**NOTES 7.1: Static Electricity**

Electric \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are \_\_\_\_\_\_\_\_\_\_\_\_\_ in one \_\_\_\_\_\_\_\_\_\_\_\_\_.

**What is it?** Static Electricity is the build-up of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_that are “static”

(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). Static electricity can result in \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, or

materials clinging together or repelling each other.

**Benjamin Franklin**

Franklin discovered that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charge results from a build-up of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and that Negative (-) charge results from a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_.

**The Atom**

Remember that in the atom…

Neutral atoms have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_numbers of protons and electrons

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an electron makes the atom or object more POSITIVE

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an electron makes the atom or object more NEGATIVE

**Friction and Electron Transfer**



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_occurs when objects rub against each other

The rubbing can result in \_\_\_\_\_\_\_\_\_\_\_\_\_hopping from one object to another

How materials are charged (negatively or positively) depends on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rubbed together.

**The Electroscope**



Used for detecting static charge.

**Insulators and Conductors**

**Insulator– materials that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ allow charges to move easily (plastics, glass, wood)**

* + **Retain a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **electrons will accumulate at surface and will stay in one place**

***Draw the diagram of rod with charges***

**Conductor- materials that allow electrons to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* + **Electrons will spread out evenly throughout material**

***Draw the diagram of rod with charges***

**DO THIS!**

1. **Think About It activity pg. 251**
2. **Read text pages 248-257 and complete questions 1-17**