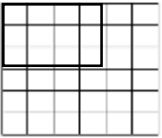

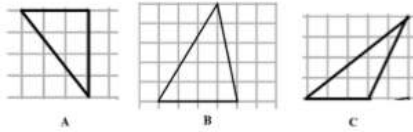


**TERM THREE**  
**WEEKLY LESSON NOTES**  
**WEEK 4**

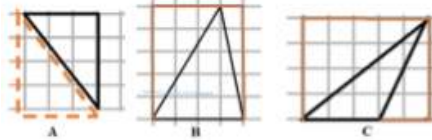
<b>Week Ending:</b> 7 <sup>th</sup> OCT, 2022	<b>DAY:</b>	<b>Subject:</b> Mathematics
<b>Duration:</b> 60MINS		<b>Strand:</b> Geometry & Measurement
<b>Class:</b> B7	<b>Class Size:</b>	<b>Sub Strand:</b> Area Of A Triangle
<b>Content Standard:</b> B.7.3.2.2 Derive the formula for determining the area of a triangle and use it to solve problems	<b>Indicator:</b> B7.3.2.2.1 Use the relationships between a triangle and a rectangle (or parallelogram) to deduce the formula for determining the area of a triangle.	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can use the relationships between a triangle and a rectangle to deduce the formula for determining the area of a triangle.		<b>Core Competencies:</b> Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)
<b>References:</b> Mathematics Curriculum Pg. 58		
<b>Phase/Duration</b>	<b>Learners Activities</b>	<b>Resources</b>
<b>PHASE 1: STARTER</b>	Revise with learners on the previous lesson.  Share performance indicators and introduce the lesson.	
<b>PHASE 2: NEW LEARNING</b>	<p>Draw a square grid on the board and draw a rectangle in the grid as shown in the diagram below.</p>  <p>Task learners to draw another rectangle whose area is twice as large as the one drawn on the grid. Go round and help those with difficulties.</p> <p>Let learners draw another rectangle which is twice as wide as and one and a half times as long as the one in the grid.</p> <p>Make a dot grid on the board and draw a triangle in the grid as shown below.</p>  <p>Task learners to draw in the dot square grid another triangle whose area is 3 square units.</p> <ul style="list-style-type: none"> <li>• What is the area of the triangle in the square grid?</li> </ul> <p>How many different triangles of the same area as the one in the grid can you draw?</p>	Square grid paper, Ruler, grid paper or geodot paper

Let learners determine the number of unit squares enclosed by the triangles below.



- What is the perpendicular height of each triangle?
- What is the area of each of the triangles?
- How does the perpendicular heights of each triangle help you in calculating its area?

Guide learners to spot the RECTANGLE enclosing the triangles to find the unit squares in each triangle.



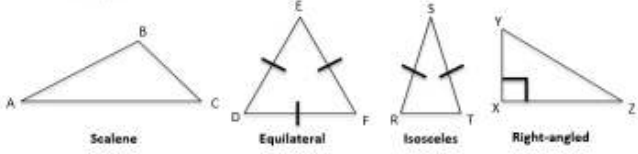
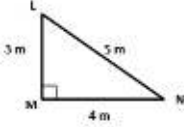
Area of a triangle =  $\frac{1}{2}$  (Area of the rectangle =  $\frac{1}{2}$  base  $\times$  perpendicular height).

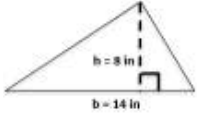
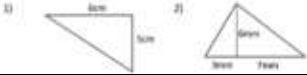
**PHASE 3:**  
**REFLECTION**

Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.

Take feedback from learners and summarize the lesson.

<b>Week Ending:</b> 7 <sup>th</sup> OCT, 2022	<b>DAY:</b>	<b>Subject:</b> Mathematics
<b>Duration:</b> 60MINS		<b>Strand:</b> Geometry & Measurement
<b>Class:</b> B7	<b>Class Size:</b>	<b>Sub Strand:</b> Area Of A Triangle.
<b>Content Standard:</b> B.7.3.2.2 Derive the formula for determining the area of a triangle and use it to solve problems.	<b>Indicator:</b> B7.3.2.2.2 Determine the area of a triangle.	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can calculate the area of a triangle.	<b>Core Competencies:</b> Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
<b>References:</b> Mathematics Curriculum Pg. 59-60		

Phase/Duration	Learners Activities	Resources
<b>PHASE 1: STARTER</b>	<p>Ask 4 learners to come to the board at once to sketch the 4 different types of triangles.</p>  <p>Ask different pupils to each state 1 feature of a triangle on the board. (Example: the equilateral triangle has 3 equal sides).</p>	
<b>PHASE 2: NEW LEARNING</b>	<p>Draw triangle LMN on the board</p>  <p>Write the formula for area of a triangle on the board.  <math display="block">\text{Area of triangle} = \frac{1}{2} \times \text{base} \times \text{height}</math></p> <p>What is the base of this triangle? Allow pupils to share their answers.</p> <p>Tell them that the base is side MN, which is 4 m in length.</p> <p>Ask: What is the height of the triangle? Tell them that the height is side LM, which is 3 m in length.</p> <p>These are the two numbers we need to find the area of the triangle. We will substitute them in the formula.</p> <p>Let learners understand that the Base and Height are always perpendicular to each other. You can take any side of the triangle as its base. Then you find the height of the triangle from that base. The height is a perpendicular line drawn from the base to the opposite angle of the triangle.</p> <p>Write on the board <math>A = \frac{1}{2} bh = \frac{1}{2} \times 4m \times 3m = \frac{12m}{2} = 6m</math></p> <p>Draw another triangle on the board.</p>	Square grid paper, Ruler, grid paper or Geodot paper

	<p>have learners determine the base and height as 14in and 8in respectively.</p>  <p>In pairs, task learners to find the area of the triangle. Go round the class to monitor learners progress.</p> <p>Learners practice in pairs with several examples.</p> <p><u>Assessment</u> Calculate the area of the triangles:</p> 	
<p><b>PHASE 3:</b> <b>REFLECTION</b></p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	