

Static Electricity Notes

Two Kinds of Electricity:

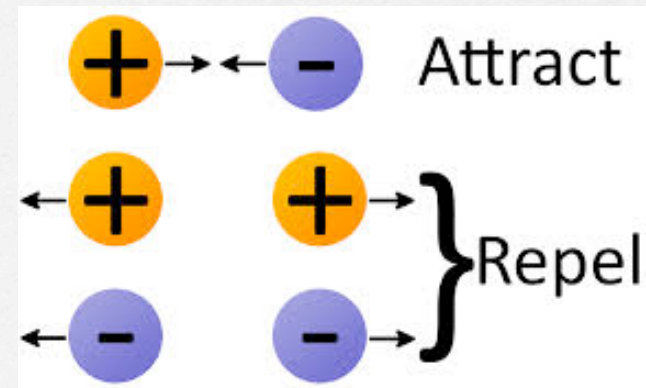
- ❑ **Static Electricity:** a buildup of electrical charges on an object or material.
- ❑ **Current Electricity:** the flow of electrical charges through a circuit.

What Causes Static Electricity?

- ❑ It is caused by friction-- rubbing two materials together.
- ❑ This causes electrons to transfer from one object to another.
- ❑ One will then have a buildup of electrons and have a negative charge.

Then, the charges interact!

- ❑ Negative charges attract positive
- ❑ Negative REPELS negative
- ❑ Positive REPELS positive
- ❑ Opposite Charges Attract
- ❑ Like Charges REPEL



How does static electricity move?

- ❑ EXAMPLE: If you rub your socks on the carpet, your skins builds up negative charges. You are negatively charged!
- ❑ Then you touch something like a doorknob. The “shock” you feel is the sudden “attraction” or transfer of the electrons to the doorknob.

Examples of Static Electricity in the World

- ☐ rubbing socks on a carpet
- ☐ your hat rubbing on your hair in the winter
- ☐ touching a door knob
- ☐ lightning
- ☐ touching a doorknob and getting a “shock” ”

Lightning is static electricity?

YES!!

- ❑ When air, water droplets, and even ice crystals rub violently against each other inside a thundercloud, they creating two opposite kinds of electrical charge: negative and positive.
- ❑ When the attraction between charges is so strong that they push through the air towards each other, **you have lightning!**