# Important Fundamental Terminology

The purpose of quizzing is to assess what we know!

The best assessment of our learning is to recall the information with no guidance or help ( fill in the blank or essay response instead of multiple choice)

This is also harder to prepare for, but a much more effective test of true knowledge.

It doesn’t matter if we don’t know the answer to a quiz, the whole point of a quiz is ASSESSMENT. Then once we know what we know and what we still need to learn, we can be more efficient with our study time.

* When we say the term “Computer” in a general context, what are we talking about?
  + Example: My computer broke, so I had to go buy a new one to check my email.
  + Did the word “Computer” always mean what it does now?
  + **In today’s world a “Computer” refers to a personal device that is capable of performing computing tasks. The most common computer people would identify is probably a desktop or a laptop. But, technically anything that has an ability to process information is a computer or at least houses a computer within, from devices like smartphones to microwaves.**
* What does it mean to “Compute” something?
  + **To compute something means to process information. This information can then be stored, used, transferred, etc.**
* What is the Difference between Hardware and Software?
  + Hardware is….**the actual machinery/electronic parts that work together to create a computing system.**
  + Software is…**code that is written and ran on top of hardware.**
* What are all of the major pieces of hardware that make a computer?
  + We store data long term with…. **Hard Drive**
    - 1. **CPU**
    - 2. **Power Unit**
    - 3. **Memory (Hard Drive/ RAM)**
  + We store data in memory short term with…. **RAM**
  + We perform Computations and run our programs with…**CPU/GPU**
  + We connect all major pieces of hardware together with the….**Motherboard**
  + User Access Hardware
    - We can see the output of our Computer on our…**Monitor/Screen**
      * The software that allows us to easily use our computer is called…**Windows/Linux/MacOS/Android**
      * It is a type of Software Interface called a ……**Operating System**

What is the difference between a Terminal, console, command prompt, shell, etc?

<https://www.geeksforgeeks.org/difference-between-terminal-console-shell-and-command-line/#:~:text=A%20command%20line%2C%20also%20known,is%20a%20type%20of%20interface.&text=A%20terminal%20is%20a%20wrapper,text%2Dmode%20programs%20are%20active>.

**Terminal: A program that runs shell and allows users to enter commands.**

**Console: A physical terminal that contains all text mode programs.**

**Command Prompt: AKA cmd.exe is the Window OS command line interface (terminal).**

**Shell: A program that processes commands and output results.**

**These terms are all related and have many similarities. A shell runs in a terminal that handles instructions. A terminal is a general environment that runs shell. A console is a specific type of physical terminal. Command prompt is a specific terminal used by the Windows Operating System. On a Mac and Linux systems, they use Terminal. These terms are related in the sense that they allow the user to send the computer instructions via a shell and get results back.**