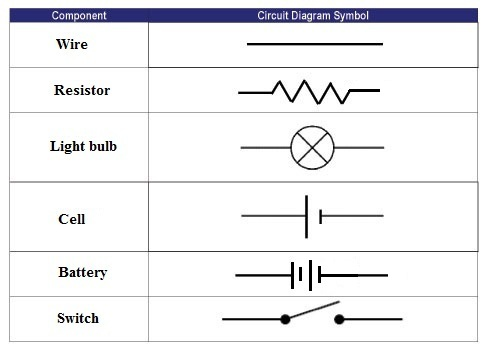
**Electricity & Circuits**

**Objective 1: I can explain the sources of Electrical Energy**

* Electrical energy: the movement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Electrical Energy comes from many sources such as:
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – (Hydroelectric) & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Both water and wind power are used to turn a \_\_\_\_\_\_\_\_\_\_\_\_ that creates \_\_\_\_\_\_\_\_\_\_\_\_\_ (green) electrical energy
  + \_\_\_\_\_\_\_\_\_\_\_\_\_ – (sun energy) heat energy is turned into electrical – green energy
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_– (energy from atoms) –green energy
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - (Batteries)

**Objective 2: I can describe series and parallel circuits**

* **Circuit**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through which \_\_\_\_\_\_\_\_\_\_\_\_\_\_ can \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* A simple circuit only need 3 things \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_
* Circuit Components

****

**Types of Current**

* D/C\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Can \_\_\_\_\_\_\_\_\_\_\_ travel \_\_\_\_\_\_\_\_\_\_\_ distances
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ travel in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Electricity we get from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* A/C\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ over \_\_\_\_\_\_\_\_\_\_\_\_\_\_ distances
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ directions forward and backward (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)
  + Electricity we get from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - anything you have to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

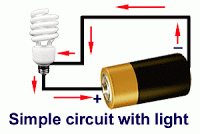
**Types of Circuits**

***Series Circuit*:**  current travels in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* + one break \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the \_\_\_\_\_\_\_ of current (if one light goes out they ALL go out)
  + current is the \_\_\_\_\_\_\_\_\_\_\_\_\_throughout circuit

**SERIES CIRCUIT DRAWING**

* + - lights are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + each device **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of the total voltage
    - get \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as lights are added

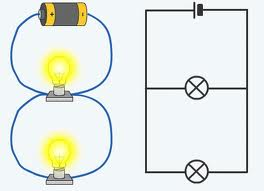


***Parallel Circuits***

* + current travels in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from negative to positive
    - one break \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flow
  + current \_\_\_\_\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ branches

**PARALLEL CIRCUIT DRAWING**

* + takes path of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ resistance
  + “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” light would be \_\_\_\_\_\_\_\_\_\_
  + each device receives the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_when lights are added



***Household Circuits***

* **Combination of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + too many devices can cause wires to \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **Safety Features:**
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - metal melts, breaking circuit
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - bimetallic strip bends when hot, breaking circuit