**FPS – Static Electricity Notes**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

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| ***Static Electricity - Notes*** |
| 1. ***What is static electricity?***  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. ***There are two kinds of charges. Rub the plastic ruler and tear off a small piece of paper. What happens?***   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. ***Where do charges come from?***   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Label the atom.  ***-If electrons = protons 🡪***  ***-If electrons > protons 🡪***  ***-If electrons < protons 🡪*** |
| 1. ***Where do charges come from?***  Rubbing materials does \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ electric charges. It just  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrons from one material to another.   When a balloon rubs a piece of wool… |
| 1. ***Insulators and Conductors***   ***Insulators 🡪***  ***Conductors 🡪*** |
| 1. Induction 🡪 |
| 1. ***Static Discharge***   ***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |
| 1. ***Mini Quiz***  * **A balloon has a negative change when rubbed by a woollen cloth. If the balloon can attract some paper scraps, which of the following cannot be the charge of the paper scraps?** * **A balloon has a negative change when rubbed by a woollen cloth. During rubbing, what have been transferred between the woollen cloth and the balloon?** |
| 1. ***http://d2vlcm61l7u1fs.cloudfront.net/media%2F7e9%2F7e9d166c-38a7-4880-aead-0b1e6a6b8537%2Fphp0J4Eib.pngHow does a positively charged rod attract a neutral object?  When a + charged rod is put near neutral object, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is induced on the side of the object near the rod and \_\_\_\_\_\_\_\_\_\_\_\_\_ is induced on the side away from the rod. The rod can attract the netural object because \_\_\_\_\_\_\_\_\_ between rod and – induced charge > the \_\_\_\_\_\_\_\_ between rod and + induced charge.*** |
| 1. ***Lightning* Sketch the diagram below.** |
| 1. **Law of Charges** |