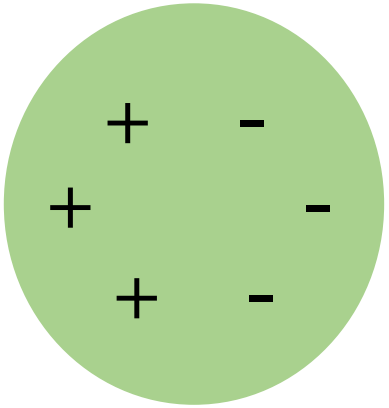
Atom: the basic component of all matter.
Nucleus: the central core of an atom.
Proton: a positively charged particle in the nucleus of an atom.
Neutron: a neutral particle in the nucleus of an atom.
Electron: a negatively charged particle that orbits the nucleus of an atom.

Protons: Pro = Positive

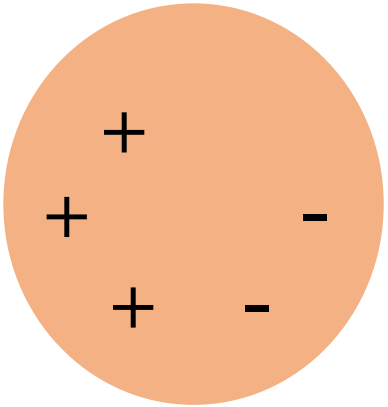
Neutrons: Neutral

Electrons: Getting Electrocuted is a Negative experience. You should try to avoid it!

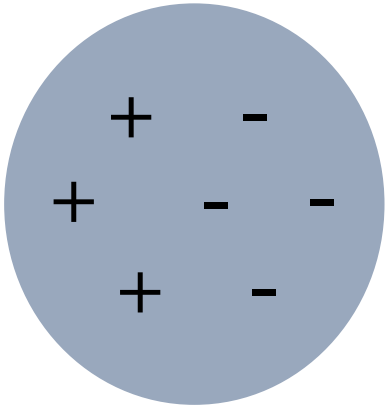
Equal Number of Protons and Electrons = Neutral Atom



Neutral Atom Loses an Electron = Positive



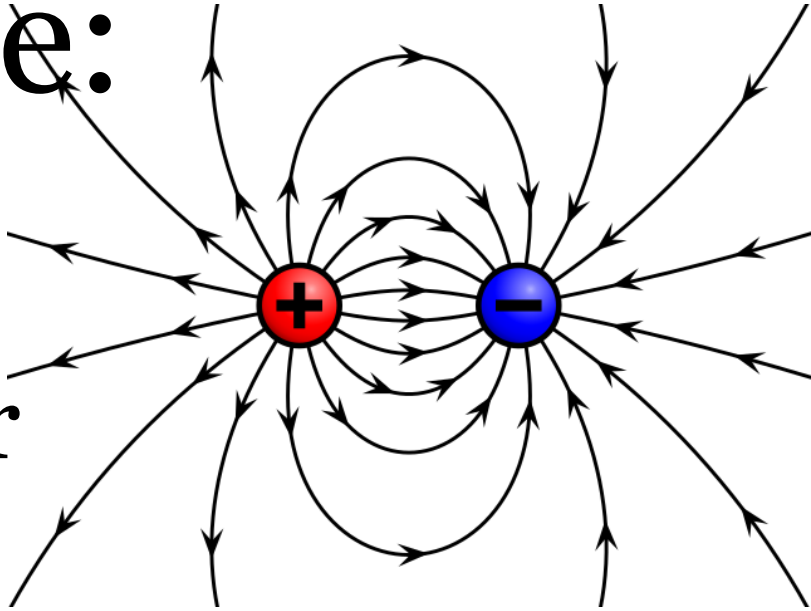
Neutral Atom Gains an Electron = Negative



