

Foundation Programme in Literacy, Numeracy and Skills (FPLNS)

NUMERACY

Teacher's Guide: Grade 7 – Lessons 11 & 12

Perimeter in real life situations

Competency: C 2.6: Apply mathematical concepts across different subject areas

Element 1: Measurement of length and perimeter in design

Performance Criteria:

Level 2: Work with perimeter

Purpose of activity:

This activity will develop students' understanding of perimeter and strengthens basic addition and measurement concepts.

Learning Outcomes:

By the end of the lesson, students should be able to:

- students should be able to measure length and width of different shape
- Students should be able to apply the concept of perimeter for real-life objects
- Reinforce basic arithmetic and unit understanding

Resources and materials:

- pencils
- Ruler or measuring tape
- String
- Cut out shapes (rectangles, squares, kites and triangle)

Teaching trajectories/ Implementation guidelines

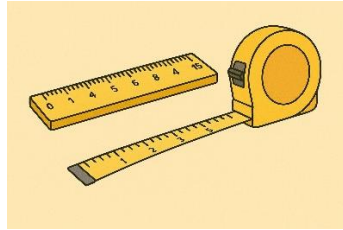
1. Providing step by step demonstration of how to measure length and width using a ruler or measuring tape.
2. Make students work in groups and each group share and compare their findings.

LESSONS 11 & 12

Activity 1:

Steps:

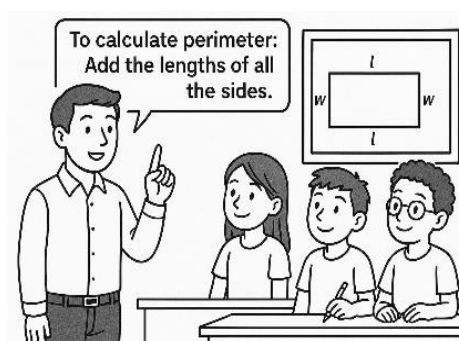
1. The educator encourages students to interpret the scale on a ruler and a measuring tape.



2. Educator brings cutout of shapes (rectangles, squares, kites and triangle).
3. Give each student a paper shape and a string.
4. Ask the students to trace the edge of the shape with string, straighten it and measure the length to find the perimeter.

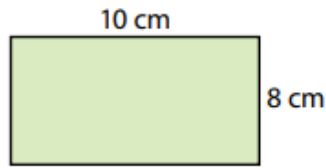


The educator then gives the students some examples, whereby the lengths of sides are given and they are asked to find the perimeter. Question 1 in student's worksheet.

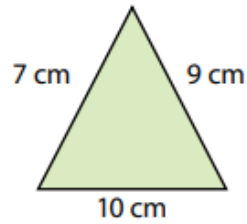


. Find the perimeter of the following figures.

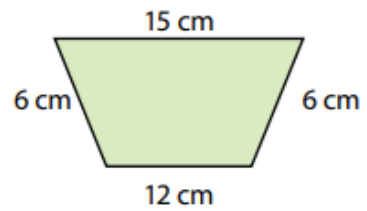
a)



(b)



(c)



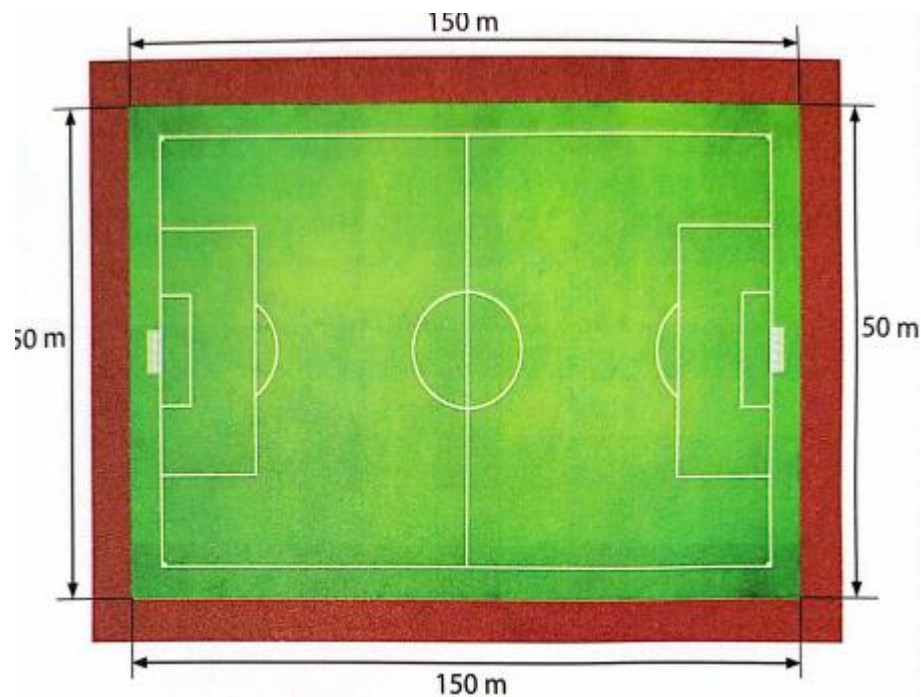
Activity 2:

1. Students measure dimensions of 2D objects that are available in the classroom.
2. Students identify the appropriate units (mm, cm, m) to be used for different objects.
3. The educator writes the answers of the students on the whiteboard.
4. Educator discusses the importance of perimeter e.g. the amount of fence for a yard or the distance covered by an athlete while running around a track.
5. Students write the perimeter of the classroom and the objects in the table below (Question 2 in student's worksheet)

	Length	width	Perimeter
Classroom			
Educator's table			
Student's desk			
Cupboard			
Whiteboard			
Door			

Additional Task: Educators can take students in the football ground and make a student measure the length, width by walking around the football ground.

The educator makes a student walk around the football pitch



What distance does the student cover?

$$150\text{ m} + 50\text{ m} + 150\text{ m} + 50\text{ m} = 400\text{ m}$$

The student walks a total distance of 400 m.

The distance round the track is known as perimeter.

Activity 3:

Students must understand that different shapes can have the same perimeter.

Example: Draw different rectangles having a perimeter of 24 cm.

Think about:

