**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 2)** |

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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 with a special focus on linear or non-linear |

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| 1. **RESOURCES:** | DBE Book 2, Sasol-Inzalo Book 2, textbook |
| 1. **PRIOR KNOWLEDGE:** | * Linear and non - linear graphs * Horizontal axis and vertical axis * Naming parts of a graph |
| 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)      1. Let learners indicate which of the graphs below are increasing, decreasing or constant 2. Are graphs B and D showing increasing or decreasing graphs? | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities**   |  | | --- | | Consolidate the activity in the introduction by indicating that graph A and C produce  straight lines and are called **linear graphs** , graph B and C are curved and are called  **non-linear graphs**  **Activity (groups)**  Let learners study the graph below and then answer the questions that follow  The given graph illustrates Simphiwe’s cycling journey from her home to school   1. Indicate the distances when both time and distance are increasing. 2. What is happening from 15 – 25 minutes? 3. Is the whole graph linear or non-linear? 4. Considering the intervals -, - and   - ,are they linear or non linear?  **N.B:** Consolidate linking learners’ responses to **linear** and **non-linear** graphs | | Respond to questions |

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| 1. CLASSWORK (Suggested time: 15 minutes)   **Activity**  The graph below shows the height of the water level in a bath tub as time passes.  As individuals answer the questions that follows referring to the graph above:  Indicate which sections of the graph are linear, non- linear or constant? As indicated below:   1. A – B 2. B – C 3. C – D 4. D – E 5. From origin - E |

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| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. **Emphasise that:**  * 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 2 page 40 Question 1(a) to (g) |