

## FLYING BALL & SILVER SNAKE MODEL N-144

This pair of accessories is used to demonstrate several of the attributes of static electricity. They are truly attention getting and students of all ages will enjoy using them.

The SILVER SNAKE is a metallized ribbon which is readily attracted to the dome by induction. As soon as any part of the ribbon touches the dome, it will become charged negatively and then be violently repelled away from the dome. The ribbon is a poor geometric shape for retaining the negative charge. The two edges quickly drain the charge into the atmosphere and the ribbon is again attracted to the dome by induction. The frequency with which the SILVER SNAKE strikes back at the dome is very dependent on the relative humidity. When it is high, the charge will be lost faster and, therefore, the repetition rate will be greater.

The FLYING BALL is a lightweight, metallized ball on the end of a thread. When the ball is slowly brought near the dome, it will be attracted by induction when it is perhaps 5 to 10 inches away. As soon as the ball touches the dome, it is repelled. The ball shape is the best geometry for retaining a charge, so the ball floats or flies around the dome at a distance of several inches. After about a minute, the charge will dissipate and the ball will again be attracted by induction.

The comparison of these two units clearly shows similar behavior but with an obvious difference in charge retention due to shape.

