**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 3: July – September**

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

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| 1. **TOPIC: GEOMETRY OF 3D OBJECTS**: Building 3D models **(Lesson 5)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to :**   * Revise using nets to create models of geometric solids, including:   + cubes |

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| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks, containers, pair of scissors, ruler, set square |
| 1. **PRIOR KNOWLEDGE:** | * Names of geometric solids * Nets * 2D shapes * Properties of 3D objects |
| 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)   Draw sketches of all the shapes that make up a rectangular prism. Name them.  **=**  4 rectangles and 2 squares | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| Do the activity below with learners. The teacher may demonstrate.  **Activity 1 [Sasol-Inzalo Workbook 2 Pages 89 and 90]**   1. Below is a net of a cube. Make an accurate drawing of the net on a piece of cardboard. NB: Each side must be **6 cm**   Image result for real life nets of 3d objects  **B**  **L**  **X**  **R**  **T**  **F**   1. Label the faces of the cube as follows:   Front (F); Left (L); Right (R); Back (B); Bottom (X) and Top (T)   1. Cut it out and create your own box. 2. Do faces fold into a cube? \_\_\_\_\_\_\_\_\_\_ | Do the activity  Draw the net using a ruler and a set square.  Follow instructions and answer questions |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| For each of the following nets, determine whether it folds into a cube or not by labelling the squares to match the faces of a cube.  [Front (F); Left (L); Right (R); Back (B); Bottom (X) and Top (T)]   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasise that:    * The same 3D object can have different nets 2. 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 books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:   1. Get hold of a die and take a good look at it. (‘die’ is the singular form of ‘dice’)    1. What is the shape of a die? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. What is the sum of the numbers on the opposite faces of a die? \_\_\_\_\_\_\_\_\_\_ 2. Draw a die in your exercise book and draw the dots on the faces you can see. 3. Draw a net of a die that shows how the dots should be aligned. |