



PLANIT
TEACHERS

Exploring Patrones y Secuencias: Understanding Patterns and Sequences

Student Name: _____

Class: _____

Due Date: _____

Introduction to Patrones y Secuencias

Welcome to the world of patrones y secuencias! Patterns and sequences are all around us, and understanding them is crucial for problem-solving and critical thinking. In this worksheet, we will explore different types of patterns and sequences, including numerical, geometric, and algebraic sequences.

Activity 1: Pattern Identification

Look at the following patterns and identify the next term in each sequence:

1. 2, 4, 6, 8, 10, ____

2. 1, 2, 4, 8, 16, ____

3. 3, 6, 9, 12, 15, ____

Activity 2: Sequence Creation

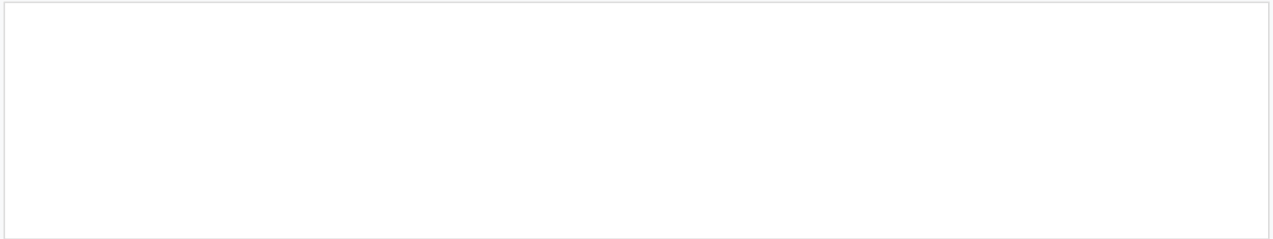
Create your own sequence using a specific rule or pattern. For example, you can use a numerical sequence, a geometric sequence, or an algebraic sequence. Write down your sequence and explain the rule or pattern you used to create it.

Activity 3: Real-World Applications

Research and write about a real-world application of patterns and sequences that interests you. How are patterns and sequences used in this application? What are the benefits and limitations of using patterns and sequences in this context?

Activity 4: Pattern Blocks

Use pattern blocks to create and extend different types of patterns. You can use the blocks to create a numerical sequence, a geometric sequence, or an algebraic sequence. Take a picture of your pattern and write down the rule or pattern you used to create it.

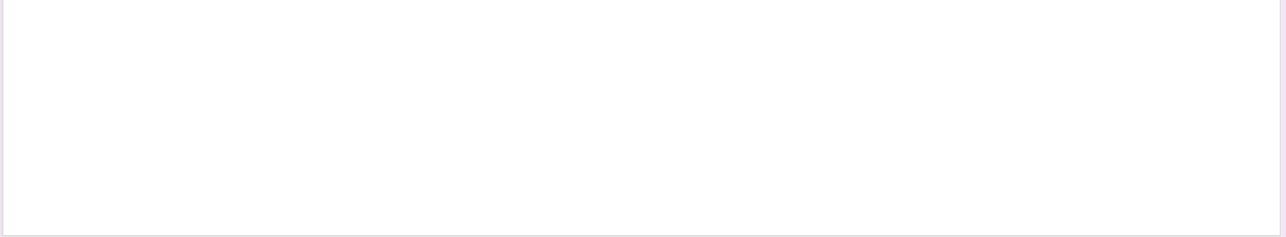


Activity 5: Sequence Games

Play a sequence game with a partner or in a small group. Take turns creating and extending sequences, and try to identify the next term in each sequence. You can use numerical sequences, geometric sequences, or algebraic sequences.

Activity 6: Math Scavenger Hunt

Go on a math scavenger hunt around the classroom or school to find examples of patterns and sequences. Take pictures or write down the examples you find, and explain the pattern or sequence you observed.



Activity 7: Pattern Puzzles

Solve the following pattern puzzles:

1. 1, 2, 4, 7, 11, ____

2. 2, 5, 8, 11, 14, ____

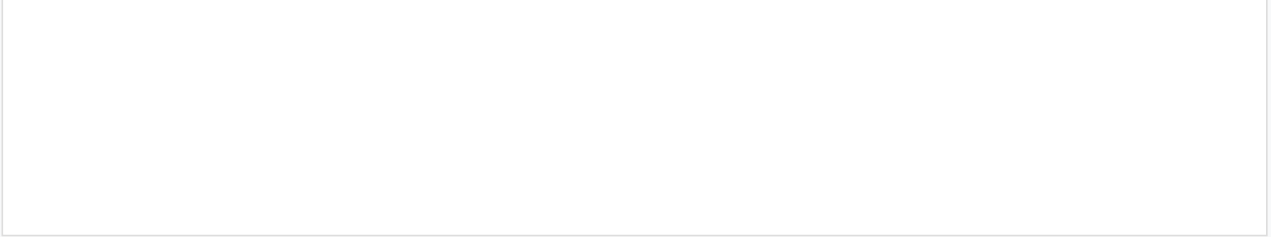
3. 3, 6, 9, 12, 15, ____

Activity 8: Sequence Charades

Act out a sequence without speaking, and have your partner or group try to guess the sequence. You can use numerical sequences, geometric sequences, or algebraic sequences.

Activity 9: Pattern Art

Create a piece of art that incorporates patterns and sequences. You can use different shapes, colors, and textures to create a unique and interesting design.

A large, empty rectangular box with a thin black border, intended for the student to create their pattern art. It occupies the lower half of the activity area.

Activity 10: Reflection

Reflect on what you have learned about patterns and sequences in this worksheet. What did you find challenging or interesting? How can you apply your knowledge of patterns and sequences to real-world scenarios?

Assessment

- * Completed activities 1-10
- * Participation in class discussions and activities
- * Quality of work and creativity in activities 2, 4, 6, and 9

Extension

Research and write about a real-world application of patterns and sequences that interests you.

Create a mathematical model of a real-world phenomenon using patterns and sequences.

Design and create a piece of art that incorporates patterns and sequences.