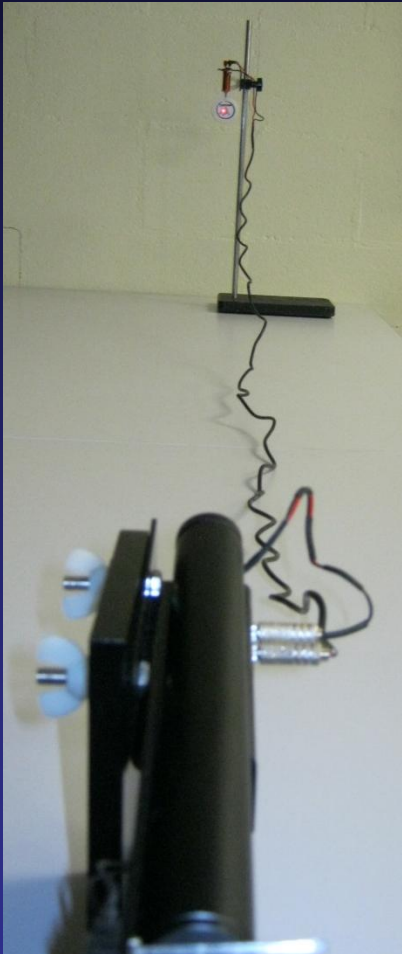


MONKEY AND HUNTER

What to do

1. Aim the gun at the monkey using the laser sight
2. Remove the laser and place the ball in the gun
3. Pull back the gun and release



Pull back the gun and place the safety key to hold the gun in position. Plug in the laser sight and electromagnet.

Hang the monkey from the electromagnet and place the laser sight in the gun.

The gun's sight can be adjusted by loosening the nuts on the gun's stand and moving the gun up and down.

Line this up so that it is pointing at the monkey.

Pull back the gun (removing the safety key) and fire!

The monkey drops from the electromagnet at the same instant that the ball leaves the gun. This is because the switch at the end of the gun is triggered and the electromagnet loses its magnetism.

The laser sight is pointing directly at the monkey. If gravity wasn't acting on the ball and the monkey, the ball would fly directly to the monkey and hit it. However, gravity causes both the ball and the monkey to fall when the gun is released.

Despite this, the ball still hits the monkey. This occurs because the horizontal and vertical components of the ball's motion are independent and thus do not affect one another. The ball and monkey fall downward at the same rate, so that, by the time the ball has reached the horizontal position of the monkey, they have fallen by the same amount. This means the ball will still hit the monkey.

If you miss it, you can tell that the ball collided with the monkey, because the monkey will fall away from the stand.

