**Teaching and Learning Plan**

**Mathematics Learning Experience for Grade 3 (C5)**

Teaching and Learning Plan: Determining Missing Terms in Patterns

Competency: Determines missing term/s in a given combination of continuous and repeating patterns

Grade Level: 3

Duration: 60 minutes

Objective: By the end of this lesson, students will be able to determine missing term/s in a given combination of continuous and repeating patterns.

Materials Needed:

1. Pattern cards (prepared in advance)
2. Whiteboard or chart paper
3. Markers
4. Pattern manipulatives (optional, such as pattern blocks, counters, or colored cubes)
5. Paper and pencils for each student

Procedure:

1. Introduction (5 minutes):
   * Begin the lesson by engaging students in a brief discussion about patterns. Ask questions like:
     + "What do you understand by the term 'pattern'?"
     + "Can you give examples of patterns you see around you?"
2. Demonstration and Explanation (10 minutes):
   * Display a pattern card showing a combination of continuous and repeating patterns, such as ABAB or AABBCC.
   * Explain to students that patterns can have a sequence that repeats, or they can continue in a logical order.
   * Write the pattern on the whiteboard or chart paper and explain how the letters represent different elements or objects in the pattern.
   * Emphasize the importance of finding the pattern rule and using it to determine missing terms.
3. Guided Practice (20 minutes):
   * Distribute pattern cards to each learneror small groups. Ensure that the pattern cards include examples of continuous and repeating patterns.
   * Ask students to work individually or in pairs to identify the missing term/s in the pattern cards they received.
   * Circulate among the students to provide guidance and clarification as needed.
   * Encourage students to explain their thinking and justify their answers by identifying the pattern rule.
4. Interactive Activity (15 minutes):
   * Divide the class into groups of 4-5 students.
   * Provide each group with pattern manipulatives (optional) or drawing materials (paper and pencils).
   * Instruct the groups to select a pattern card from a shuffled deck and create the next few terms in the pattern.
   * Once the groups have completed their patterns, ask them to present their solutions and explain the pattern rule they used.
   * Encourage other groups to provide feedback and ask questions about the patterns.
5. Conclusion and Review (10 minutes):
   * Gather the students back together and lead a class discussion about their experiences with determining missing terms in patterns.
   * Ask students to share any challenges they encountered and discuss strategies they used to find the missing terms.
   * Summarize the key concepts learned in the lesson and reinforce the importance of identifying pattern rules.

Note: Adapt the activities and materials based on the specific needs and resources available in your classroom. You can also incorporate physical movements or games to make the learning experience more playful and interactive.