**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 1 January - March**

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

|  |
| --- |
| 1. **TOPIC:GEOMETRY OF 2D SHAPES:** Classifying 2D shapes **(Lesson 4)** |

1. **CONCEPTS & SKILLS TO BE ACHIEVED**

**By the end of the lesson learners should know and be able to** describe, sort, name and compare quadrilaterals (Trapezium) in terms of: length of sides, parallel and perpendicular sides, and size of angles (right angles or not)

|  |  |
| --- | --- |
| 1. **RESOURCES:** | DBE workbook 1, Sasol-Inzalo book 1, textbooks, pair of dividers,  ruler, protractor. |
| 1. **PRIOR KNOWLEDGE:** | Properties of quadrilaterals learnt in the previous lesson:   * Square * Rhombus. * Parallelogram. * Rectangle |
| 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) | |
| **ACTIVITY 1**  Ask learners to name the properties of the following quadrilaterals:   * square * rhombus. * parallelogram. * rectangle | |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  **(Learners are expected to :)** |
| Divide learners into small groups and provide them with the following worksheet.  **ACTIVITY 1**  Provide learners with an accurately constructed parallelogram. An example is provided below.   * Let them cut out the parallelogram and then cut out a portion of the parallelogram as shown with a dotted line above. Their new shape should look as follows * Let them trace the new diagram into their books and indicate which sides are parallel. * Let them compare the length of the sides and the size of the angles. * Ask them if this shape is a square, rhombus, rectangle or a parallelogram. * Conclude the activity by informing the learners that this shape is a trapezium.   **NB**: Consolidate by naming and summarising the properties of the diagrams given above. | work in pairs on the activities given on the worksheet.  share their findings |

|  |
| --- |
| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| **Classwork:**  Look at the following shapes and answer the questions that follow:    A  B  B  B B   1. Label and name the vertices in each figure 2. Use the ruler to measure and write down the length of each line segment in the table provided. 3. Use the protractor to measure the size of each angle and record the measurements in the table.  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Figure** | **Side 1** | **Side 2** | **Side 3** | **Side 4** | **Angle 1** | **Angle 2** | **Angle 3** | **Angle 4** | | A |  |  |  |  |  |  |  |  | | B |  |  |  |  |  |  |  |  |  1. What do you observe about the lengths of the opposite sides? 2. Use a pair of dividers to measure the distance between the two opposite sides. What do you observe? What conclusion can you make from your observation? |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK** (Suggested time: 5 minutes) 2. **Emphasise that in a trapezium:**  * One pair of opposite sides are parallel. * Two pairs of angles are acute * Two pairs of angles are obtuse   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 workbooks, workbooks and/or textbooks for learners’ homework. The selected activities should address different cognitive levels.  **Recommended homework**  1. DBE workbook 1 page 51 no. 3b  2. Answer the following questions referring to the diagram below.    2.1 What is the name of figure A? Motivate  2.2 Name and label all the vertices.  2.2 Label the angles in the diagram, and say whether the size of the angles equal 900, is less than 900 or more than 900 |