

Introduction

This diagnostic assessment is designed to evaluate the mathematical understanding of children aged 4-6 years in the areas of number sense and basic operations.

Section 1: Number Sense

Recognize and write numbers 1-10.

1. Write the correct number that corresponds to the given quantity of objects:
 - 3 blocks: _____
 - 5 toys: _____
 - 2 pencils: _____
2. Complete the sequence: 1, 2, 3, ____, 5

Section 2: Basic Shapes

Identify basic shapes.

1. Identify the basic shape:
 - Circle: _____
 - Square: _____
 - Triangle: _____
2. Sort the following shapes into their corresponding categories:
 - Circle, Square, Triangle, Circle, Square

Section 3: Basic Operations

Understand basic addition and subtraction concepts.

1. Solve the following addition problem: $2 + 1 =$ _____
2. Solve the following subtraction problem: $5 - 2 =$ _____

Section 4: Interactive Games

Engage in interactive games to reinforce learning.

1. Identify the missing number in the sequence: 1, 2, ____, 4
2. Sort the following shapes into their corresponding categories:
 - Circle, Square, Triangle, Circle, Square

Section 5: Conclusion

Reflect on learning and set goals for future learning.

1. What did you learn today?
2. What do you need to work on?

Answer Key

Check your answers against the answer key.

1. Section 1: Number Sense
 - 3, 5, 2
 - 4
2. Section 2: Basic Shapes
 - Circle, Square, Triangle
 - Circle: 2, Square: 2, Triangle: 1
3. Section 3: Basic Operations
 - 3
 - 3
4. Section 4: Interactive Games
 - 3
 - Circle: 2, Square: 2, Triangle: 1

Assessment Rubric

Evaluate your performance using the assessment rubric.

1. Accuracy: 80% or higher
2. Completion: Complete all questions and tasks within the given time frame
3. Participation: Engage and participate in all activities

Differentiation Options

Consider differentiation options for children with special needs, English language learners, and gifted children.

1. For children with special needs: provide extra time, use visual aids, and offer one-on-one support
2. For English language learners: provide bilingual support, use visual aids, and offer one-on-one support
3. For gifted children: provide additional challenges, such as more complex questions or tasks, and offer opportunities for extension and enrichment

Bloom's Taxonomy Alignment

Align the assessment with Bloom's Taxonomy.

1. Knowledge: Recognize and write numbers 1-10, identify basic shapes
2. Comprehension: Understand basic addition and subtraction concepts
3. Application: Apply basic addition and subtraction concepts to solve problems
4. Analysis: Analyze and identify patterns in numbers and shapes
5. Synthesis: Create and generate new numbers and shapes
6. Evaluation: Evaluate and justify the correctness of answers

