

Newton`s First and Second Law

Multiple Choice:

How long will an object remain at rest, according to Newton's First Law of Motion? (1 mark)

- A. It can't rest.
- B. Until noon.
- C. Until an unbalanced force occurs.
- D. As long as there are unbalanced forces acting on it.

What is inertia? (1 mark)

- A. The tendency of an object to continue doing what it is currently doing.
- B. The opposing force of gravity.
- C. Another name for unbalanced forces.
- D. The mass of an object.

The amount of force needed to move an object is measured in... (1 mark)

- A. Newtons
- B. Kilometers
- C. Seconds
- D. Grams

Gravity and magnetism are examples of what kind of forces? (1 mark)

- A. Frictional
- B. Non-contact
- C. Contact
- D. Momentum

Why do you lean towards the left when a car turns right? (1 mark)

- A. Because of inertia
- B. Because of gravity
- C. Because of buoyancy
- D. Because of velocity

A person is measured on the moon and on Earth. Which statement would be true? (1 mark)

- A. The mass would be the same on the moon as it is on Earth, but the weight would be more on the moon than it is on Earth.
- B. The weight would be the same on the moon as it is on Earth, and the mass would be more on the moon than it is on Earth.
- C. The mass and weight would be the same on the moon as it is on Earth, because mass is another name for weight.
- D. The mass would be the same on the moon as it is on Earth, but the weight would be more on Earth than it is on the moon.

A rightward force of 302 N is applied to a 28.6-kg crate to accelerate it across the floor. The coefficient of friction between the crate and the floor is 0.750. Determine the acceleration of the crate.

A 405-N rightward force is used to drag a large box across the floor with a constant velocity of 0.678 m/s. The coefficient of friction between the box and the floor is 0.795. Determine the mass of the box.

References:

<http://www.proprofs.com/quiz-school/story.php?title=laws-motion-quiz>

<http://www.physicsclassroom.com/getattachment/curriculum/newtlaws/newtl17.pdf>