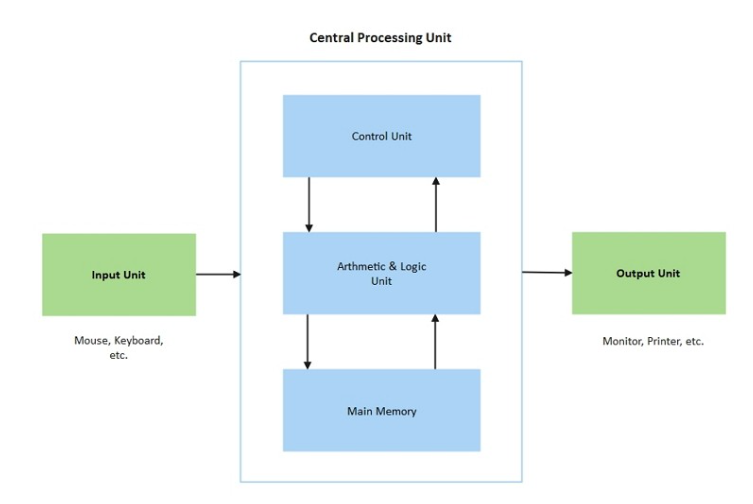
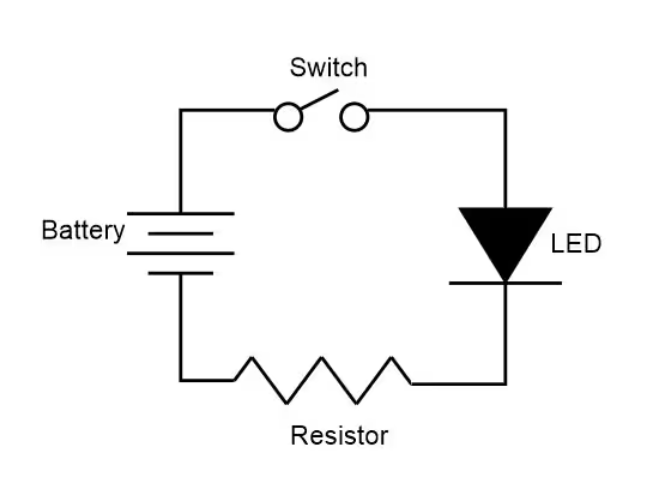
**Schematic Reading Notes:**

You’ll encounter three types of diagrams in electricity and electronics: block, schematic, and pictorial.

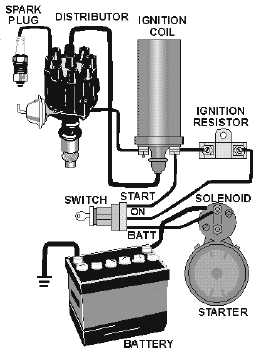
A block diagram gives you an overview of how the discrete circuits within a device or system interact.



Schematic diagram: a simplified drawing showing how components are connected in a system, using symbols and lines to help design, build, and troubleshoot.



A pictorial diagram, sometimes called a layout diagram, shows the actual physical arrangement of the circuit elements on the circuit board or chassis, so that you can quickly find and identify components to test or replace.



When you troubleshoot an unfamiliar electronic circuit, you’ll usually start with the block diagram to find where the trouble originates. Then you’ll refer to the schematic diagram (or part of it) to find the faulty component in relation to other components in the circuit. A pictorial diagram can then tell you where the faulty component physically resides, so that you can test it and, if necessary, replace it.

In a block diagram, each block represents all of the schematic symbols related to that part of the circuit. In addition, each block has a label that describes or names the circuit it represents. However, the block does nothing to explain the actual makeup of the circuit it represents.

A block diagram can provide a clear understanding of how each part operates in conjunction with the others.

A schematic diagram acts, in effect, as a map of an electronic circuit, showing all of the individual components and how they interconnect with one another.

A schematic drawing must indicate not only all components necessary to make a specific scheme, but also how these components interrelate to one another.

A schematic diagram reveals the scheme of a system by means of symbology. Symbology in schematic diagrams refers to the use of standardized symbols, icons, and graphics to represent components, devices, and concepts in a clear, consistent, and efficient visual representation of a system or process.