## Conceptual Physics ALIVE! With Paul G. Hewitt

## Chapter 4 – Newton's First Law of Motion

Answer the following questions that go directly with the supplemental DVD for the textbook.

01. When a cannonball is launched or an arrow is shot from a bow, where did <u>Aristotle</u> say the force is coming from that keeps it moving?
02. When a cannonball is launched or an arrow is shot from a bow, where did <u>Galileo</u> say the force is coming from that keeps it moving?
03. Complete the following statements:
a. Newton's first law of motion is called the Law of
b. An object at rest will
c. An object in motion will
04. Complete the following statements:
a. Things at rest tend to stay at rest is saying that an object has
b. Saying an object has a lot of inertia is saying an object has a lot of
c. Saying an object has a lot of mass is saying an object has a lot of
05. Draw the force vector example of the weighted cylinder on the table. What does that demonstration explain?
06. If an object is not accelerating, we say it is in equilibrium. Explain why equilibrium show a balancing of forces.