



## EXPLORING THE LAWS OF MOTION

### Inertia

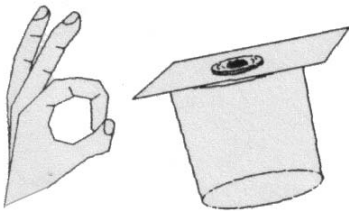
Names \_\_\_\_\_  
\_\_\_\_\_

**Purpose:** To show how inertia affects an object at rest.

**Materials:** drinking glass  
penny  
a piece of cardboard

**Procedure:**

1. Cut the cardboard so that it is just slightly larger than the mouth of the glass.
2. Put the cardboard on the glass and rest the penny on the center of the cardboard.
3. Hit the cardboard quickly with a snapping motion of your fingers.
4. Make observations and then repeat a few times to see if things always happen the same.



**Observations:**

1. What happens to the cardboard?
2. What happens to the coin?

**Conclusions:** How does this show that objects at rest want to stay at rest?



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## EXPLORING THE LAWS OF MOTION

### Inertia

Name \_\_\_\_\_

**Purpose:** To show how inertia affects an object at rest.

**Materials:** six blocks                      fork end                      flat, smooth table top

**Procedures:**

1. Stack the blocks on a smooth surface of the table.
2. With the knife end flat to the table, quickly "slice" or pass the fork through the bottom of the coin stack hitting the bottom coin.
3. Make observations and repeat step 2.

**Observations:**

1. What happened to the block at the bottom of the pile?
2. What happened to the other blocks?
3. What happens if you don't move the fork quickly?

**Conclusion:** How does this demonstrate inertia?

