**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: CONSTRUCTION OF GEOMETRIC FIGURES**: Constructions **(Lesson 8)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should be able to** accurately construct geometric figures appropriately using compass, ruler and protractor, including: Perpendicular lines |

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| 1. **RESOURCES:** | DBE workbook 1, Sasol-Inzalo book 1, Mathematical instruments |
| 1. **PRIOR KNOWLEDGE:** | * using a ruler and pencil to draw line segments * constructing arcs |
| 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)  * Show learners drawings of arcs * Remind them that an arc is part of a circle * Let the learners * Draw an arc using a radius of 3 cm. * Draw an arc bigger than a quarter circle, using a radius of 5 cm. * Draw an arc smaller than a quarter circle, using a radius of 5 cm. | |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to: ) |
| **Constructing a Perpendicular Bisector**  **Activity 1**  Construct line segment CD that is perpendicular to line segment AB  Take learners through the following steps  [Refer to DBE workbook, page 57].  Step 1   * Draw a line segment AB. * Open you’re your pair of compasses to a radius that is longer than half of AB * Place the sharp point your pair of compasses at A as shown below.     Step 2   * Draw an arc as shown below. | * Learners construct in their exercise books |
| Step 3   * Without changing your radius, place your pair of compasses at B and draw an arc the cuts the first one. * Mark the points of intersections C and D as shown below.     Step 4   * Draw a line segment the passes through points C and D. |  |
| 1. **CLASSWORK** (Suggested time: 15 minutes) | | |
| Construct line segment PQ perpendicular to line segment RS using a pair of compasses. [Allow them to assist each other] | | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** | | |
| 1. Emphasis that:  * Constructions should be done accurately * They should be done neatly  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**:  Let the learners construct rectangles using a pair of compasses | | |