**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 1: JANUARY – MARCH**

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

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| 1. **TOPIC: EXPONENTS:** Calculations using numbers in exponential form**(Lesson 7)** |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to perform calculations involving all four operations using numbers in exponential form, limited to exponents up to 5, and square and cube roots.** |

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| 1. **RESOURCES:** | Sasol-Inzalo Book, DBE workbook and Textbooks |
| 1. **PRIOR KNOWLEDGE** | * Exponential form * Square and * Cubes * Prime factorisation |
| 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: Exponential form: 10 X 10 X 10 X 10 X 10 X 10 X 10 =  Square :, = 4 and = 5, = 9, = 12    Cubes : = 3, = 5, = 6 | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching Activities** | **Learning Activities**  **Learners are expected to:** |
| **Activity 1**  Work through the activities with the learners  If you are looking for cube roots you look for triplets of the same number.   |  |  | | --- | --- | | 2 | 64 | | 2 | 32 | | 2 | 16 | | 2 | 8 | | 2 | 4 | | 2 | 2 | |  | 1 |   = = 2 2 = 4  **Activity 2**  Simplify:  a).  b). x    c). 10 + x  Solutions          7   1. x   13 x 5  65     1. 10 + x     **Activity 3**  Give the following activity to learners to complete. Observe them while completing and clarify the misconceptions.  State whether the following statements are TRUE or FALSE. If FALSE write the correct statement. | * give answers,discuss the question and ask questions * discuss and justify their answers |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| |  |  |  | | --- | --- | --- | | Sasol-Inzalo Book | DBE workbook | Textbook | | Pg 73 No 3a – f | Pg 35 No 17a – d |  | |

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| 1. **CONSOLIDATION/CONCLUSION &HOMEWORK**(Suggested time: 5 minutes) |
| 1. Emphasise that**:**  * **NOT +** and other misconceptions  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 workbooks, workbooks and/or  textbooks for learners’ homework. The selected activities should address different cognitive  levels.  **Recommended Homework**   |  |  |  | | --- | --- | --- | | **Sasol-Inzalo Book** | **DBE workbook** | **Textbook** | |  |  |  | |