

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade and Section: \_\_\_\_\_

Score: \_\_\_\_\_

### Science I/Quarter 3/Week 4

#### Ways that Make an Object Move Easier or More Difficult

This Learning Activity Sheet is about:

1. identify the objects that use wheels or ball bearings, lubricants and smoothing or roughening surfaces;
2. describe the effects of wheels or ball bearings, lubricants and smoothing or roughening surfaces to the movements of an object; and
3. recognize the different ways that make an object move easier or difficult.

We see moving things around us. Other things like sheet of paper, ball, wheels, and piece of wood cannot move by themselves. These things move because something or someone makes them move. They move only when a force acts on them. Force is applied to make things move.

In our everyday living, objects that move easier makes our life simple and easy. Objects that move more difficult need another things such as wheels, ball bearings and lubricants to move easily.

Wheels, ball bearings, lubricants, smooth and rough surfaces affect ways that make an object move easier or more difficult.

Let us read the poem below.

#### **Moving Things** by Emily S. Guingon

In everyday living, wheels make our lives easier.  
Wheels make it easier to move heavier things.  
We pull a cart. A cart has wheels.  
Vehicles have wheels that we use to go to other  
places.

Rusted machinery, lubricants are the key!  
Friction applies and resist.  
If friction doesn't exist, nothing would ever stop from  
moving.  
We need friction to function.

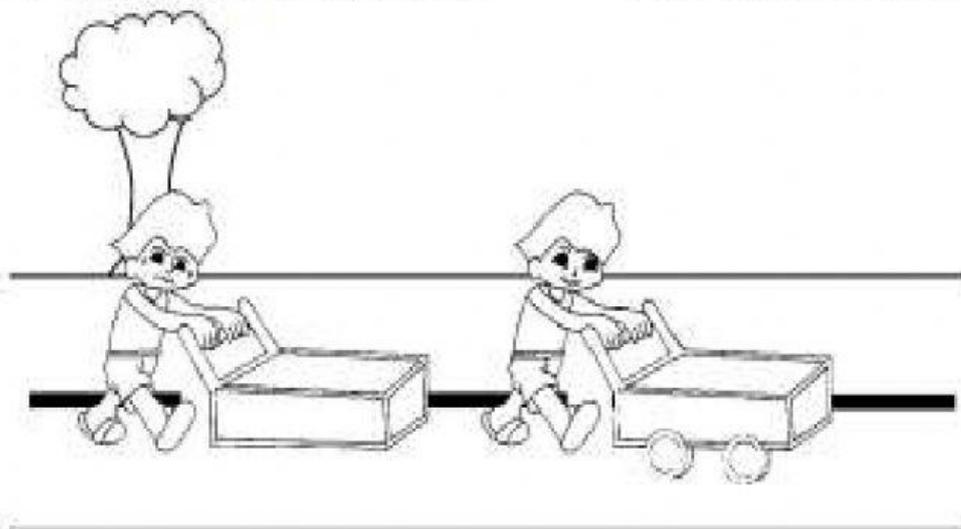
Smooth and rough surfaces affect movement.  
Smoother surface creates little friction.  
Rougher surface offers more friction.  
If there were no frictions, slip and slide around took  
place.

Based on the poem, let us investigate ways that  
make an object move easier or more difficult.

- **Using Wheel**

**A.** Cart without wheels

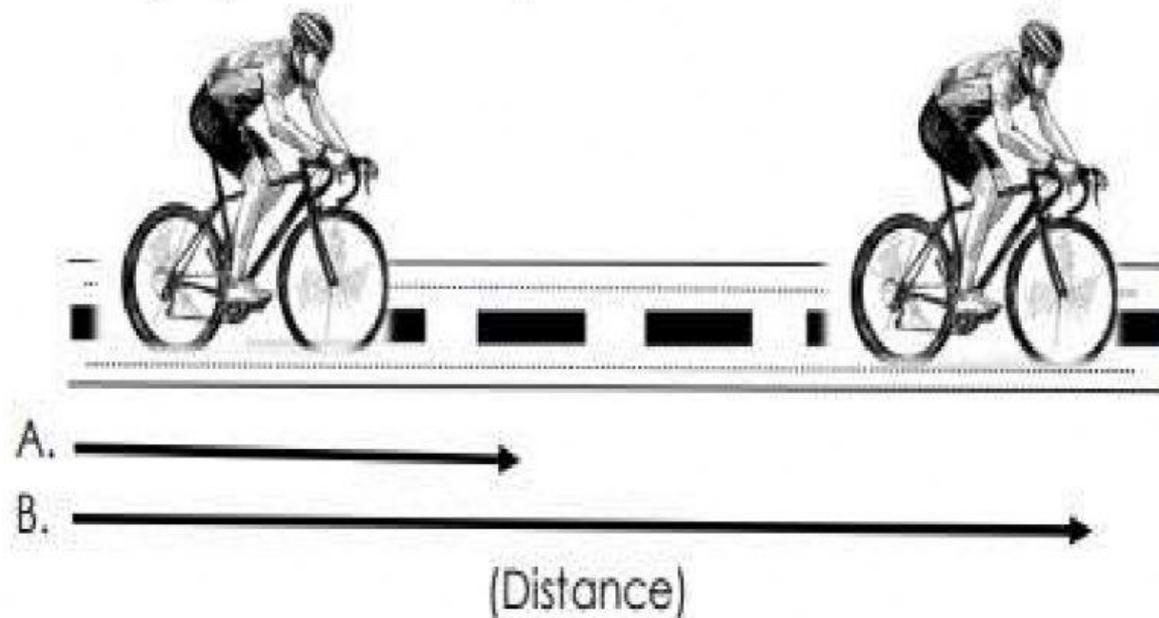
**B.** Cart with wheels



In illustration A, you can see that when the object  
has no wheels, it moves more difficult. On the other hand,  
when the object has wheels, it moves easier.

- **Using Lubricants**

**A.** Slightly lubricated bike parts      **B.** Well lubricated bike parts



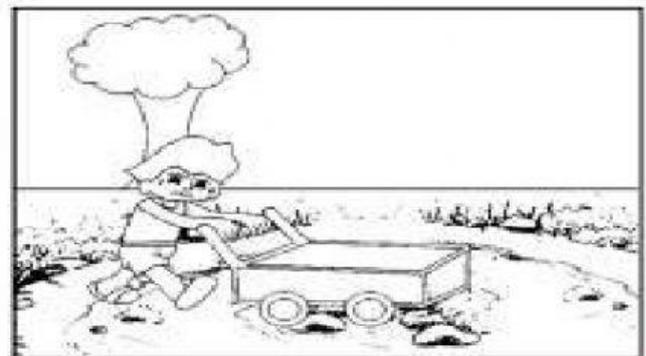
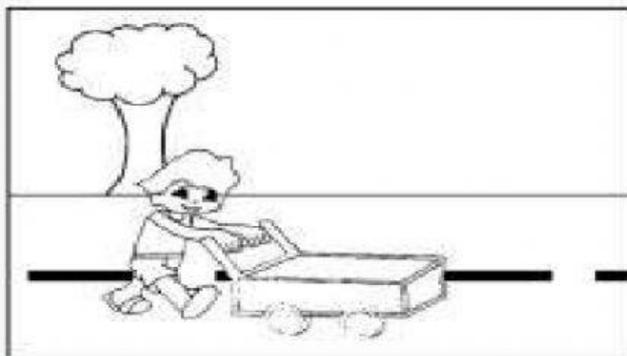
The illustration A and B shows the distance travelled of bicycle A and bicycle B.

When the bike parts are well lubricated it moves easier and when it is slightly lubricated it moves more difficult.

- **On Smooth and Rough Surfaces**

**A.** Smooth surface

**B.** Rough surface



In situation A, the cart is pushed on a smooth surface and moved easier while on the situation B, the cart is pushed on a rough surface and moved more difficult.

Summary of findings on how an object move.

Situation	Move Easier	More Difficult
Moving an object with wheels.	✓	
Moving an object with no wheels.		✓
Moving a rusted ball bearing with a lubricant.	✓	
Moving a rusted ball bearing without lubricant.		✓
Moving an object on a smooth surface.	✓	
Moving an object on a rough surface.		✓

**BUILD UP: PERFORMANCE TASK #4**

Determine whether the following movements involve moving easier or more difficult. Put a check (/) in the column that corresponds on how an object move. Write your answers on a separate sheet of paper.

