

Science Ch. 2, lesson 1 notes

Vocabulary

- * **electrical charge**- the property of matter that causes electricity
- * **attract**- to pull towards; the opposite of repel
- * **repel**- to push away; the opposite of attract
- * **static electricity**- a buildup of electrical charge on a material
- * **electric current**- a flow of charged particles; provides electricity

Electrical Energy

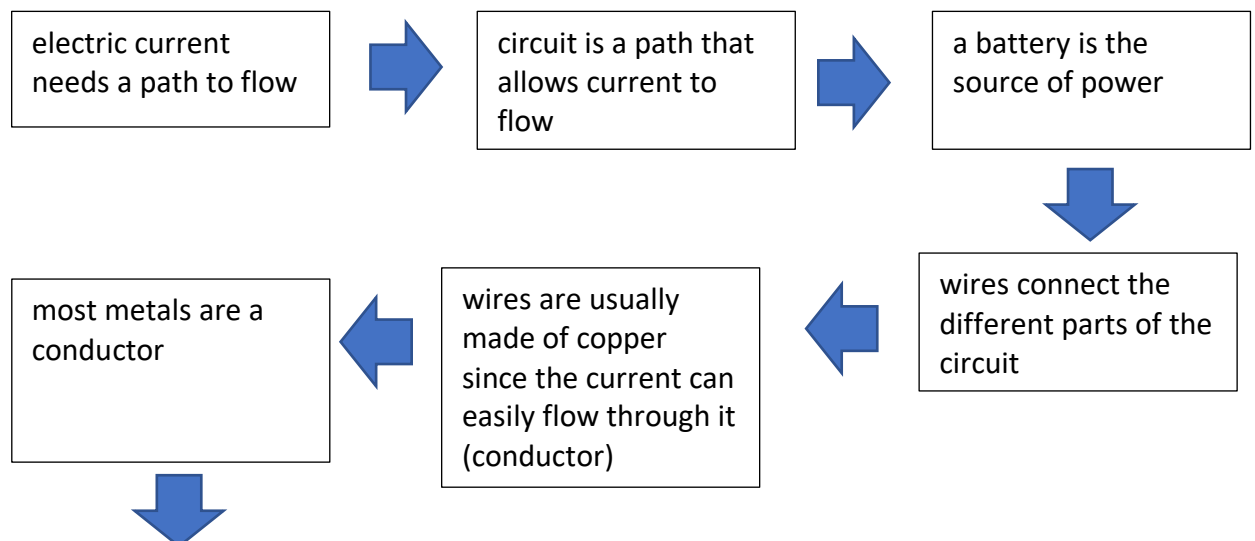
- * materials are made up of tiny parts called particles
- * some particles have either a positive or a negative charge
- * if both objects have a negative charge, they repel each other (-, -)
- * if both objects have a positive charge, they repel each other (+, +)
- * if the object has one positive and one negative charge, they will **attract** each other (+, -)
- * objects must have one negative and one positive charge (or opposite charge) to attract each other (north- south, east-west, positive-negative)

Static Electricity

- * metal is a conductor for static electricity
- * all objects have charged particles
- * most have the same number of positive and negative particles
- * when two objects touch, negative particles can move from one object to another
- * negative particles can build up on an object, giving them a negative charge
- * this buildup causes static electricity

Electric Current

- * charge particles can build up on an object or can make them flow
- * a flow of charged particles is an electric current
- * electric currents are used every day because they provide the energy to turn on your lights, tv, radio, and computer



plastic, which is an insulator, does not allow current to flow easily. Therefore, wires are usually wrapped in plastic



an electric current is created