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

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| **WEEK ENDING** | 24th January, 2025 |
| **DAYS** | M o n d a y - F r i d a y |
| **DURATION** | 4 periods per class |
| **SUBJECT** | Mathematics |
| **STRAND** | Strand 2: Patterns and Algebra |
| **SUBSTRAND** | Substrand 2.1: Patterns and Relationships |
| **CLASS** | Basic Seven |
| **CLASS SIZE** | A(28) B(28) C(28) |
| **CONTENT STANDARD (ANNOTATION)** | * MA.7.PA.2.1: Recognize, describe, and extend patterns and relationships in numbers and shapes. |
| **LEARNING INDICATOR(S)** | * MA.7.PA.2.1.1: Identify and describe patterns in numbers and shapes. |
| **PERFORMANCE INDICATOR(S)** | * Students should be able to identify patterns in sequences of numbers. * Students should be able to extend patterns using rules. * Students should be able to apply pattern rules to solve problems. |
| **TEACHING/LEARNING RESOURCES (TLMS)** | * Charts with number patterns * Markers * Whiteboard * Real-life objects like beads and shells |
| **CORE COMPETENCIES** | * Creativity and Innovation (CI) * Critical Thinking (CP) * Collaboration (CC) |
| **KEY WORDS** | * Patterns * Sequences * Relationships * Algebra * Number series * Rules * Extend |
| **R.P.K** | Learners have previously encountered simple sequences in numbers and shapes in Basic Six. |

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| **PHASE 1: STARTER** | **PHASE 2: MAIN** | **PHASE 3: REFLECTION** |
| Begin with an engaging activity by showing a sequence of numbers (e.g., 2, 4, 6, 8) and asking students what comes next. Discuss why they think their answer is correct, introducing the concept of patterns and relationships. | The lesson objective is to enable students to recognize and create patterns in numbers and shapes, and to use these patterns to solve problems.Introduction: Explain that patterns and relationships are everywhere in our world, from the beads we use in traditional jewelry to the rhythms in our music. Patterns help us predict what comes next and solve problems. Today, we will explore how to identify and extend these patterns.Real-life Example 1: Discuss how market women arrange items in patterns to make their stalls attractive. For instance, arranging tomatoes in a triangular pattern catches the eye. Ask students to think about other examples of patterns they see in their daily lives.Real-life Example 2: Explore patterns in Kente cloth, where specific color and shape sequences are repeated. Explain how understanding these patterns helps designers create beautiful fabrics.Explanation and Modeling: Write a simple numerical pattern on the board, such as 5, 10, 15, 20. Ask students to identify the rule (add 5). Demonstrate how to extend the pattern using this rule. Explain that this is a linear pattern because it increases by the same amount each time.Interactive Activity 1: Provide students with a sequence of shapes (e.g., circle, square, triangle, circle, square). Ask them to identify the pattern and predict the next shape.Interactive Activity 2: Divide the class into groups and give each group a set of colored beads. Challenge them to create a repeating pattern and share it with the class, explaining the rule they used.Independent Practice: Provide three problems for students to solve independently:  a. Extend the pattern: 3, 6, 9, 12,*\_, \_*.  b. Identify the rule and extend: 1, 4, 9, 16,*\_, \_*.  c. Create your own pattern using numbers or shapes and write a rule for it.By the end of the lesson, students should feel confident in recognizing, describing, and extending patterns in various contexts. | Review questions: What is a pattern? How do you identify a pattern? Ask students to share examples of patterns they notice in their environment. Clarify common mistakes, such as confusing the rule of a pattern with its elements. Connect patterns to real-life applications like predicting weather patterns, understanding rhythms in music, or planning architecture. |

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| **ASSESSMENTS** |  |
|  | Observe participation during group activities and discussions. Check classwork for accuracy and understanding. Provide feedback by highlighting correct solutions and offering hints for corrections where necessary.Create your own number pattern using a rule of your choice. Write the first five terms and explain the rule. Additionally, find a pattern in your home or community and describe it in a short paragraph. |