

Aim: To make an electroscope (a device that detects static charge) and use it to find everyday items that emit a static electric charge.

Equipment:

modelling clay

length of wire

plastic bottle

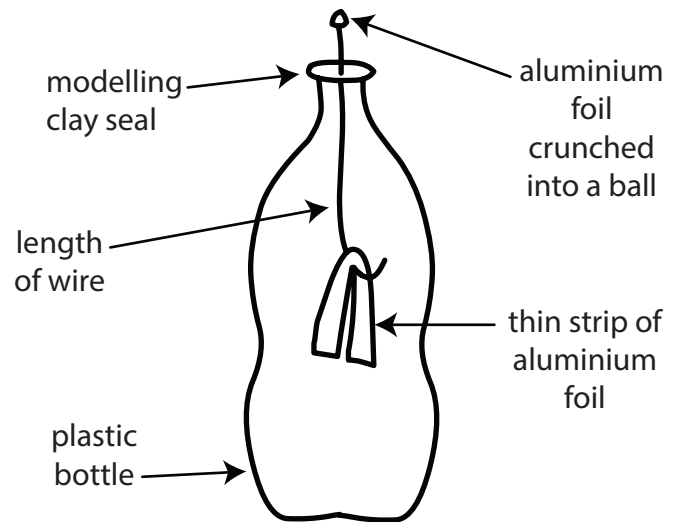
aluminium foil crunched into a ball

thin strip of aluminium foil

balloon

(Hint: Test some electronic devices in the room!)

Diagram:



Method:

- 1) Assemble the electroscope as shown in the diagram.
- 2) Test that the electroscope is working:
 - a) Rub a balloon vigorously on your hair.
 - b) Hold the balloon near the aluminium ball on the electroscope.
- 3) Hold the electroscope by the plastic bottle with the metal part close to various items in the room. (Do not touch the metal parts with your fingers or the static charge will discharge into your body and not register in the electroscope.)
- 4) Record which items register static charge.

Observations:

Conclusions: