

Analyzing Static Electricity

Today we are going to discover the connection between induction, conduction and friction. We will be using homemade electrosopes to test these topics. Our electroscope will be made from a pie plate, Styrofoam plate and cup, straw, string and aluminium foil ball.

Make two holes near the bottom of a Styrofoam cup on opposite sides.

Push a plastic straw through the holes in the cup.

Turn the cup upside down and glue it onto the bottom of an aluminum pie pan. Make sure that the cup is right at the edge so that the straw sticks out over it. If you don't want to wait for the glue to dry, tape the cup to the pan.



Cut a piece of thread about 8 inches long and tie a few knots in one end of the thread.

Cut a one-inch square of aluminum foil. Use it to make a ball around the knots in the thread. The ball should be about the size of a marble. It should be just tight enough so it doesn't fall off the thread.

Tape the end of the thread to the straw so that the ball of foil hangs straight down from the straw, right next to the edge of the pan.

Tape the straw to the cup so it doesn't move around when you use the Electroscope.