**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 3: July– September**

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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 1) |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson,learners should know and be able torecognise and interpret rules or relationships represented in symbolic form** |

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| |  |  | | --- | --- | | 1. **RESOURCES:** | Textbooks, DBE Workbook 2, Sasol-Inzalo Book 2 | | 1. **PRIOR KNOWLEDGE:** | * patterns * functions and relationships * whole numbers | | 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) | | | Lead learners to do the activity below.  Activity  1.Complete the table below.   |  |  |  | | --- | --- | --- | | **Word** | **Operation(symbol)** | **Meaning** | | Sum |  | **add** | | Increase |  |  | | Less than |  |  | | Difference |  |  | | Decrease |  | **subtract** | | Quotient |  |  | | Product |  |  |   2. Write the following word problems in a mathematical language   1. The sum of 5 and 45 2. The quotient of 169 and 13 3. 86 decreased by 27 4. The product of 24 and 8. | | | |
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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities** |
| Give the learners the following activities to work in groups.  **Activity 1**  Consider the sequence below and answer the questions that follow:  1; 3; 5;……   1. Describe the rule in words for the pattern above. 2. Write the general rule for the pattern. 3. Use the rule to determine the 4th,5th,6th and 7th term.   **Activity 2**  Consider the rule for the sequence 4 ;7; 10.. and answer the following questions:  What does the rule mean for the given number sequence?  **NB**.Consolidate by demonstrating how the rule can be used to find any term.             * Learners should recognise that represents the general term, where n represents the position of the term in the sequence * Rules can be called algebraic expressions * Algebraic expresssions consist of parts called terms separated by addition or subtraction. * Term can either be a single number,a variable or a combination of the two. * and are terms on the expression.   Activity 3  Complete the following table:   |  |  |  | | --- | --- | --- | | Words | Expression | Term(s) | | Multiply a number by 4 and subtract 5 from the answer. |  |  | | Five greater than three times a number. |  |  | | Product of a number and 5. |  |  | | Leaners work on the activities allocated to them |

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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 |
| P. 29 no. 6-7 | p. 22-23 no. 1(a)-(c), 2(d)-(f) |  |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) | | |
| 1. Emphasise that:    * an algebraic expression is a set of connected mathematical symbols made up of a term or terms without 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.    * rules can be called algebraic expressions. 2. 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:**  DBE workbook 2 Pg 24 No. 1 and 2 | | |