

Name: _____

Grade 1- _____

Science I/Quarter 3/Week 2

DISCUSS CHANGES THAT TAKE PLACE WHEN OBJECTS AND MATERIALS ARE PUSHED, PULLED, THROWN, DROPPED OR ROLLED

This Learning Activity Sheet is about Discuss and identify changes that takes place when objects moved. After going through LAS, you are expected to tell what force can do and its relation to movements.

LET'S DIG IN!



Diagram A shows a person pushing a ball on a table. An arrow points from the person's hand to the ball, and another arrow points from the ball towards the right edge of the table, indicating the direction of movement.

A



Diagram B shows a ball on a table. An arrow points from the ball towards the right edge of the table, indicating the direction of movement.

B

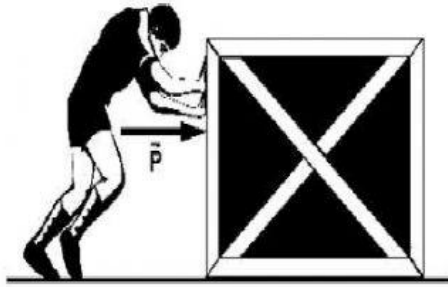
- What happened to the ball as the man pushed it gently?
- Did it move?
- Did it change position?

- **The ball moved when it was pushed gently.**
- **It changed position.**
- **The ball rolled when it was pushed.**
- **The balls appearance remains the same after it was moved.**

Motion is movement in any direction. A moving thing is in motion. It changes its place or position. In order to make things move, we need force.

Force can make an object move and at rest, which means it can stop a moving object. Unlike people and animals, objects cannot move by themselves. They move only when a certain kind of force is applied to them.

A force is a push or a pull. Here is a simple example: A cat hits a ball with its paw and makes the ball roll across the floor. The cat uses force to make the ball move. When you kick a ball or pull open a door, you are also using force. Take a look at the other example below.



The boy is pushing the box. The box is moving.
Pushing makes objects move.

A **push** is a shove away from an object.



A man pulling the table. Pulling makes objects move.

A **pull** is a tug toward an object.

Your muscles help you push, pull, and lift objects. They produce the force needed to make things move. The more force you use, the faster the object will move.

So why do things in motion slow down and stop after a while? The answer is "friction." **Friction is another kind of force.** Friction is two things rubbing or sliding against each other. Skis on snow. A car on a road. A ball rolling across a carpet. Friction is a force that slows down moving objects.

If you roll a ball across a shaggy rug, you can see that there are lumps and bumps in the rug that make the ball slow down. The rubbing, or friction, between the ball and the rug is what makes the ball stop rolling.

But what would happen if you rolled the ball across a very smooth surface and there was no wall or obstacle in the way? Would the ball keep rolling forever? Unfortunately, no. There is no such thing as a "frictionless surface." There is friction between all objects and materials when they are touching.

KINDS OF FORCE

What enables a sailboat to travel across water? What makes a ball bounce when thrown or dropped? These objects are moved by certain forces.



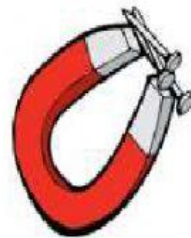
The wind makes the kite fly.

Flowing water makes the waterwheel turn.



Electricity makes the blades of the electric fan spin.

A magnet exerts magnetism on the iron nail to make it move.



BUILD UP: PERFORMANCE TASK #2

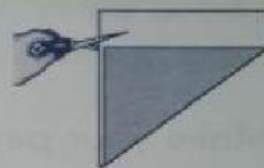
Find out: What makes a pinwheel move?

Make a Guess: _____

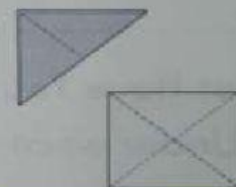
You will need: colored paper, pin, pencil with eraser, scissors

Do these:

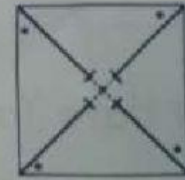
1. Fold a sheet of colored paper diagonally to make a square. Cut the sheet and discard the small rectangle. Unfold.



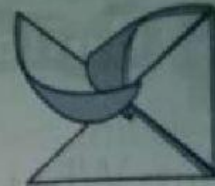
2. Fold the square diagonally. Unfold.



3. Use the pencil to mark 4 dots as shown on the right. Also, mark an inch from the center along the diagonals. Cut along the four lines. Stop at the pencil marks.



4. Gently bend the four corners toward the center. Secure the intersection with the pin.



5. Carefully push the point of the pin into the side of the eraser of the pencil.



6. Make your pinwheel spin.



What have you found?

Under what condition does a pinwheel move?

What have you learned?

I have learned that _____

I. Direction: What makes the given objects move? Write wind, electricity, running water, or magnet on the blank.

1.



2.



3.



4.



5.



II. Direction: Write the letter of the correct answer on the blank.

- ____ 1. What is force?
 - a. A kick and run
 - b. A push or a pull
 - c. A throw and catch

- ____ 2. What is a moving air called?
 - a. rain
 - b. storm
 - c. wind

- ____ 3. What do magnets attract?
 - a. metals
 - b. plastics
 - c. water

- ____ 4. What force slows down or stops a moving object?
 - a. electricity
 - b. friction
 - c. magnets

- ____ 5. What makes a ceiling fan moved?
 - a. electricity
 - b. magnets
 - c. wind