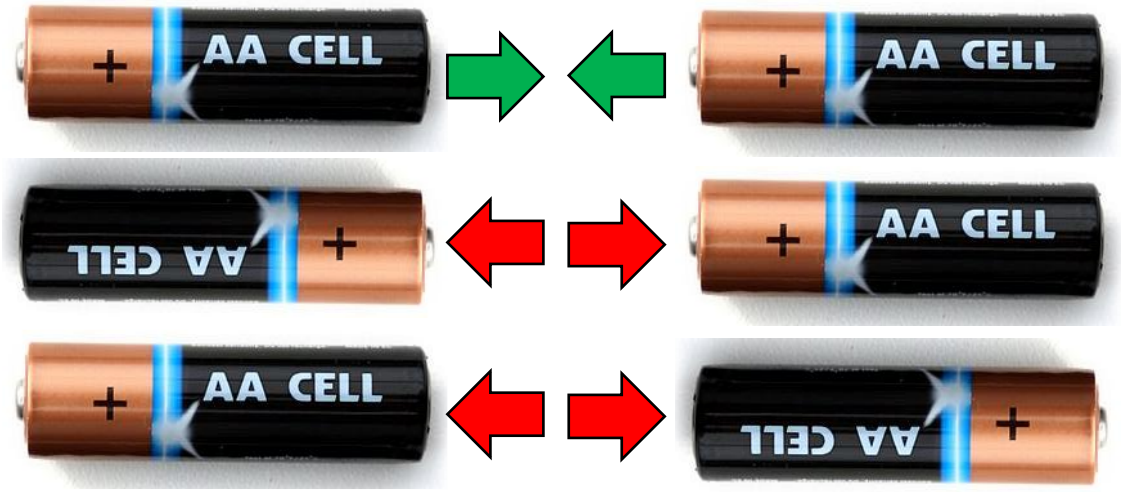
Static Electricity:

- Static = at rest
- Buildup of electric charge
- Static discharge causes spark when energy is transferred
- Lightning is a large amount of static discharge

Charge:

