO?

Learning Intention / Overview

Computers are everywhere! And, while, most students grow up using computers in their homes and at school, they may not know what the different parts are called. Additionally, they may lack knowledge of how these parts work together to give us the ability to compute. Students will love the opportunity to combine creativity with acting in this engaging lesson that brings computer hardware to life – literally!

Methods / Teaching Strategies

- Skits
- Discussion
- Inquiry

Assessment of Learning

- Short skits

How might you customize or alter this lesson?

Key Learning Areas

Introduction to Computers

Concepts Taught

Computer Hardware

Target Age

6 – 12 Year Olds

Duration

1 x 60 minute Session

You will need:

Computer Parts
Description Cards
(provided)

Online Resources:

- <http://edgalaxy.com/education-quotes>
- <http://edgalaxy.com/classroom-posters-charts/2013/9/10/14-educational-quotes-posters>
- <http://www.youtube.com/watch?v=iPnYfwLOW84>

Teaching Instructions

1. As each student enters your classroom, have them complete in the following questions as a bell ringer/opening activity:

- How many parts of a computer can you name?

2. Give students about three minutes to complete their responses.

3. Allow students to share their lists.

4. Record their responses on the compuer/smartboard or on the dry erase board.

5. Explain that today we are going to learn about the parts of a computer. This is called computer hardware.

6. Explain that while computers have many tiny parts with specific functions and purposes, you are only going to explore the five most common parts.

7. Let students know that these five parts could be slightly different, depending on the type of computer they have in their homes, etc. since not at all computer systems are the same.

8. Give students a description card that contains the name and definition for a piece of computer hardware. Once all students have received their cards, give them a minute to read the card.

9. At this time, have all the students that have the same piece of hardware to get into a group: all the monitors will form one group, all the CPUs will form one group, etc.

10. Provide instructions that allow students to understand that they are going to create a brief skit about their assignment computer part. (The attached scoring guide may be copied and passed out and used during planning/presenting, etc.

11. Once students have had sufficient time to plan their skits, allow them to present their skits. As students present, you may want to have the rest of the class to write down some brief notes about each computer part.

Computer case:

A plastic or metal box that stores the entire computer's parts inside of it. These can range in size from very small to much taller. You might compare this piece of the computer your skin because it holds everything inside of it!



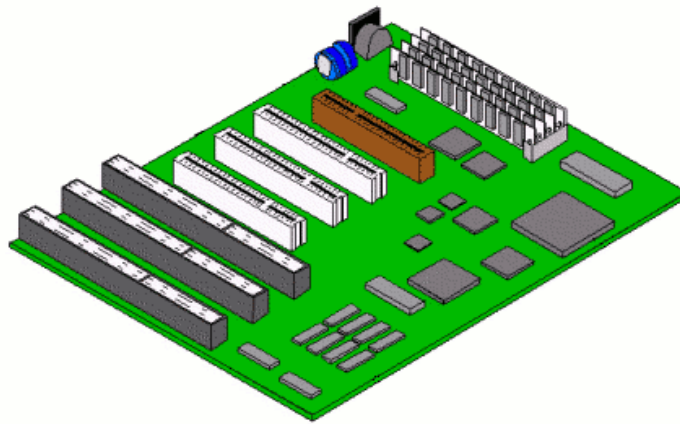
Power supply:

The power supply allows electricity to flow through a computer. A computer will not turn on if the power supply is damaged or not working correctly. You might compare this piece of the computer to your veins because they spread blood all throughout your body. The power supply spreads electricity all throughout the computer.



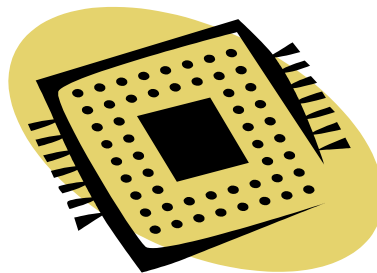
Motherboard:

This is main part of the computer that is stored inside the computer. It connects all of the other parts. Since your skeleton provides this connection, the motherboard could be called the computer's skeleton.



CPU (Central Processing Unit):

The CPU is a tiny chip that creates a lot of heat. This heat is created because the CPU works a lot. It makes all of the calculations that allow the computer to work. You might call this the computer's brain. Just like your brains gives commands to the rest of your body, the CPU gives commands to the rest of the computer.



Input devices:

A computer's keyboard or mouse lets you give the computer commands. This is putting information "into" the computer. Without a keyboard or mouse, the computer would not do the work that you need done. This computer part could be compared to the ears because they let us take in information.



Output devices:

A computer's monitor and speakers are considered output devices. The computer provides information to us from these parts. We can hear what the computer has to say from the speakers. We can see what the computer has to say from the monitor. These output devices are like a human's voice because information is shared when we talk. Information is shared through the monitor and the speakers!



Computer Hardware Skit

Scoring Guide



- _____ /25 Explains the computer part's job
- _____ /25 Skit is well organized
- _____ /10 Includes the name of the assigned computer part
- _____ /10 Speech is clear and loud enough to be heard
- _____ /10 Includes the name of the assigned computer part
- _____ /10 At least one prop from the classroom is used
- _____ /10 Skit is creative (not just read)
- / **100** **TOTAL SCORE**

Teacher's Comments:

