***Electrical Circuits***

Terms:

***Electrical charge:*** a property of matter

***Current***: a flow of electrical charges

***Charges:*** can build up as static electricity

***Circuit:*** unbroken path along which an electric current flows

***Closed circuit:*** the status of a circuit that is complete and unbroken- flowing electricity

***Open circuit***: status of a circuit that has breaks or openings- current DOES NOT FLOW.

***Switch***: opens and closes a circuit

***Series circuit:*** all electrical charges flow in the same direction

***Voltage:*** the strength of a power source that is measured in volts

***Resistance:*** the ability of a substance to slow down electric currents

***Parallel circuit:*** circuit in which the electrical current follows 2 or more paths called branches

**NOTES**

**What is an electrical current?**

1. charges can be made to low continuously through materials.
2. Electric circuit begins at a ***power source***
3. Current flows through connectors called ***wires***
4. ***A load***  is a computer or lamp that uses electricity

***What is a series circuit?***

1. series circuit- same directions, single path
2. open- it is removed or broken

***What is a parallel circuit?***

1. parallel circuit- more than 1 path, have branches

***What affects electrical current?***

1. amount of electrical current depends on:
   1. voltage
   2. resistance
2. short circuit: can stop the circuit from operating properly

**Light Bulbs**: us a resistance- electrical current does not keep flowing