Current electricity and

Circuits.

**Electric current- is the flow of electrons from a power source (battery, outlet) through a conductor.**

**There are three different kinds of electric current: Current (measured in Amps), Resistance (measured in Ohms) and Voltage (measured in Volts).**

**Resistance: is a ratio of the voltage across the conductor to the current it carries.**

**\*\*Analogy: Try to think of an electric circuit as a river that flows. The strength of the current (represents electric current) is slowed down (or resisted: represents electric resistance) by the curves, depth and rocks that are on the bed of the river. The more resistance that the path of the river creates the slower the river will flow.**

**Much like a river that flows an electric circuit flows, it just uses electrons instead of water. Depending on what kind of wire (conductor) is being used will dictate how easily the electricity (current) flows through it.**

**Electric circuit: is a system of wires and a power source designed so current electricity can be sent to a specific place.**

**There are two main kinds of electrical circuits:**

1. **Parallel: these types of circuits have several paths for the current to flow through.**

**Example:**

**resistors**

**2.)Series: is a circuit that has only one path for the current to flow through.**

**\*\*A series circuit creates more resistance than a parallel circuit because they only have one path for the electrons to travel on**.