Sample Lesson Plan
Subject: Mathematics
Strand: Measurement
Topic: Perimeter of simple rectangular shapes
Grade: 3
Duration: 1 hour

Standard 2: Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.

Attainment Target: Estimate, compare and use various types of measurements

Bench mark: Estimate and measure **distance.**

Specific Objectives:
At the end of the lesson the students should be able to-
- Correctly define the term perimeter
- Spell the word perimeter
- Measure and state the perimeter of given rectangular shapes
- Calculate the perimeter of simple rectangular shapes
- Recognize real life situations that make use of a knowledge of perimeter

Prior Learning:
Before doing this lesson, students should :
- Know how to add whole numbers
- Have knowledge of polygons
- Have knowledge of paths as it relates to sides of a polygon
- Have knowledge of how to measure distance with the most appropriate measuring instrument

Materials:
Shapes, string, video (play only the first 3 minutes of video),

Content Outline:

Perimeter of a shape is the total distance along the boundaries of the shape.
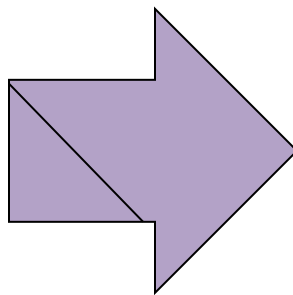
To calculate the perimeter of a polygon we simply add the lengths of all the sides of the polygon.

For example, the perimeter of the shape below (which is not drawn to scale) is
(15cm + 10 cm + 15 cm + 10 cm = 50 cm)

15 cm

10 cm   10 cm

15 cm
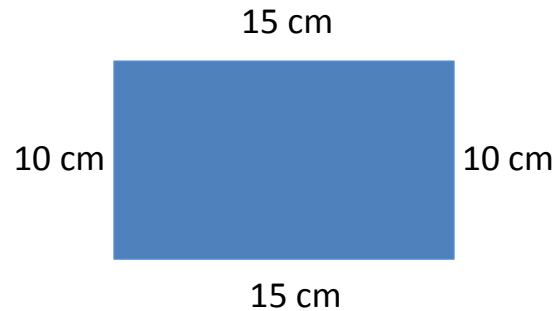
Engage

A similar polygonal shape like the one above will be drawn on the classroom floor. The exact measurement of each side of this shape will be known by the teacher for future reference.

Three students will be asked to carry out the following instructions:

- The first student will be asked to walk around the shape not necessarily on the boundaries of the shape.

- The second student will be asked to walk along the boundaries of the polygon.

- The third student will be asked to walk along all the paths of the polygon. So then this student will actually go through the shape.

Explore:

- A group of students will be asked to work together and use a piece of string and metre rule to measure and state the length of the string that is equal to the total distance around the boundaries of the shape drawn on the floor.

- Other groups of students will be asked to repeat activity (1) above to see if any of the groups will actually arrive at the correct measurement yet they have different ways of getting their answers.

- The necessary corrections will be made to ensure that the exact measurement was arrived at by all the groups. It may take some form of illustration by the teacher if the students have somehow forgotten how to use the metre rule or struggling some other way.

Explain

Making reference to the engaging activity, the students will, with some assistance from the teacher, establish what the topic for the day is. Following this discussion the students will be further engaged in a discussion to establish a general definition of perimeter and which of the student found that.

Possible response

The second student was the only student who corrected travelled the total distance along the boundaries of the shape. Hence, the second student is the only student who covered the perimeter of the shape.

- The students will generate a definition for perimeter to be written in their books and the first example that they will have is a similar shape to the one that was drawn on the floor.

- The second example will be the rectangle above.

- The students will be then given a non-example similar to the one below.

Elaborate:

Give that the square below represents Mary's bedroom floor.

6 metres

6 metres   6 metres
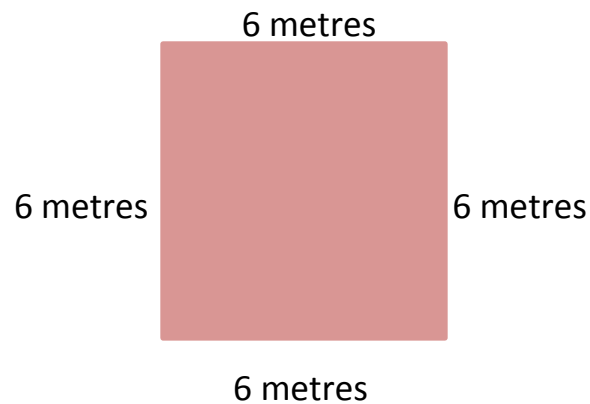
6 metres

Mary told her mother that the perimeter of her floor is 12 metres.
- Was Mary correct? Justify why do you say she was correct or not correct?

Evaluate:
- On index cards and students will be chosen at random from each group to answer one of the questions. The necessary corrections will be made by asking other students to assist their group members as well little assistance from the teacher.
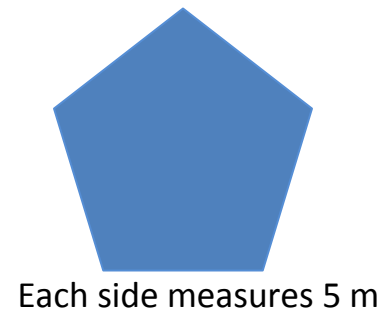
1)Classwork:

The students will be given the activity below to complete in 10 minutes.

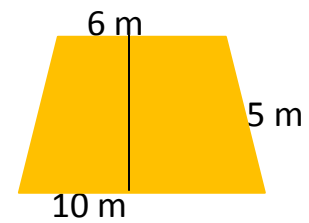Instruction: Calculate the perimeter of the shapes below.

(a)

4 cm

12 cm   12 cm

4 cm

(b)

Each side measures 5 m

(c)   5 m

6 m

5 m

10 m
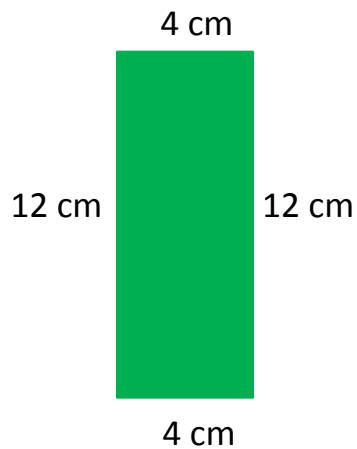
Homework Assignments:

- The students will be given this activity below to complete with their parents, guardians or older brother, sister or cousin.

Instruction: If you want to buy a piece of wall paper to place right around the walls of your bedroom, how long should the paper be in order for it to go around your room?

- Draw the shape of the room and put in the measurements.