**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: SURFACE AREA AND VOLUME OF 3D OBJECTS:** Calculations and solving problems **(Lesson 7)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to** use and convert between appropriate SI units, including: |

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| 1. **RESOURCES:** | Sasol-Inzalo Book 1, DBE workbook 1, textbook. |
| 1. **PRIOR KNOWLEDGE:** | * Volume and capacity of a cube and rectangular prisms done in the previous lessons. * Conversion between appropriate units done in Area and perimeter of 2D shapes. |
| 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)   Revise with learners the conversion between appropriate SI units as shown on the table below:   |  |  |  |  | | --- | --- | --- | --- | | **To convert** | **Do this** | **To convert** | **Do this** | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  |   **Hence we see from the table that:**      POSING A PROBLEM: How many would fit into ?  How many would fit into ? | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to: ) |
| Present examples 1, 2 and 3 to learners, and let learners do example 4 as an activity in their groups and present their solutions to the whole class.    Example 1: Convert to  Solution: To convert to is the same as finding out how many  would fit into ?  Consider the sketch below which shows cube A with an length  edge of Also shown is cube B with an edge length of    How many small cubes can fit into the large cube?   * 100 small cubes can fit along the length of the base of cube A (because there are 100 in 1 ). * 100 small cubes can fit along the breadth of the base of cube A. * 100 small cubes can fit along the height of cube A.   The total number of cubes in      Example 2: Workout how many are equal to ?  Solution:      Example 3: Convert to  Solution: 1 | actively engaged  during lesson presentation by answering questions in pairs |
| Example 4:   1. Write the following volumes in : 2. Write the following volumes in : | do example 4 in groups and discuss their solutions with the whole class |

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| 1. **CLASSWORK** (Suggested time: 15 minutes)   Sasol-Inzalo Book 1: page 242 no. 4 (a), (c) and (e), page 247 no. 1 (a) and (b) |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasise that**:  |  |  |  |  | | --- | --- | --- | --- | | To convert | Do this | To convert | Do this | |  |  | to |  | |  |  | to |  |  1. **Homework**:   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 Book1, DBE workbook 1 and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  Sasol-Inzalo Book 1: page 241 no. 2 (a), (c) and (e), no. 3 (c) and (d) |