

Computers Don't Byte

Objective – You will be able to answer the following questions:

1. What was the first computer?
2. How smart are computers?
3. What are the five components of a computer and what is the most important?
4. Where are things stored?
5. What does Back-up, Back-up, Back-up mean to me?
6. What is the difference between local and network?
7. What is does it mean to completely power down my computer?
8. What is a good password and why shouldn't I just post it on my computer?

First computers

Early computers were calculators, slide rulers, fingers, but the first computer was the abacus.

Base Two Math – Computers are basically living in a binary world. They only “think” in terms of 1 and 0, on/off, or yes/no. Would you consider something smart that the only job was to, for example turn a light switch on and off all day long? Oh yes, the only thing is, they do it 40 million times/sec. It isn't exactly what is done that is so incredible but how fast they do it. Now that is pretty cool.

Everything for a computer is in base two math. For example if I was going to write a number in base two I would write the number 64 as 1000000. That number in base 10 (our system) would be one million (1,000,000). So...you decide if a computer is smart or not.

Computer Components- what is the computer? All of the following components:

1. Monitor
2. Input
3. Output
4. Processing
5. Storage

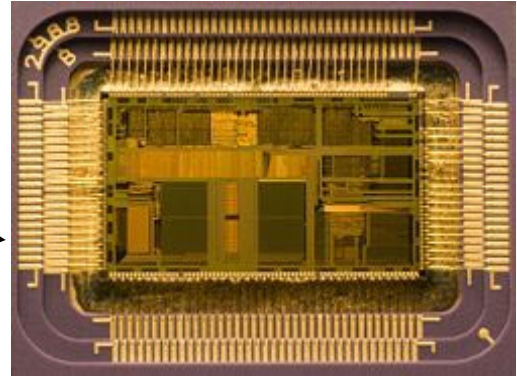
Monitor- the screen that allows you to view what the program is doing in the computer.

Input- Some examples are the keyboard, CD player, camera, or anything that puts information into the computer.

Output- printers, fax machine, or anything the computer sends information to.

Processing- CPU or **Central Processing Unit** or sometimes just called processor, is a description of a class of logic machines that can execute computer programs.

Die of an actual microprocessor- the actual size is 12X 6.75 mm. It is in its packaging.



Storage- Information can be stored on the computer in at least three different ways.

Storage is either electronic (RAM) which is temporary or magnetic (CPU or a floppy disc) which is permanent.

The information can be stored on the hard drive, externally (CD or zip drive) or it can be stored on a network (server). The most important thing to remember is **Back up, Back up, Back up.**

If your information is important to you then save it in a very safe place.

I think not losing information is the most important part of the computer. All of the storage spaces (file cabinets) have size limitations. The old "floppy discs" could store 1.44mb of data. 1.44mb=1,444,000 bits.

Many computers today have storage in the gigabyte range. 1 gigabyte = 1000mb.

Information is in bits. They are combined to form bytes and words.

<u>Name</u>	<u>Size</u>
<u>Bit</u>	<u>1 or 0</u>
<u>Byte</u>	<u>8 bits</u>
<u>Word</u>	<u>4 bytes = 32 bits</u>

You can look at a document, a file, or a shortcut under properties to see if it is stored locally or on the network. In the address, \ means local and \\ means on the network.

Network (domain) with a server is backed up each night; it is also backed up to another server off-site so the three part back up for the safest method of storing information.

What is the safest way to turn off your computer? The safe way is to turn it off using the start button. The only way to completely power the computer off is to use the toggle switch (if it exists) to turn off power.

Why should I log on to my computer and have a password? When you log on to the computer, you are giving the credentials to log in. It is telling the computer you are the right person to gain access to that information. The password is like a lock on the door. So... do not tamper with it.

One way to make it safe is to lock the screen when you step away from the computer.

The fast way to do this is to hit the **Microsoft key +L**

This will lock your computer, you can just log back on, and no one can use your computer when you are away from your workspace.

