

# 1st Quarter Grade 8

## Revised Standards on Force, Motion, and Energy

Learning Competency: Identify situations in which work is done and in which no work is done

Lesson Focus: Work

### I. INTRODUCTION

#### Activating Prior Knowledge

##### 1. Work Charades

Give 10 common activities and write each activity in a  $\frac{1}{8}$  sheet of paper. Then put them in an empty can or bowl. Then ask 10 students to draw the pieces of paper (one paper for each student) and act the nature of work or activity written there. Let the rest of the students recognize the work acted. (e.g. fishing, driving, pushing cart, etc.)

##### 2. Socialized Recitation

Ask the following questions after the students are done with the charades:

- On your own opinion, what is work?
- When can we say that work is done and when work is not done?

### II. BODY

##### 1. Distance x Force = Work Chart

Ask the students to complete the table. Write on the third column if there is work done or no work done.

Distance	Force	Work Done or No Work Done
Present	Present	
Present	Absent	
Absent	Present	
Absent	Absent	

##### 2. Direct Instruction

Reinforce the lesson with a discussion on how work is done.

### III. CONCLUSION

##### 1. Work Done or Not!

Let the students write 10 examples of activities when there is work done and when no work is done.

(Five examples for each)

# 1st Quarter Grade 8

## Revised Standards on Force, Motion, and Energy

Learning Competency: Relate the laws of motion to bodies in uniform circular motion

Lesson Focus: Laws of Motion

### I. INTRODUCTION

#### Activating Prior Knowledge

1. Jumbled letters

Let the students arrange the jumbled letters to form a word.

- a. I O M N O T
- b. I A N T E R I
- c. C C A E N O L E T I A R
- d. N U I M R F O R I C C L A U R N I M O O T

2. The Moves

Ask the students to identify the laws of motion involved in the following examples:

- a. launching a rocket ship
- b. boating using a paddle
- c. a man of average built running very fast
- d. it is hard to move a heavy furniture

### II. BODY

1. Film Viewing

Students will watch a video clip of the revolution of the planets around the sun. Note the motion of the planets and relate it to the three laws of motion.

2. Direct Instruction

After the film viewing, reinforce the lesson with a discussion of the uniform circular motion in relation to the three laws of motion.

### III. CONCLUSION

#### K-W-L-H

Have the students accomplish the K (What They Know); W (What They Want to Find Out); L (What They Have Learned), and H (How They Can Learn More).

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# 1st Quarter Grade 8

## Revised Standards on Force, Motion, and Energy

Learning Competency: Explain the advantages and disadvantages of series and parallel connections in homes

Lesson Focus: Advantages and Disadvantages of Series and Parallel Connections at Home

### I. INTRODUCTION

#### Activating Prior Knowledge

1. Blueprint

Ask the students to draw the circuit diagram of the house wiring on a clean sheet of paper. Let the students identify the series and parallel circuits on their circuit diagram.

2. Socialized Recitation

Let the students express their understanding by answering the following questions:

- a. Describe the arrangement of loads on a series connection.
- b. Describe the arrangement of loads in a parallel connection.
- c. Enumerate the type of loads connected in a series connection, and loads connected in a parallel connection. Try to explain why.

### II. BODY

1. Experiment Time

Let the students prepare the following materials:

5 pieces of light bulb

Dry cell

Connecting wire

Group students and ask them to connect the light bulb into a series connection, and then write their observations. Next, arrange the same materials into a parallel connection.

2. Good or Bad... That Is the Question

Ask the students to tabulate their observations during the experiment.

Series Connection		Parallel Connection	
Advantages	Disadvantages	Advantages	Disadvantages

3. Direct Instruction

Reinforce the lesson with a discussion of the advantages and disadvantages of series and parallel connections.

**III. CONCLUSION**

**K-W-L-H**

Have the students accomplish the K (What They Know); W (What They Want to Find Out); L (What They Have Learned); and H (How They Can Learn More).

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