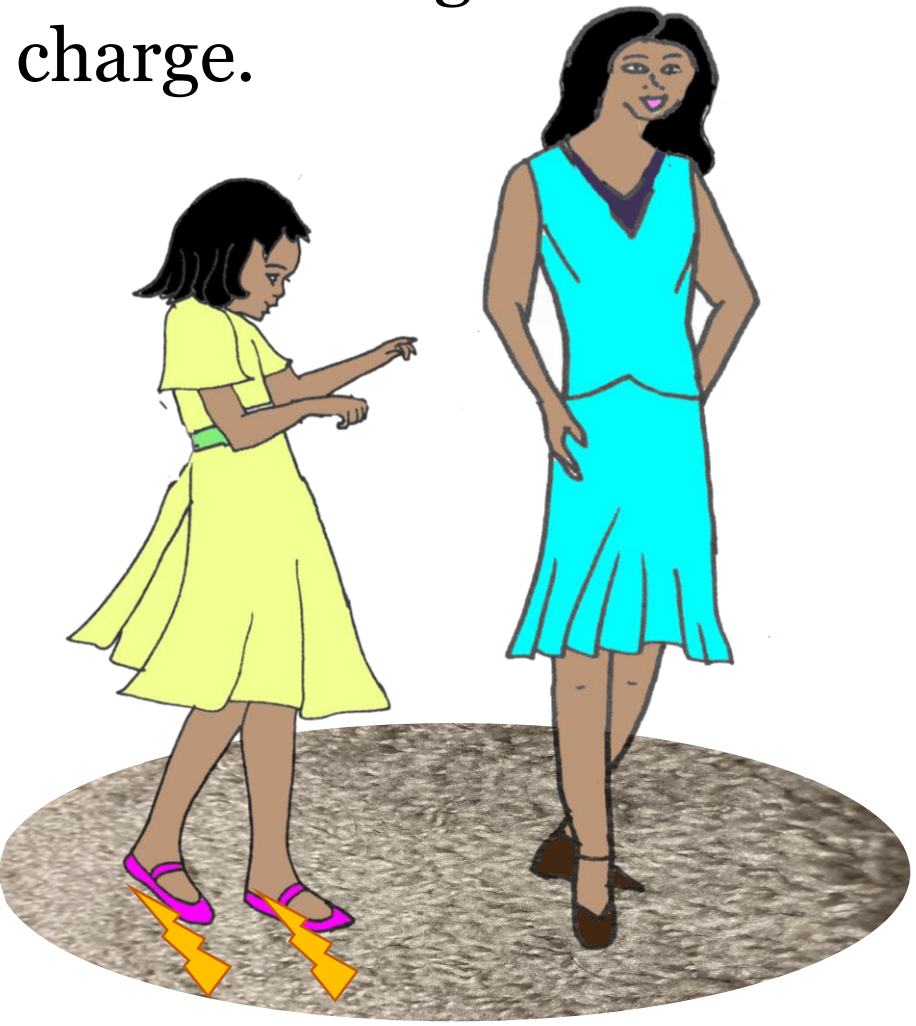


- Creates an invisible force that causes particles to attract or repel one another
- Opposite charges attract
- Particles with the same charge repel



Static Electricity:

The buildup of nonflowing electric charge.



Takes electrons.

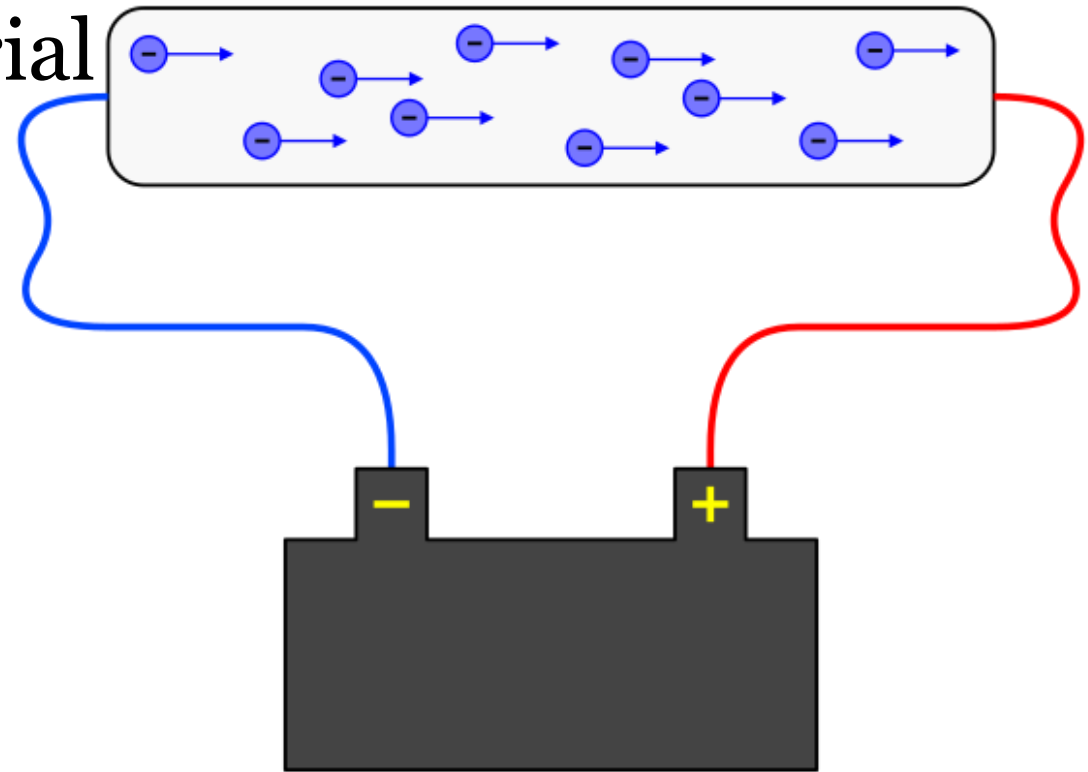
Static Discharge:

A sudden flow of static electricity from one object to another.

Passes electrons on.

