**LESSON DEVELOPMENT FOUR**

**SUM OF ANGLES IN TRIANGLES**

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| **STAGE/TIME** | **TEACHER’S ACTIVITIES** | **LEARNER'S ACTIVITIES – MIND/HANDS ON** | **LEARNING POINTS** |
| **Step 1**  **Introduction**  **(5 minutes)** | Introductory Activities –  1. Draw a line.  2. Draw another line from the starting or end of the first line.  3. How many lines have you drawn?  4. Draw another line to join the first and second lines together.  5. How many lines altogether?  6. What do you observe?  7. What shape is this?  8. Triangle has many corners?  ***Note – Lets pupils know that the 3 corners of triangle is called vertices.*** | HANDS ON ACTIVITIES –  1.  2.  3. 3 lines.  4.  5. 3 lines.  6. Observation.  7. Triangle.  8. 3 corners. | Linking the Previous knowledge to the new lesson |
| **Step 2**  **Development**  **(5 minutes)**  **Grouping** | 1. Groups the learners into four groups – A, B, C, and D.  2. Guide the learners to choose a leader and secretary for your group.  3. Gives each group learning materials – chart and sample of triangles, 2 and 3 dimensional shapes. | 1. Belong to a group.  2. Choose their leader and secretary.  3. Received learning materials for their group. | Learner’s group, leader and secretary confirmed. |
| **Step 3**  **Development**  **(5 minutes)**  ***If the side between A and B is called AB.***  **If corner A is called angle A or ∠ A.** | **TRIANGLE**  1. Name the 3 corners A, B and C.  Teacher’s comments – The triangle is called triangle ABC.  2. The side between A and C is called AC. Side between B and C are called \_\_\_\_\_\_\_\_\_\_\_\_\_.  The angle at:  What is corner B and C?  ***Point to note –*** angle A is written as ∠ BAC or CAB.  4. How is angles B and C are written? | Listen to teacher’s comments.  2. Side between B and C is called BC.  3. Corner B is called angle B or ∠ B.  Corner C is called angle C or ∠ C.  4. Angle B is written as ∠ ABC or CBA. While angle C is written as ∠ ACB or BCA. | Properties of Angle |
| **Step 4**  **Development**  **(10 minutes)** | **Measuring Angles in a Triangle**  1. Study and Name each triangle ABC, then easure the angles following triangles –    2. Record your measurements.  3. Add all the 3 angles in a triangle together.  4. Observe and record your observations. | Groups Activities –  1st, 2nd, & 3rd Instructions Studying and recording –  First triangle,  ∠ A = \_\_\_\_\_  ∠ B = \_\_\_\_\_  ∠ C = \_\_\_\_\_  Sum of angles = \_\_\_\_\_  Second triangle,  ∠ A = \_\_\_\_\_  ∠ B = \_\_\_\_\_  ∠ C = \_\_\_\_\_  Sum of angles = \_\_\_\_\_  Third triangle,  ∠ A = \_\_\_\_\_  ∠ B = \_\_\_\_\_  ∠ C = \_\_\_\_\_  Sum of angles = \_\_\_\_\_  Fourth triangle,  ∠ A = \_\_\_\_\_  ∠ B = \_\_\_\_\_  ∠ C = \_\_\_\_\_  Sum of angles = \_\_\_\_\_  4. Observation | Sum of Angles in a Triangle. |
| **Step 5**  **Development**  **(10 minutes)** | Asks each group to present their results/solutions so that you can compare responses with those in other groups. | Presentation  First triangle,  ∠ A = 60°  ∠ B = 60°  ∠ C = 60°  Sum of angles  = 60° + 60° + 60° = 180° | Group Presentation |
| **Step 7**  **Conclusion**  **(5 minutes)** | To conclude the lesson, the teacher revises the entire lesson and ask the key questions.  **SUMMARY**  The sum of angles in a triangle is 180°.  **ASSIGNMENT**  **Find the missing angle in each of the following:** | The learners listen, ask and answer questions. | Lesson Evaluation and Conclusion |

***Reference book – New Method Mathematics Book 6.***