**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 1: January - March**

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

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| 1. **TOPIC: GEOMETRY OF STRAIGHT LINES:** Define line segment, ray, straight line **(Lesson 1)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson learners should know and be able to define the following: line segment, ray and straight line.** |

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| 1. **RESOURCES:** | Textbooks, DBE Workbook 1, Sasol-Inzalo Workbook 1, Pencil, Ruler |
| 1. **PRIOR KNOWLEDGE:** | * Properties of 2D shapes |
| 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)   **Geometry** is a part of mathematics concerned with questions of size, shape and position of figures and with their location in space. This lesson is going to focus on some of the building blocks of geometry.    **When working with geometric figures, we can learn three things about each. We can learn what the description or definition is, then we can learn what the figure looks like and finally we can learn how to “name” them.**  **Activity 1**  **Draw the following shapes on the chalkboard. Discuss them with learners. Let learners identify whether the shapes have straight sides or curved sides and the number of sides each shape has.**  Shape A Shape B Shape C | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  **(Learners are expected to :)** |
| Explain the terminology to learners:  The first geometric figure that you are going to learn about is a **point**. **A point is a definite place in space that doesn’t have a size or shape**. Here is an example of a point.  The corner of the shape is an example of a point A  A | **Take notes. Use pencil and ruler to construct a point.** |
| **A ray has an end point but extends in one direction indefinitely**. Here is a picture of a ray.    **Notice that:**   * **This ray has two points. It has one point, point F that is the endpoint and one point, point G which is on the ray.** * **To name the ray, we use the letters of the two points and a symbol.** The symbol looks like a small ray that is above the letters | * **Take notes.** * **Use pencil and ruler to construct a ray.** |
| **A line segment has two endpoints.** A line segment is a set of connected points, meaning that while we see a straight line segment here, it is really a whole bunch of connected points.    **A line has two arrows on each end. A line is also a set of connected points, but the line does not end because of the arrows.** It goes on and on and on indefinitely. | * **Take notes.** * **Use pencil and ruler to construct a line segment.** * **Take notes.** * **Use pencil and ruler to construct a line.** |
| Activity 1  State whether the following is a point, ray, line segment or line. |  |
| Activity 2  Draw the following as accurately as possible – remember to use a ruler:   1. A ray that is long 2. A line segment that is long 3. A straight line that is long |  |

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| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| 1. Draw a line segment long. Extend to so that Write down the length of . 2. Identify and name the lines in the figure below.   F  E  O  G  D  A  C  B   1. Ray 2. Line segment 3. Straight line |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) |
| 1. **Emphasize that:**  * When learners are solving problems in context, they need to read the problem carefully to understand the context in which it is set. * learners must always interpret their answers to see if they make sense in the context in which they are working  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. |