**MATHEMATICS LESSON PLAN**

**GRADE 7**

**TERM 3: July – September**

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

|  |
| --- |
| 1. **TOPIC: GEOMETRY OF 3D OBJECTS**: Building 3D models **(Lesson 6)** |

|  |
| --- |
| 1. **CONCEPTS & SKILLS TO BE ACHIEVED:**   **By the end of the lesson, learners should be able to :**   * Revise using nets to create models of geometric solids, including:   + cubes   + prisms |

|  |  |
| --- | --- |
| 1. **RESOURCES:** | DBE workbook 2, Sasol-Inzalo book 2, Textbooks, containers, pair of scissors, ruler, set square |
| 1. **PRIOR KNOWLEDGE:** | * Names of geometric solids * Nets * 2D shapes * Properties of 3D objects |
| 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)   Learners will be required to do the activity below. The teacher will guide learners throughout the activity.   1. Name the 3D object shown below. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  |  |  | | --- | --- | |  | R |  1. Does the drawing on the right hand side represent the picture of the Toblerone?   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Draw a sketch of a net of the geometric solid above. Label the faces as follows:   [Left(L); Right(R): Front(F); Back(B) and Bottom(X).     1. Think of another way the same net could be drawn. Try it out. | |

|  |  |
| --- | --- |
| 1. **LESSON PRESENTATION/DEVELOPMENT** (Suggested time: 20 minutes) | |
| **Teaching activities** | **Learning activities**  (Learners are expected to:) |
| Do the activity below with learners. The teacher must provide learners with different geometric objects so that they may use them as reference.  **Activity 1**    Name the types of faces in the net above. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. How many triangles does the net have?   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Will this net form a prism or a pyramid?   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. How do you know?   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. Name the 3D object that the net will form.   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. The net of the geometric figure above could be represented in another way. Draw another net on a card board and make a model.  |  | | --- | |  | | Do the activity  Follow instructions and answer questions |

|  |
| --- |
| 1. **CLASSWORK** (Suggested time: 15 minutes) |
| **Activity**  Which geometric solid is represented by the net below?   |  |  |  | | --- | --- | --- | | A | B | C | | D | E  Image result for nets of geometric solids | F | |
| 1. **CONSOLIDATION/CONCLUSION & HOMEWORK (Suggested time: 5 minutes)** |
| 1. Emphasise that:    * The same 3D object can have different nets 2. 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**:  Decide whether the following nets will form 3D objects.   |  |  | | --- | --- | |  | Image result for nets of 3d shapes worksheet | |