

# Monkey Hunter

**Estimated Time for Activity:** ~5 minutes

**Optional Objectives:**

*The students will:*

- Understand the effects that gravity has on motion.
- Gain insight into the components of vectors.

**Materials:**

- Ring stand
- Electromagnet
- Paddle
- Control box
- Cannon with photogate and aiming laser
- Plastic ball

**Optional Vocabulary:**

- Vector
- Gravity
- Component

**Procedures:**

- Make sure laser beam is aligned to the target.
- Load ball into cannon.
- Explain that when the ball leaves the cannon, the paddle will begin to fall.
- Ask if the ball will still hit the paddle since it was aligned before everything went into motion.

**Optional Post-Activity Question(s):**

- Why did the ball hit the paddle even though the paddle dropped?