**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:** Solving problems **(Lesson 8)** |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to solve problems in context involving numbers in exponential form** |

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| 1. **RESOURCES:** | Sasol-Inzalo Book 1, DBE workbook1,Textbooks |
| 1. **PRIOR KNOWLEDGE** | * Exponential form * Square numbers and square roots. |
| 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. | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaqching Activities** | **Learning Activities**  **Learners are expected to:** |
| * Present the problems to learners one at a time. * Allow them time to read and discuss each problem * Facilitate solving the problem through asking questions. Some suggested questions are given in the textbox with probable responses given in parenthesis.   **Activity 1**  The formula for calculating the area of a square with the side length of a square. Write in exponential form the area of a square with a side length of:      **Activity 2**  Find the length of the side of a square that has an area of  **Probable solution:**  Area  Thus,    So,  NB: Use any method you find appropriate to calculate the square root.  **Activity 3**  A box contains 6 eggs in each row and there are 6 rows. How many eggs are there in the box.  Answer: 6 6 = = 36 | * read and analyse problems * respond to questions posed by the teacher * suggest appropriate processes for solving the problem * solve problems individually and as a group |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| Solve the problems that follow. You may leave your answer in the exponential form.  a. Find the area of a square that has sides of 9cm .  b. Find the length of the side of a square that has an area of |

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| 1. **CONSOLIDATION/CONCLUSION &HOMEWORK**(Suggested time: 5 minutes) |
| 1. Emphasise that**:**  * learners should read individually through the problem (sometimes two times or three times if necessary).   b) 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 workbooks, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**  Solve the problems that follow. You may leave your answer in the exponential form   1. Find the area of a square that has sides of 9 2. Find the length of the side of a square that has an area of 3. Mrs Mokoena has a vegetable garden. There are 10 rows and 10 columns in each bed. Each row and column is 1cm wide, work out the number of small squares, each 1cm by 1cm in the grid and write it in exponential form. |