**MATHEMATICS LESSON PLAN**

**GRADE 8**

**TERM 1: January – March**

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

1. **TOPIC: INTEGERS: Calculations with integers (Lesson 3)**
2. **CONCEPTS & SKILLS TO BE ACHIEVED:**

**By the end of the lesson learners should know and be able to do addition and subtraction with integers.**

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| 1. **RESOURCES:** | Textbooks, DBE workbook 1, Sasol-Inzalo Book 1. |
| 1. **PRIOR KNOWLEDGE:** | * count forwards and backwards in integers at given intervals * identify additive inverses * perform addition and subtraction of 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)   Ask the learners why the following are correct:  The answers to the above should be alluded to additive inverses.  Use the idea of additive inverses to explain why each of these statements is true:  Through guided instruction learners should realise that additive inverses have been used to perform calculations with integers. | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  **(Learners are expected to:)** |
| Addition of positive integers:  Explain to learners that addition of positive integers is the same as the addition of whole numbers.  For example:  Also | complete the following activity 1 to illustrate this fact: |
| Addition of negative integers  Explain that addition of negative integers is the same as the addition of positive integers, but the sign is negative.  For example:  Also | do the following activity 2 to illustrate this fact: |
| Present the following examples to the learners.  Addition of positive and negative integers:  Adding a negative number has the same effect as subtracting a natural number.  When you add a number to its additive inverse, the answer is always (zero) 0.  Subtraction of integers:  Subtracting a negative number has the same effect as adding a natural number. | do the following activity 3 to illustrate this fact: |

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| 1. **CLASSWORK** (Suggested time: 15 minutes)   **Sasol-Inzalo Book 1 p 37 no. 7 – 9** |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) 2. **Emphasise that:**  * Commutative property does not apply for subtraction of integers. * Adding a negative number has the same effect as subtracting a natural number. * Subtracting a negative number has the same effect as adding a natural number.  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.  **Sasol-Inzalo Book 1 p 37 no. 10 and 12**  **DBE workbook 1 p 26 no. 1** |