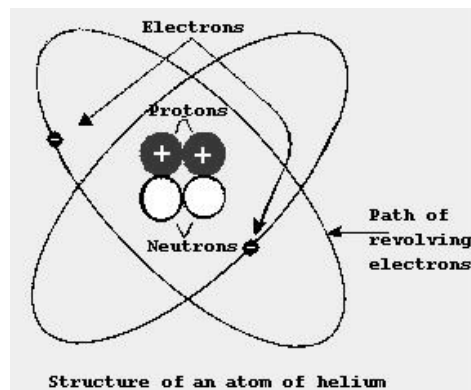


WHAT IS

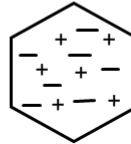
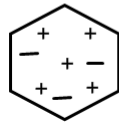
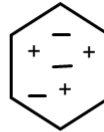
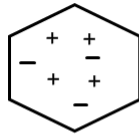
STATIC
ELECTRICITY?

To understand Static you must understand The Atom

- All matter is made of atoms that are combined together into molecules
- The atom is composed of protons, neutrons and electrons
 - Protons have a positive charge, -can't move
 - Electrons have a negative charge -lost or gained easily
 - Neutrons are neutral



Determine the Charge on the Following Objects



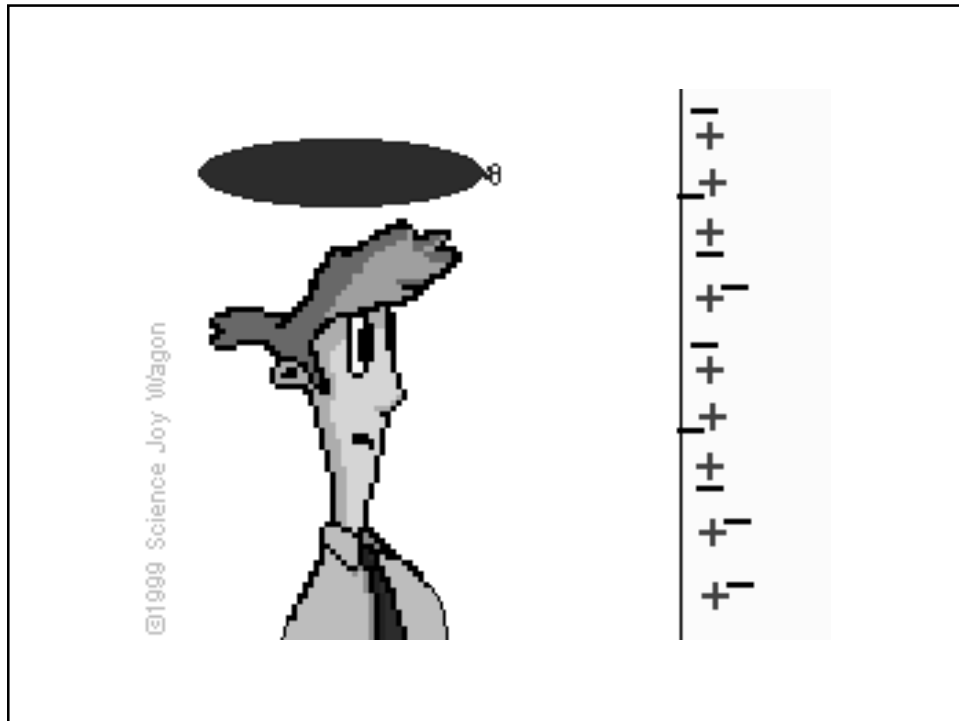
How would you make each of the above neutral?

Static Electricity

Static electricity is created by applying a friction force between two objects

The friction force transfers electrons from one object to the other

Static Electricity is the study of charges at rest.



Static Electricity

**If something gains electrons
It has an excess of electrons,
it is negatively charged**

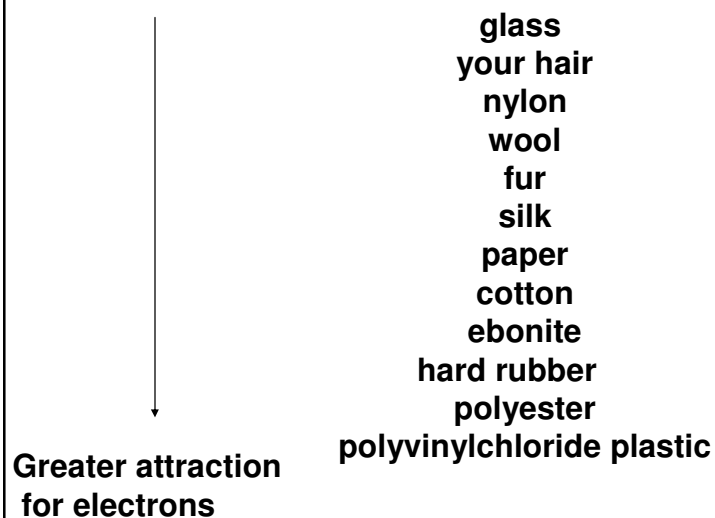
**If something loses electrons
it has a deficiency of electrons
It is positively charge.**

Neutral objects have equal numbers of protons
and electrons

Predicting Charge

- You can predict what charge an object gets by using the electrostatic series
- Q 1 If you rub silk with fur what charge will each get?
- Q 2: If silk is rubbed on plastic what charge will each object get?

Electrostatic Series



Laws of Electrostatics

Like charges repel.

- Positive repels positive
- Negative repels negative

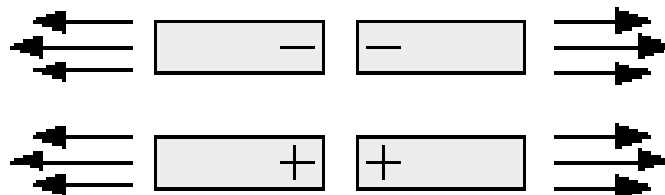
Opposites attract.

- Positives attract negative

Charged objects attract neutral objects.

- Negative attracts neutral
- Positive attracts neutral

opposite charges attract



like charges repel