**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 2: April – June**

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| **PROVINCE:** |  |
| **DISTRICT:** |  |
| **SCHOOL:** |  |
| **TEACHER’S NAME:** |  |
| **DATE:** |  |
| **DURATION**: | 1 Hour |

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| 1. **TOPIC: AREA AND PERIMETER OF 2D SHAPES:** Area and Perimeter **(Lesson 4)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to** use appropriate formulae to calculate the perimeter and area of triangles |

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| 1. **RESOURCES:** | DBE workbook 1, Sasol-Inzalo Book 1, textbook |
| 1. **PRIOR KNOWLEDGE:** | * formulae for area of a rectangle * properties of a rectangle and triangle * types of triangles * substitution |
| 1. **REVIEW AND CORRECTION OF HOMEWORK** (suggested time: 10 minutes)   Homework provides an opportunity for teachers to track learners’ progress in the mastery of mathematics concepts and to identify the problematic areas which require immediate attention. Therefore it is recommended that you place more focus on addressing errors from learner responses that may later become misconceptions. | |
| 1. **INTRODUCTION** (Suggested time: 10 Minutes)   Activity 1: Revise with learners the following by asking them to:   * list the properties of rectangle. * describe different types of triangles   Activity 2: Demonstrate to learners how to derive the formulae for determining the area of a triangle  by using the formulae for determining the area of a rectangle done in lesson 3:  Request learners to do the following:  STEP 1: Draw rectangle ABCD with length and breadth .  STEP 2: Draw diagonal AC.  STEP 3: Name the polygons which are formed. and  STEP 4: Determine the area of the rectangle.  STEP 5: Determine the area of the two polygons formed.  **NOTE**:  When A and C are joined, it creates two triangles that are equal in area: and .    Area of rectangle ABCD  Area of or    In rectangle ABCD, AD is its length and CD is its breadth.  But look at . Can you see that AD is a height and CD is its base?  Hence, Area of or any other triangle | |
| Note: The height( of a triangle is a perpendicular line segment drawn from a vertex to its opposite  side. The sketches below show different positions of the heights in triangles.    Activity 3: Ask learners to apply the definition of a perimeter and write the perimeter of the  Triangle below:    Solution: Perimeter of a triangle Sum of all the sides | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| **Activity**: Worked examples  Example 1: Consider the following triangle:     1. Calculate the perimeter. 2. Calculate the area.   Solutions:       Example 2: In , the area is and the perpendicular height is  . Find the length of the base.  Solution:        **Activity 2**: Use the formulae to calculate the area of .    Solution: | actively engaged during lesson presentation by answering questions posed by the teacher  do activity 2 and discuss their solution with the whole class |

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| 1. **CLASSWORK** (Suggested time: 15 minutes)   DBE workbook 1: page 121 no. 2 (a), (b) and (c) |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasise that**:  * Area of a triangle * Perimeter of a triangle Sum of all the sides      1. The primary purpose of Homework is to give each learner an opportunity to demonstrate mastery of mathematics skills taught in class. Therefore Homework should be purposeful and the principle of ‘Less is more’ is recommended, i.e. give learners few high quality activities that address variety of skills than many activities that do not enhance learners’ conceptual understanding. Carefully select appropriate activities from the Sasol-Inzalo book 1, DBE workbook 1 and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.   **Homework:**  Sasol-Inzalo Book 1: page 226 no. 1 (Determine the area of and and page 227 no. 3 |