

Name: _____

Pd: _____

Objective: 7.P.2.3







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

Component	Circuit Diagram Symbol
Wire	
Resistor	
Light bulb	
Cell	
Battery	
Switch	

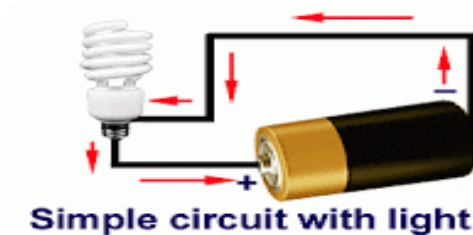
Types of Current

- 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 _____

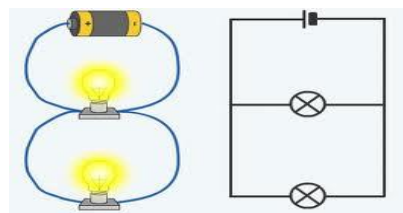
- one break _____ the _____ of current (if one light goes out they ALL go out)
- current is the _____ throughout circuit
 - lights are _____
- each device _____ of the total voltage
 - get _____ as lights are added



SERIES CIRCUIT DRAWING

Parallel Circuits

- current travels in _____ from negative to positive
 - one break _____ flow
- current _____ in _____ branches
- takes path of _____ resistance
- “_____” light would be _____
- each device receives the _____
- _____ when lights are added



PARALLEL CIRCUIT DRAWING

Household Circuits

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