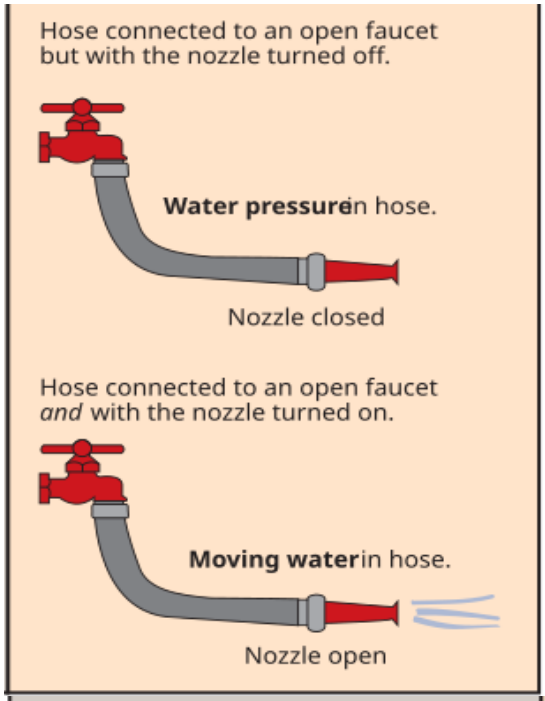
Current Electricity:

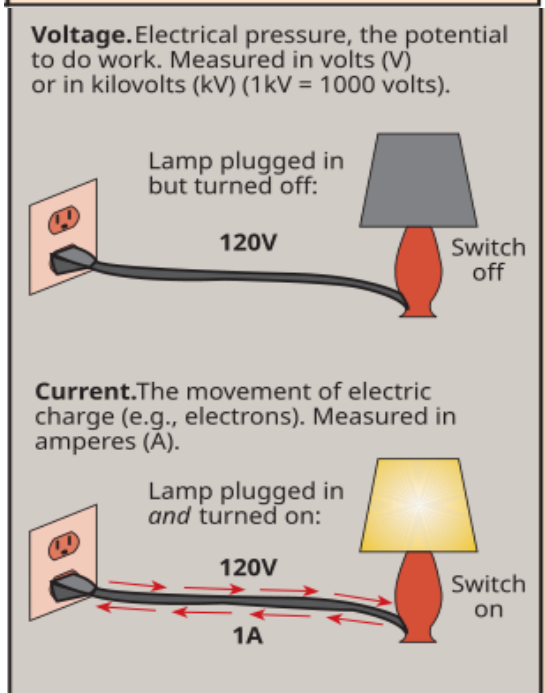
- A continuous flow of an electric charge
- What people normally refer to as electricity
- In order to flow, it needs
  - Conductive material
  - Unbroken circuit
  - Energy to start flowing



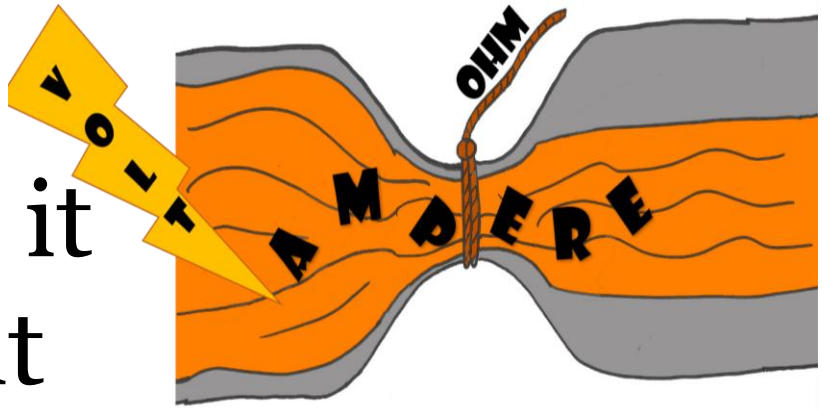
Voltage:

- When two ends of a circuit have opposite charges, this creates a difference in potential energy
- Electrons built up at the negatively charged end have the potential to transfer to the positively charged end





Resistance:



Describes how difficult it is for an electric current to flow.