**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: TRANSFORMATION GEOMETRY**  **(Lesson 7)** |

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| 1. **CONCEPTS & SKILLS TO BE ACHIEVED: Identify and draw lines of symmetry**   **By the end of the lesson, learners should be able to :**   * Identify and draw lines of symmetry in geometric figures. |

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| 1. **RESOURCES:** | DBE workbook 1, Sasol-Inzalo book 1, Textbooks |
| 1. **PRIOR KNOWLEDGE:** | * Using the squared paper for symmetry (slide). * Compare the shape and size of geometric figures. * Understanding the key word line symmetry. |
| 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)   Divide learners into small groups.  Discussion: A shape is said to have ***line symmetry*** if you can draw a line to cut the shape into two halves. This line is called ***axis of symmetry***. Each half is the ***mirror image*** of the other. Groups discuss whether the lines of symmetry in each shape are correctly indicated. |

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| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| **Activity 1**  Make a tick next to each figure which has line symmetry. Also indicate the lines of symmetry in each figure.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   **Activity 2**  Use the dots to help you decide where the line of symmetry of the will be in the given diagram.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • • | * Identify the lines of symmetry. |

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| 1. **CLASSWORK ( Suggested time : 15 minutes** |
| 1. Draw a hexagon of your own size using the given square grid. 2. Indicate all the lines of symmetry in your hexagon.  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      1. In the next figures draw all the lines of symmetry.   • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • •  • • • • • • • • • • • • • • • • |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasis that:  * .A line or axis of symmetry is a line that divides a figure into two parts that have an equal number of sides, and all the corresponding sides and angles are equal. The two parts on either side of the line of symmetry are mirror images of each other. We also say the parts are congruent.   A geometric figure can have no line of symmetry, one line of symmetry, or more than one  line of symmetry.   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. Choose few examples from Sasol Inzalo workbook to give a homework. |
| **Recommended Homework**:   1. How many lines of symmetry in the figures below?   • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • •    • • • • • • • • • • • • • • • • |