

Name: _____
Grade and Section: _____

Date: _____
Score: _____

Science I/Quarter 3/Week 3

Demonstrate that forces can make an object move or not move, and moving objects to slow down, speed up, or change direction.

This Learning Activity Sheet is about:

1. identify the effects of forces to an object;
2. demonstrate the effects of forces to an object; and
3. value the effects of forces to an object in performing various activities to observe safety.

We see objects being pushed or pulled to make them move. A force is a push or a pull. A push is when things move away from us while a pull is when things are moved toward us.

Force can also change the direction of a moving object and can make it go faster, slower, or stop from moving (Abracia, 2014).

Look at the pictures below and answer the questions that follow. What can you see in the pictures? In picture A, is the ball moving or not moving? In picture B, what happened to the ball? If you were the child, do you think the ball will speed up or slow down after you kicked it? Will it move in one direction?

Force can do a lot of things on objects around us. Force is applied to make things move.



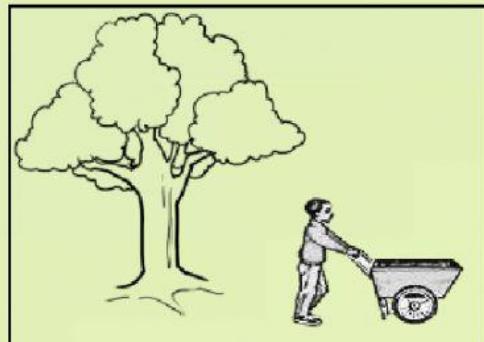
a.



b.

Below are some examples that force can do to objects:

Force can make an object move. It can move forward or backward. An object moves if it changes its place or location (Abracia,2014).



Force can make objects to slow down or stop. Some heavy objects like grocery carts with heavy loads move slowly or stop because of their weight while they move faster if they are light objects (Joaban,2019).

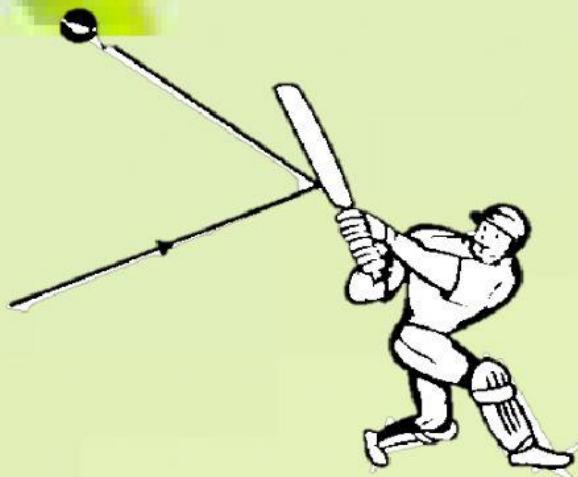


Force can change the speed of a moving object. As explained by Oriundo-Legaspi (2010), when a biker starts to pedal, movement of his bike will speed up based on the force he will apply. Thus, the greater the force applied; the greater the speed of the bike.



Force can change the direction.

According to Oriondo-Legaspi (2010), the stronger the force applied on an object, the faster the object moves and changes its direction.



BUILD UP: PERFORMANCE TASK #3

Find out: Act out the activities that you can see in the pictures. Answer the following questions below.

Hold the ball



Dribble the ball
(slowly and
quickly)



Shoot the ball



1. When will the ball move?

2. When is the ball not moving?

3. When will the ball slow down?

4. When will the ball speed up?

5. Will the ball change its direction when it stops moving? Why?

I. Direction: Read and answer the following questions. Write the letter of the correct answer on the blank.

___ 1. Which of the following statements does NOT describe the effects of force to an object?

- A. A force makes things speed up, slow down or change direction of objects.
- B. A force cannot control movements or direction.
- C. A force can slow down the objects.
- D. A force can make things move.

___ 2. What would be a good way to speed up when you are riding or driving a bicycle?

- A. You need to pedal faster.
- B. Hold the hand break.
- C. Drag your feet across the ground.
- D. Make sure the saddle height is right.

___ 3. Which of these examples could change the direction of object's motion?

- A. A boy closing the door.
- B. A boy battling the ball.
- C. Mother cooking food.
- D. Mother opening the refrigerator.

___ 4. Lito rolls a ball across the playground wherein there are lumps and bumps.

What do you think will happen to the ball?

- A. The ball will continue to roll.
- B. The ball will slow down and eventually stops.
- C. The ball will keep rolling while crossing the road.
- D. The ball will move faster while crossing the road.

5. How can we tell if the object has moved?

- A. It changed its weight.
- B. It stayed in its location.
- C. It changed its place or location.
- D. It stayed in the same speed or direction.

II. Direction: Choose the statement that describes the movement shown in each picture. Choose your answers.

1. Driving a scooter



Not moving object

Object speeds up

2. Dribbling the ball



Change in direction

Not moving

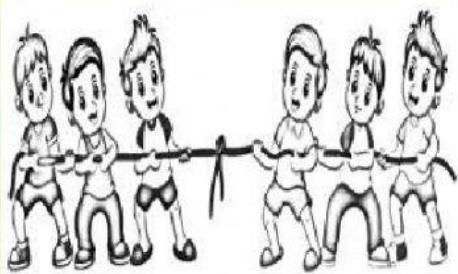
3. Pulling the bag to the right



Not moving

Change in direction

4. Playing tug-of-war



Moving

Not moving

5. Pushing a cart



Moving object

Not moving object