Every day scenarios	Move Easier	More Difficult
1. King drove his rusted and slightly lubricated bicycle in a rough road.		
2. Robi puts an engine oil on his wheels before travelling.		
3. The ball bearing of Lito's skateboard loosen up while using it.		
4. Sam pushed his grandfather's well lubricated wheel chair.		
5. Anne pulled her trolley bag on a smooth surface.		

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

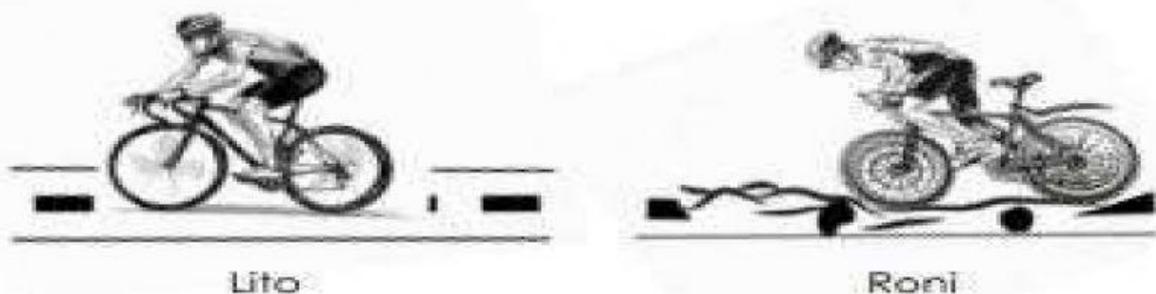
\_\_\_\_\_ 1. A truck loaded with sand move more difficult on a rough surface. What do you think is the reason?

- A. It is because of the driver of the truck.
- B. It is because of the size of the truck.
- C. It is because of the weight loaded on the truck and the roughness of surface.
- D. It is because of the weight loaded on the truck and the smoothness of surface.

\_\_\_\_\_ 2. If you are riding your well lubricated bicycle on a flat level ground, which of the following is true?

- A. The bike has a natural speed on the flat ground.
- B. You moved easier because of the well lubricated bicycle and the flat level ground.
- C. You moved more difficult because of the well lubricated bicycle and the flat level ground.
- D. No movement at all because of the well lubricated bicycle and the flat level ground.

\_\_\_\_\_ 3. What do you think is the reason why Lito moved easier his bicycle than



Roni?

- A. It is because Lito is stronger and bigger than Roni.
- B. It is because Roni doesn't want to move his bicycle.
- C. It is because Lito travelled on a smooth surface while Roni travelled on a rough surface.
- D. It is because Lito travelled on a rough surface while Roni travelled on a smooth surface.

\_\_\_\_\_ 4. The ball bearing of Juan's skateboard is already rusted. Every time he uses it, the movement of his skateboard is more difficult. What do you think Juan should do?

- A. Ask his mother to buy him a new one.
- B. Borrow his brother's skateboard.
- C. Never use the skateboard.
- D. Put lubricants on his skateboard.

\_\_\_\_\_ 5. Mother went at the supermarket to buy a grocery and she placed it in the cart. Which of the following situations is true?

- A. The grocery cart moves easier because it has 4 wheels.
- B. The grocery cart moves easier because it has 1 wheel.
- C. The grocery cart moves easily because of the people in the supermarket.
- D. The grocery cart moves more difficult because of the people in the supermarket.

**II. Direction:** Complete the paragraph using the words in the box. Write your answers on a separate sheet of paper.

easier   more difficult   rough   smooth   wheels

Objects move \_\_\_\_\_<sup>(1)</sup> when they have wheels, when they are on \_\_\_\_\_<sup>(2)</sup> surfaces and when well lubricated.

Objects move \_\_\_\_\_<sup>(3)</sup> when they are heavy and do not have \_\_\_\_\_<sup>(4)</sup>; when they are on \_\_\_\_\_<sup>(5)</sup> surfaces and if not lubricated.

**Reference:**

**Grade 1 Science Quarter 3 – Module 4 Ways that Make an Object Move Easier or More Difficult**

**Writer: Emily S. Guingon**

**Editors: June C. Bernabe, PhD, Margarita M. Daluz, Mercy J. Balagtas, Fe Ruby C. Flores, Edmira E. Navarro, Denver T. Soriano**

**Reviewers: SDO Cabanatuan City**

**Illustrator: Emily S. Guingon Layout Artist: Emily S. Guingon**

