**MATHEMATICS LESSON PLAN**

**GRADE 9**

**TERM 1: January – March**

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

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| 1. **TOPIC: DECIMAL FRACTIONS:** Calculations with decimal fractions (Lesson 2) |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to:**   * perform multiple operations with decimal fractions, using a calculator where appropriate * perform multiple operations with or without brackets, with numbers that involve the squares, cubes, square roots and cube roots of decimal fractions * use knowledge of place values to estimate the number of decimal places in the result before performing calculations. |

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| 1. **RESOURCES:** | DBE workbook, Sasol-Inzalo book, textbooks, calculator | | |
| 1. **PRIOR KNOWLEDGE:** | * Operations with:   -decimal fractions and mixed numbers  -squares, cubes, square roots and cube 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 | | | |
| 1. **INTRODUCTION** (Suggested time: 10 Minutes) | | | |
| Let learners work in pairs to complete the table below:   |  |  |  |  | | --- | --- | --- | --- | |  |  | Estimated answer | Calculated answer | | (a) | 4,5 x 2,4 |  |  | | (b) | 4,4 0,2 |  |  | | (c) | 2,5 x 2 10 |  |  | | (d) | 0,16 x 0,02 |  |  | | (e) | 0,12 ÷ 0,03 |  |  | | (f) | (2,5)2 |  |  | | (g) |  |  |  | | | | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | | | **Learning activities**  **(Learners are expected to :)** |
| Give activities to learners to work individually.  **Activity 1**  Calculate the value of the following (leave answers in two decimal places):   1. 0,08 x 0,04 2. 0,024 ÷ 0,06 3. 0,5   0,02   1. (1,5)2 x      1. 3,4z – 1,2z   1,1z + 4z   1. 5 | | | * calculate the values   using various methods |
| **Activity 2**  Given: **0,174 ÷ 0,3 = 0,58**. Using this fact, write down the answers in the space provided for the following without doing any further calculations.   |  |  |  | | --- | --- | --- | |  |  | Answer | | (a) | 0,3 x 0,58 |  | | (b) | 1,74 ÷ 3 |  | | (c) | 17,4 ÷ 30 |  | | (d) | 174 ÷ 300 |  | | (e) | 0,0174 ÷ 0,03 |  | | (f) | 0,3 x 5,8 |  | | | | * write down the answers |
| 1. **CLASSWORK** (Suggested time: 15 minutes) | | | |
| Use Sasol-Inzalo book and other resources | | | |
| Sasol-Inzalo book | | Textbook | |
| 1. p. 68 no. 1c; e and f 2. p.69 no. 2c; d | |  | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) | | | |
| 1. **Emphasise that:**  * adding and subtracting algebraic expressions with coefficients, follows that only like terms are added or subtracted. * multiplication follows the distributive property of multiplication. * division involves multiplying both the numerator and denominator with the same number usually the multiples of ten, e.g. 10, 100, 1000.  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 books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Homework** (Select activities from DBE workbook  **p 44 - 46**) | | | |