Station 1: Soda Cans

Lay the can on its side so it can roll. Without touching the can, move it around the table.

Station 2: Punched Paper

Can you make the pieces of paper move without touching the container?

Station 3: Aluminum Balls

1. Bring the rod near the foil balls but don't touch. What happens?
2. Next, touch the aluminum foil balls with the rod repeatedly and move the rod away from them. The balls should now be repelling. If you observe nothing, recharge and repeat step 2.
3. Touch the aluminum balls with your hand. What happens?

Station 4: Seemingly Magical Meter Stick

Balance the meter stick on the glass plate. Can you move the meter stick without touching it?

Station 5: Electroscope

Do you see the 2 pieces of foil hanging inside the container? Do the following IN ORDER. Charge the rod well before starting.

1. Bring the charged rod near the metal sphere at the top.
   If nothing happens recharge and repeat step 1.
2. Touch the metal sphere with the rod.
   If nothing happens recharge repeat step 1.
3. Touch the metal sphere with your fingers to make them move.

What do you observe?

Station 6: Water Trick

Create a steady, VERY light stream of water. Without touching the water, can you use the rod to do move the water?

Station 7: Plastic vs Glass

Do an experiment that shows the charged plastic and glass have opposite charges.

Name: _____

Electrostatics Stations

Station 1: Soda Cans

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the cans?
3. Are the cans insulators or conductors?
4. Are the cans attracted to or repelled from the rod?
5. Are the cans polarized?

Station 2: Punched Paper

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the paper?
3. Is the paper an insulator or conductor?
4. Is the paper attracted to or repelled from the rod?
5. Is the paper polarized?

Station 3: Aluminum Balls

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the aluminum foil before you touch it?
3. What do you observe when you bring the charged rod near the foil?
4. Is the foil polarized?
5. What is the charge of the aluminum after touching the rod to it?
6. What do you observe after touching the foil with the rod several times?
7. Is the foil polarized?
8. What do you observe after touching the foil with your hands?
9. What is the charge of the foil after touching it with your hands?

Station 4: Seemingly Magical Meter Stick

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the wood meter stick?
3. Is the meter stick an insulator or conductor?
4. Is the meter stick attracted to or repelled from the rod?
5. Is the meter stick polarized?

Station 5: Electroscope

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the foil before you do anything?
3. What happens to the foil when you bring the rod near the metal sphere?
4. What happens to the foil when you touch the metal sphere with the rod?
5. What is the charge of the foil now?
6. What do you observe when you touch the metal sphere with your hand?
7. What is the charge of the foil now?

Station 6: Water Trick

1. What is the charge of the rod after rubbing with fur?
2. What is the charge of the water?
3. Is the water an insulator or conductor?
4. Is the water attracted to or repelled from the rod?
5. Is the water polarized?