SPINNING STRAW

Experiment

WHAT YOU NEED:

- ☐ Plastic bottle and cap
- ☐ Plastic straw
- ☐ Wool or fleece sweater or blanket

WHAT YOU DO:

1. Make sure the cap is screwed onto the bottle. Set the bottle on a table.
2. Wrap the bottom edge of a sweater or blanket around the straw. Holding onto one end, rub the straw back and forth between the fabric several times.
3. Still holding the same end of the straw, carefully balance it across the cap of the bottle. Touch the straw as little as possible.
4. Place one finger very close to one end of the straw (try not to actually touch the straw) and begin to move your finger slowly in a circle around the bottle. The straw should follow it! This step may take a little practice to make it move smoothly.

WHAT HAPPENED:

Rubbing the straw between the layers of cloth of your shirt created static electricity. The rubbing motion caused the straw to gain an electrical charge. When your finger came close enough, the negative charge on the straw was attracted to the positive charge of your skin. As you moved your finger, the straw moved right along with it because the charges were attracted to each other. Do you remember learning about magnets? Opposite charges attract while like charges repel (push away) and the same is true for electrical charges. Try showing your friends or family members this science “magic” trick and see if they can figure out how you made the straw move without touching it!