**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: INTEGERS:** CALCULATIONS WITH INTEGERS **(Lesson 4)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should be able to :**   * Add and subtract with integers |

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| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * operations with positive number * addition of whole numbers * properties 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. | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| Divide learners small groups  **Activity 1**  **Note:** a number line should be made prior this lesson with intervals ranging from 11 to 11. This number line should be made for each group in your class. The number of number lines that will be made will vary from class to class depending on the contextual factors. The number line must be big enough and must allow learners to walk on it or alongside it. This lesson can be done in the hall or in an open space since it requires a lot of space.  Divide learners into small groups   * Give each group a hand-made number line with intervals and * Allow learners in each group to place the number line on the floor and they must stand around it.   Use the following expressions and play a game with the learners guided by the instructions that follow:  Calculate:   1. 3(2) 2. 5 (1 ) 3. 9 (2) 4. 2 (8) 5. 4 6) 6. 7 (2) 7. 1 (4) 8. 6 (5)   How the game is played?  **Note:** explain to learners the difference between an operation sign and an integer sign (see the block above). Allow learners to copy down expressions above from the board before they move out or make copies of the above expressions and give them in the form of the worksheet before you leave the classroom.  Let’s play the game:  The positive operation sign tells us to move forward  The negative operation sign tells us to move backward  The sign of the integer tells us to turn left or right depending on the expression e.g. in the above example :  4 (3)   * Starting from the origin, move 4 steps towards the right and stop at 4 facing the front. * The positive integer sign tells us to change the direction and face right and the positive operation sign tells us to move forward 3 times. * Where do you lend?   **You should lend at 7**  4 (3)   * Starting from the origin, move 4 steps towards the right and stop at 4 facing the front. * The negative integer sign tells us to change the direction and face left and the positive operation sign tells us to move forward 3 times. * Where do you lend?   **You should lend at 1**    **Note:** ask learners to conclude – they should be able to see that adding a positive integer from a positive integer is the same as adding ordinary whole numbers and adding a negative integer from a positive integer is the same as subtracting ordinary whole numbers bearing in mind that the answer will either be positive or negative. At the end of the game, collect the number lines from all the groups and keep them safely since you they will be used again in lesson 6 when you introduce subtraction of integers. | * listen to instructions * play the game in groups. * compare answers and draw conclusions |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| Use the conclusion you drew above to answer the questions that follow:  a) 5 8)  b) 1 (5)  c) 1 6)  d) 4 ( 11)  e) 8 10)  f) 7 4)  g) 8 (15) |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasise that:  * adding two positive whole numbers is the same as normal addition learnt in whole numbers * adding a negative number to a positive number to is the same as subtracting. * addition is commutative  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 books, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended Homework**:  DBE Workbook 2 - page 94 no 2(e) to (f) and page 96 no (f) to (j) |