**THE MORNING STAR SCHOOL LTD.  
  
  
WEEKLY LESSON PLAN**

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| **WEEK ENDING** | 16th May, 2025 |
| **DAYS** | Monday - Friday |
| **DURATION** | 4 periods per class |
| **SUBJECT** | Mathematics |
| **STRAND** | 3: Geometry and Measurement |
| **SUBSTRAND** | 3.2: Angles and Polygons |
| **CLASS** | Basic Eight |
| **CLASS SIZE** | A    B    C |
| **CONTENT STANDARD (ANNOTATION)** | * GMS.B8.3.2.1: Demonstrate understanding of the properties of angles and polygons. |
| **LEARNING INDICATOR(S)** | * GMS.B8.3.2.1.1: Identify and classify angles and polygons. |
| **PERFORMANCE INDICATOR(S)** | * Learners should be able to classify different types of angles. * Learners should be able to calculate the sum of interior angles of polygons. * Learners should be able to identify polygons by their properties. |
| **TEACHING/LEARNING RESOURCES (TLMS)** | * Protractor, ruler, markers, whiteboard, angle and polygon charts |
| **CORE COMPETENCIES** | * Critical Thinking * Collaboration * Numeracy |
| **KEY WORDS** | * Acute Angle * Obtuse Angle * Polygon * Interior Angle * Exterior Angle * Sum of Angles * Quadrilateral |
| **R.P.K** | Learners are familiar with basic shapes and can identify simple angles like right angles. |

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| **PHASE 1: STARTER** | **PHASE 2: MAIN** | **PHASE 3: REFLECTION** |
| Begin with a quick recap of basic shapes and ask students to describe different angles they see around them, such as in the classroom or at home. Pose the question, 'What makes an angle different from a shape?' to engage students in thinking about the relationship between angles and the sides of polygons. | The objective of this lesson is to explore the properties of angles and polygons, enabling students to classify and compute their measures. \n\n**Introduction:**\nStart by discussing the importance of angles and polygons in everyday life, using examples such as the triangular kente patterns and the rectangular shapes of Ghanaian architecture. Explain how understanding angles and polygons is crucial for design and construction. \n\n**Lesson Objective:**\nBy the end of this lesson, students should be able to classify angles, calculate the sum of interior angles of polygons, and identify different types of polygons based on their properties. \n\n**Step-by-Step Explanation:**\n1.**Types of Angles:**\n - Define and illustrate acute, right, and obtuse angles using a protractor. Mention that an acute angle is less than 90°, a right angle is exactly 90°, and an obtuse angle is greater than 90° but less than 180°.\n - Example: Draw an angle of 45° and classify it as acute.\n\n2.**Sum of Interior Angles of Polygons:**\n - Explain the formula for calculating the sum of interior angles of a polygon: \n    \n where \  n \  is the number of sides.\n - Example: For a quadrilateral    ), the sum of interior angles is \    \times 180^\circ = 360^\circ).\n - Derive this formula by dividing a polygon into triangles.\n\n3.**Identifying Polygons:**\n - Discuss different polygons such as triangles, quadrilaterals, pentagons, and hexagons.\n - Use the properties  e.g., number of sides, sum of interior angles  to identify them.\n\n**Guided Practice:**\n1.**Activity 1:**\n - Divide students into groups and provide each group with a set of polygons. Ask them to measure and classify the angles using protractors.\n2.**Activity 2:**\n - Provide a worksheet with various polygons and ask students to calculate the sum of interior angles.\n\n**Independent Practice:**\n1. Calculate the sum of interior angles for a pentagon.\n2. Identify and classify the angles in a given diagram.\n3. Draw a hexagon and calculate its sum of interior angles. | Conclude the lesson by asking students to reflect on how angles and polygons are used in real life, such as in art and architecture. Encourage them to share any misconceptions they had and clarify them. Highlight the importance of angles in designing items like traditional Ghanaian fabrics and the shapes of local buildings. |

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| **ASSESSMENTS** |  |
|  | Observe students during group activities to assess their understanding and participation. Provide feedback on their ability to classify angles and calculate interior angles. Use quizzes or oral questions to gauge individual comprehension.  Ask students to find and draw three different polygons they observe in their environment, calculate the sum of their interior angles, and classify any angles they can measure. This will help reinforce the lesson and encourage observation skills. |