SNC1D7 Characteristics of Electricity	**Lab: Investigating Electric Charges** /15

Name: _____

Materials

- Comb
- Ebonite rod
- Glass rod
- Watch glass
- Empty pop can
- Pieces of paper
- Balloon
- Wool
- Fur
- Yourself

Instructions

There are three sections to answer for each station:

(a) Description of your actions
(b) Type of electrostatic attraction (one or more of friction, contact, or induction)
(c) Explanation of results (**BE SPECIFIC & USE SCIENTIFIC VOCABULARY**)

In your explanations, refer to positive, negative, neutral or no charge as well as attract, repel, and electrostatic series. **Use diagrams if necessary.** You get a bonus if you use everything from the list at least once.

Station #1

Goal: Make the balloon stick to the wall using only materials from the list.

Description of your actions [1]:

Type of electrostatic attraction(s) [1]: _____

Explanation of the results [1]:

Station #2

Goal: Move the pieces of paper without touching or blowing on them.

Description of your actions [1]:

Type of electrostatic attraction(s) [1]: _____

Explanation of the results [1]:

Station #3

Goal: Starting from a stationary position (meaning not moving), and using only materials on the list, move the pop can (I) away from you, and (II) towards you **WITHOUT** touching it or blowing on it, no additional force and starting from the same position (in other words, you **CANNOT** simply go behind the pop can!!!).

Description of your actions [1]:

Type of electrostatic attraction(s) [1]: _____

Explanation of the results [1]:

Station #4

Goal: Force a stream of running water to "bend" without touching it. Use only materials from the list.

Description of your actions [1]:

Type of electrostatic attraction(s) [1]: _____

Explanation of the results [1]:

Station #5

Goal: Using any two of the same type of rod/comb/materials, place one on the watch glass and use any type of material to (I) CAUSE the object on the watch glass to rotate away from the second one, and (II) CAUSE the object on the watch glass to rotate towards the second one **WITHOUT** touching or blowing it – NO ADDITIONAL FORCE!

Description of your actions [1]:

Type of electrostatic attraction(s) [1]: _____

Explanation of the results [1]: