**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:** SOLVING PROBLEMS **(Lesson 9)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should be able to :**   * solve problems in contexts involving addition and subtraction of integers |

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| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * addition and subtraction of integers * recognise, order and compare integers * properties of integers |
| 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. **INTRODUCTION** (Suggested time: 10 Minutes)   **Activity**   1. Toto has R200 in a savings account and R40 in her purse. Her brother owes her R50. How rich is she? In other words, how much money does she have?   She has R290   1. Oops! Toto forgot that she borrowed R60 from her mother, and that she still has to pay R150 for a dress she bought last month. So how rich (or poor) is she really? In other words, how much money does she actually have?   She now has R80   1. In fact, Toto’s financial situation is even worse. She has received an outstanding bill from her doctor, for R250. So how much money does she really have?   She has no money. She is owing R170 |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| **Activity 1**  When Sam woke up, the temperature was -3 °C. By lunchtime, the temperature had increased by 8 °C. By the time Sam arrived home from school at 3:00 PM, the temperature had increased by 1 °C. By the time Sam went to bed at 10:00 PM, the temperature had dropped by 7 °C.  a) What was the temperature at lunchtime?  b) What was the temperature at 10:00 PM when Sam went to bed?  **Activity 2**  **Scenario:** At the beginning of this game, you have a bank account balance of **R15. This game must be played in pairs.**  Directions for playing the game:  1. Cut out the action cards below. Mix them up and place them face down in front of you.  2. Draw one card at a time and keep a running balance.  3. **Please note**: Your bank will allow you to withdraw more money than is in your account. If you do take more money out of your account than you have in it, it will result in a negative balance.  **You deposit R8 into your bank account**  **You take R6 out of your account to buy a snack**  **You take R7 out of your account to buy books**  **You take R10 from your account to go to the movies**  **You find R20 on the sidewalk and deposit it into your account**  **You take R3 out of your account to pay a library fine**  **You deposit the R10 your neighbour gave you for helping her with yard work**  **You take R8 out of your account to pay for the class field trip**      **Note:** collect a completed game from all the groups and assess their level of understanding of the game and the concepts involved. | * work in groups and answer questions. * play the game in groups and submit one after a number of attempt (rounds) showing the cards that were picked and the answers as a group for the teacher to check the level of understanding. |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| Simon is in Grade 5. He saved money in a tin. When he turned 10, his grandmother gave him R100. He also opened his savings tin on his tenth birthday and there was R260 in the tin. Simon was very happy. He said to himself: “I am very rich!”  Simon decides to buy some things that he has always wanted. This is what he decides to buy:  • a soccer ball at R160  • a pair of sunglasses at R180  • a book about animals at R90  1. How much money did Simon have in total on the day that he thought he was rich?**2** MATHEMAT  2. What is the total cost of the three items he wants to buy?  3. Simon decides to first buy the soccer ball only. How much money will he have after paying for the soccer ball?  4. How much money will Simon have if he buys the soccer ball and the sunglasses?  5. If Simon is allowed to have credit, how much money will Simon have if he buys the soccer ball and the sunglasses and the book about animals? |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasise that:  * learners should read a question with an understanding * underline numbers and key words from a problem  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**:   1. Give three integers of which the sum is 9. Use two positive integers and one negative integer 2. Give three integers of which the sum is 4. Use two negative integers and one positive integer 3. Give four integers of which the sum is 11. Use two positive integers and two negative integers |