

Galileo's Gravity

Background

A long time ago, there were two scientists: one named Aristotle and one named Galileo. Aristotle thought that the Earth's gravity would pull heavier objects down faster than lighter ones but he never did the experiment. Galileo wanted to find out for sure so he designed an experiment where he dropped a heavy ball and a light ball off a tall tower at the same time. Which one do you think hit the ground first?

What You Need

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| 1 golf ball | 1 pair of safety goggles | 1 tissue |
| 1 Ping-Pong ball | 1 flat pan | sand - get this when needed |

What You Do

1. Fill the pan part way with sand to make a soft place for the balls to fall. Which ball is heavier, the Ping-Pong ball or the golf ball?

2. Put the pan on the floor. One partner should put on the safety goggles and get down on the floor so she or he can see which ball hits the ground first.
3. The other partner should hold both balls at shoulder height above the pan. Count to three out loud (so your partner will be ready) and then drop both balls at once. Which one hits first or do they both hit at about the same time?

4. A tissue weighs about the same as a Ping-Pong ball. Which one do you think will land first?

5. Try it and record what happens.

Think About It

What did you learn about gravity from Galileo's experiment?
