**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 3) |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to:**   * Rcognise and interpret rules or relationships represented in symbolic form * 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 language * patterns * flow diagrams * tables |
| 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)   Ask learners the questions below.  **Activity 1**   1. Which of the rules below are equivalent to each other?     7. Use  to determine the first three terms of the sequence. 8. Identify the variable and constant term in the expression in no.2. | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  **(Learners are expected to)** |
| Let learner work in groups on the activity below**.**  **Activity 1**  Classify the following as either an expression or equation by putting a tick on the relevant column.   |  |  |  | | --- | --- | --- | |  | Expression | Equation | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | Work in group and share their solutions to the whole class |
| **Activity 2**  Represent the following as algebraic expressions   1. Negative seven plus negative twenty-five. 2. Three hundred increased by a certain number. 3. Negative eighteen divided by two. 4. Eight minus eleven. | Engage in group discussions to determine the answers of the activities. |
| **Activity 3**  Identify variables and constants on the following algebraic expressions   |  |  |  | | --- | --- | --- | |  | **Variable** | **Constants** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

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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 152 no.6 (a) and (b) |  |  |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) | | |
| 1. Emphasise that:  * an algebraic expression is a set of connected mathematical symbols without an equal sign. * in algebraic language the multiplication sign is usually omitted, e.g. We write instead of and we also write as -10x * an algebraic expression is a set of connected mathematical symbols made up of a term or terms withot an equal sign. * a constant is a number that does not change. * a term is a part of an expression that are added or subtracted eg 3n and 1 are terms of the expression * a variable is a letter or symbol that represents a number (unknown quantity)  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 2 – p.153 no.7a-b | | |