

Lesson 77: Measuring the Circumference of a Circle Using Appropriate Tools

Week 8

Objective: Measures circumference of a circle using appropriate tools.

Value Focus: Cooperation, Caring, Sharing

Prerequisite Concepts and Skills:

- Circumference of a Circle
- Deriving a Formula in Finding the Circumference of a Circle
- Finding the Circumference of a Circle

Materials: circular covers of lids of cans, jars, real objects, coins, string, tape measure, ruler, meter stick

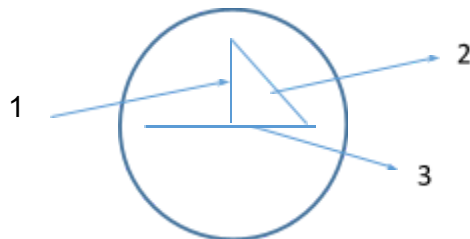
References: K to 12 Grade 5 Curriculum Guide M5NS-IIIh-68 p. 63, Lesson Guide in Elementary Mathematics Grade 5 pp. 362
Mathematics for a Better Life 5 pp.242-243
Growing Up with Math 5 page 284

Instructional Procedure:

A. Preliminary Activities

1. Drill

Draw and label the parts of a circle on the board.



2. Review

Have a review on visualizing circumference of a circle by “Checking of Assignments”.

3. Motivation

Sing a song about circles with action/drawing in air



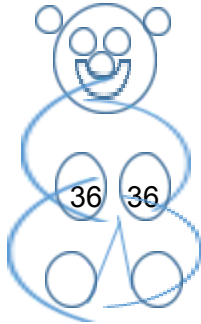
Small circle, small circle, big circle



Small circle, small circle, small circle



This is the ship I will ride, mother and father say goodbye!



6 x 6 is 36, 6 x 6 is 36, Mount Fiji.

B. *Developmental Activities*

1. Presentation

Present this problem opener.

In the middle of the park, there is circular flower garden that has a diameter of 10 meters. What is the distance around the garden?

a. Va

A

What is/are given/s?

How will you answer the question in the problem?

2. Performing the Activities

Activity 1: Cooperative Learning

- a. Divide the class into four groups. Each group will have 3 different sizes of jars or cans. See to it that each group will have all the required materials for the activity.
- b. With a piece of string, measure around each circle to find its circumference.
- c. Then, measure the string with your ruler and enter the data in the table.

- d. Measure also the diameter and enter the measure in the table.
- e. Compare the measures of diameter to each circumference.

3. Processing the Activities

Let the groups present their output one at a time. After all groups have presented, ask “How did you find the activity? How will you measure the circumference of a circle? Does the circumference of the circle increases as the diameter increases? Is it easy to measure the circumference of a circle?

Let the pupils find the distance around the circular garden.

4. Reinforcing the Concept and Skills

- A. Discuss the presentation under **Explore and Discover** on page ____ of LM Math Grade 5
- B. For extra practice, give exercises under **Get Moving** and **Keep Moving** on pages __ to __, LM Math 5.

5. Summarizing the Lesson

Lead the pupils to give the following generalization by asking: How do you measure the circumference of a circle? What tools were use in measuring circumference of a circle?

To measure the circumference of a circle, we can use string, ruler, meter stick or tape measure.

6. Applying to New and Other Situation

- A. Have the pupils do the items under **Applying Your Skills** on page __, LM Math Grade 5.

C. Assessment

Measure the following objects (or any available objects) inside the classroom using appropriate tools then, record the results in the table.

Circle Objects	Diameter	Circumference
1. electric fan		
2. number wheel		
3. wall clock		
4. speaker		
5. jar		

D. Home Activity

Measure 5 circle objects at home using the appropriate tools and record the results in the table.

Circle Objects	Diameter	Circumference
1.		
2.		
3.		
4.		
5.		