

## 1D15.17 - Ball Roller

Key words: Ballistic, velocity, ball, rolling, potential, kinetic



### **Equipment List:**

1. Ball roller
2. Ball (Mouse ball works best)

### **How to assemble and operate:**

- Place ball roller on table, hold firmly
- Drop ball into track at top of roller
- Observe ball rolling perpendicular to the initial direction of travel

### **Description/Theory:**

This demonstration illustrates how the ball has no “memory” of its initial direction of travel. We see the movement of the ball as it leaves the roller is perpendicular to the initial direction of travel.

### **Comments/Notes:**

Sometimes the ball does not go in a straight line when leaving the roller, so repeat demonstrations may be needed.