

# WHAT A DOWNER

## What Do You Think?

Do heavy objects fall faster than lighter ones? You be the judge...

## Now, Find Out

If you drop a heavy canister and an empty canister at the same time, will the heavy one fall faster? ...Yes...No

### 1. Assign jobs.

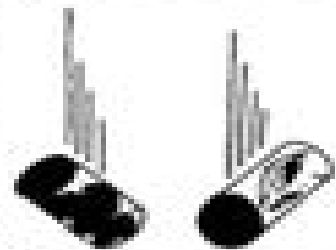
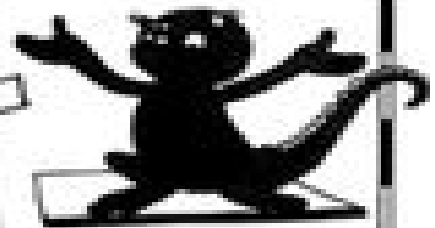
**DROPPER** places a heavy and light canister on the edge of a surface. When **STARTER** says, "GO!" the Dropper knocks both off at exactly the same time.

**STARTER** says, "GO!" and watches sure canisters fall at the same time.

**EYES** and **EARS** wear safety glasses. They lie on the floor to see when objects hit. They listen as objects hit. Are the hit sounds together or apart?

### 2. Test your canisters.

### 3. Run four trials. Rotate jobs so everyone fills all jobs.



## YOU BE THE JUDGE:

Which canister hit the ground first— the heavier (H), the lighter (L), or both at the same time (S)? Record H, L, or S on this chart.

	Trial #1	Trial #2	Trial #3	Trial #4
<b>DROPPER</b>				
<b>STARTER</b>				
<b>EYES &amp; EARS #1</b>				
<b>EYES &amp; EARS #2</b>				

## Wrap-Up

Do heavy objects fall faster than lighter ones? \_\_\_\_\_  
Were the trials easy to judge? \_\_\_\_\_  
Explain why or why not on the back.

## Take-Home Challenge

Can you push with as much force as gravity pulls?

1. Weigh yourself on a bathroom scale. Your weight is the pull of gravity on you.
2. Now, ask a family member to hold the scale against a wall. Push on it with both hands. Push HARD! Can you push your own weight?