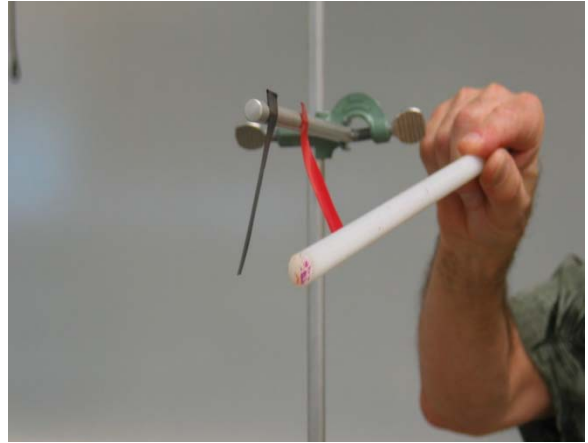


Two Kinds of Charge!



Purpose: To demonstrate that an object can become charged by rubbing and that there are two different kinds of charge.

Location: room 146, shelf L2 (vertical rod in vertical bin by door to room 144)

Stick a piece of red tape to the non-sticky side of a piece of black tape and pull them apart (as in “Charged” Tape demo). Show that they are attracted to each other then stick them to a horizontal rod that’s attached to a vertical rod with a rod clamp, as shown. Now, rub the Teflon^R rod with fur and hold it up to the hanging pieces of tape as shown. Students will observe that the rod has become “charged” and that the red tape is attracted to it, but the black tape is repelled by it. This implies that the red and black tapes have “unlike” charges.

Charged objects that repel each other are said to have “like” charges. The Teflon^R rod and the black tape therefore have like charges.

Charged objects that have unlike charges attract each other, as has been shown in the “Charged” Tape demo.

A glass rod rubbed with fur becomes charged “unlike” the Teflon^R rod, which can be demonstrated by holding it up to the hanging tapes.