

**INSTRUCTIONAL GUIDE****Instructions**

Flip the Dropper Popper inside out and drop from shoulder height, flat side down. Use the small knob to give it a little spin so the popper stays flat while falling. On impact, the popper returns to its original shape and bounces higher than your head!

**Lesson Ideas:**

**Conservation of Energy:** A perfectly elastic ball would bounce back to its original height. How does this popper bounce higher? You stored extra energy in it when you pushed it with your fingers.

**Activation Energy:** Energy is stored in the popper as in a molecule. With a little bit of “activation energy” (dropping from a height), the stored energy can be released.

**Troubleshooting**

- Knead the rubber so the popper will stay inside out until it lands. Flip inside out and Pop in your hands multiple times to break it in. You can flip and pinch backwards to encourage it to stay open longer.
- Dropper Poppers perform differently depending on temperature, humidity, and surface texture. Works best when used on carpet. When used on a hard surface a greater force is needed therefore it must be released from a greater height.

**Related Products**

**Happy/Unhappy Balls (P6-1000)** One of our all-time favorites! Side by side, these two black rubber spheres look identical. But, when you throw them to the ground, one bounces wildly about the room, while the other just lies there no matter how hard you throw it.

**Astro Blaster (P1-5000)** The Astro Blaster lets you dramatically demonstrate the Law of Conservation of Momentum to almost any age level. Drop it on a hard surface, then stand back as the top ball bounces to heights up to 5 times the original drop!

**Magnetic Accelerator (P4-1365)** Is energy conserved in a magnetic field? Watch as students try to figure out this amazing demo.