**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: GRAPHS**: Interpreting graphs (Lesson 5) |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should know and be able to :**   * Analyse and interpret global graphs of problem situation with special focus on linear or non- linear * Draw global graphs from given description of a problem situation |

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| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * analyse and interpret linear, non-linear, constant and decrease or increasing trends. * drawing graphs from given situation. |
| 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 the learners to respond to the questions below:  Activity  Mr Masoga bought three plants in containers; the first plant Glamiolus, grows at a constant rate. The second plant, Bouncy Bess, grows slowly at first but then grows faster and faster and the third one Samara, grows.   1. Let learners Match the graphs with the plants as identified above. 2. Indicate which of the graphs are: 3. Linear 4. Non – linear 5. Increasing 6. Decreasing 7. Constant | | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| Let learners work in groups  **Activity 1**  The graph below shows the temperature of 5 days in Evander.  Let learners study the graph above and then answer the questions that follow:   1. In which days is the temperature decreasing? 2. In which days is the temperature increasing? 3. In which days is the temperature constant? 4. In which day do we have minimum temperature? 5. In which day do we have maximum temperature?   **Activity 2**  The graph below expenditure of a family in each month from January to June  Describe the different intervals of the graph in terms of: non – linear, linear, decreasing, increasing and constant   1. April – June 2. Feb – March 3. Jan - Feb 4. Jan - June 5. March - April   **N.B:** Consolidate linking learners’ responses to **linear, non-linear, increasing, decreasing** and **constant** graphs | Respond to questions  Respond to questions |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| Refer to DBE Workbook 2 page 42, to answer questions below:   1. Describe the different intervals of the graph in terms of: non – linear, linear, decreasing, increasing and constant 2. Jan – Feb 3. Feb – July 4. July – December 5. Which months show maximum temperature? 6. Which months show minimum temperature? |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasis that:**  * The graph is **increasing** when dependent value (distance) increases as the independent value (time) increases. The graph slopes upwards from left to right. * The graph is **decreasing** when the dependent value (distance) decreases as the independent value (time) increases. The graph slopes downwards from left to right. * When the dependent values (distance) remain the same while independent value increases we say the graph is **constant**. * When the graph is increasing or decreasing and is a straight line it is called **linear graph** * When the graph is neither increasing or decreasing and is curved it is called **non-linear graph**  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 Page 34 no 1(a - c)  Sasol-Inzalo Page 52 no 5-6 |