**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 4: October – December**

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

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| 1. **TOPIC: ALGEBRAIC EXPRESSIONS: Algebraic language** (Lesson 2) |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **Learners should know and be able to identify variables and constants in given formulae and equations** |

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| |  |  | | --- | --- | | 1. **RESOURCES:** | Textbooks, DBE Workbook 2, Sasol-Inzalo book 2. | | 1. **PRIOR KNOWLEDGE:** | * algebraic expressions * patterns * integers * functions and relationships | | 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) | | | Assign learners to work in groups on the activity below:  **Activity**   1. Complete the table by multiplying the input number by 20 and add 50 to the answer.  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | x |  |  |  |  |  |  |  |  |  | | y |  |  |  |  |  |  |  |  |  |  1. Express the rule as an algebraic expression 2. Identify the constant and the variable in the algebraic expression above | | | | | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | | | |
| **Teaching activities** | | **Learning activities** | |
| Let learners work in groups on the activities below**.**  **Activity 1**   1. Describe the rule of the pattern below in your own words.   9; 6; 3; 0;-3   1. Express the rule as an algebraic expression.              1. Identify the variable and constant in . | | Explain the meaning of the rule and find the general rule. |
| **Activity 2**  Complete the table   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Position in sequence (n) | 1 | 2 | 3 | 4 | 5 | n | | Term () | -3 | -5 | -7 |  |  |  |   Identify the numbers that are changing and those that are not changing. | | Identify variables and constants from given formula | |
| **Activity 3**  Identify variables and constants on the following algebraic expressions | | Engage in group discussions to determine the answers of the activities.  Record their answers and make conclusions about their observations. | |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) | | |
| Carefully choose the exercises which show different cognitive levels from Sasol-Inzalo workbooks, DBE workbooks and any textbook used in your school. The following are some of the questions that can enhance understanding of algebraic expressions. | | |
| Sasol Inzalo book 2 | DBE Workbook 2 | Textbook |
| Page 143 5 a-c |  |  |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) | | |
| 1. **Emphasise that**:  * an algebraic expression indicates a sequence of calculations that can also be described in words,tables or flow diagrams * the flow diagram indicates the order in which the calculations must be done. * in algebraic language the multiplication sign is usually omitted, e.g. We write -10x instead of and we also write as -10x  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:** | | |