



COLEGIO ANGLO AMERICANO

PROYECTO FORJADOR DE VALORES PARA UNA NUEVA SOCIEDAD

DEPARTAMENTO DE CIENCIAS NATURALES Y EDUCACIÓN AMBIENTAL

ACTIVITY: NEWTON'S FIRST LAW OF MOTION AND LAW OF INERTIA

SECOND TERM - FOURTH GRADE - 2021

NAME: _____ COURSE: 4º DATE: _____ 2021



- The student understands Newton's first law.
- The student makes predictions about the distance objects can move depending on their weight and the forces applied to them.



1. Compare the three photos below. Order them from 1 (least force needed) to 3 (most force needed).



biking downhill



biking uphill



driving uphill

Zoran Pajic / Shutterstock.com

2. Read the descriptions and number the sequence correctly.



When an object moves, it changes its position. Speed indicates how far the object moves during a certain period of time.



Acceleration is what makes the speed of an object change, making it faster or slower.



When an object is not moving, it is said to be at rest because the position of the object doesn't change. The position is the location of an object.

3. Fill in the blanks according to the key words.

A golf ball stays at _____ and has no _____, until a new _____ acts on it and makes it _____. As the ball travels up in the air, it slows down, changing its _____. When it reaches its highest point, it changes its _____ and begins to fall back to the ground. The change in direction and speed is caused by the motion that results from a new force acting on the ball. What is the new force acting on the golf ball? _____. If this force didn't exist, the ball would keep moving at the same speed forever!

rest
inertia
motion
acceleration
position
move
force



4. Answer:

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

Objects can never remain at rest.

Forever.

Until a force acts on it.

As long as there is acceleration.

5. Choose the right answer:

5.1 While you're ice-skating with your friends, you push off from one end of the rink and slide forward. Based on Newton's First Law of Motion, what is true?

- You will lose your balance and fall over before you reach the middle of the ice rink.
- You will continue to slide across the ice until a force makes you stop or change direction.



5.2 What does friction do to a moving object?

- Slows it down.
- Makes it rise.

5.3 Your friend kicks a soccer ball, and it stops a few meters from you. What needs to happen to it in order for it to return to your friend?

- Speed has to be applied to the ball.
- Force has to be applied to the ball.



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