Learning About...®

Attribute Blocks

INTRODUCTION

Learning About...® Attribute Blocks is a resource providing hands-on activities and ideas that allow you, the teacher, to lead students in an active exploration of the world of mathematics. The activities presented involve students in the process of exploring abstract concepts through the use of manipulatives. Students are encouraged to think critically, plan strategy, and share conclusions.

This *Learning About...® Attribute Blocks* activity guide emphasizes:
- communication
- exploration
- problem solving
- analysis

Each set of Attribute Blocks consists of 60 blocks in three colors (red, yellow, blue), five shapes (circle, square, rectangle, triangle, hexagon), two sizes (large, small), and two thicknesses (thick, thin). The Attribute Blocks are contained in a compartmentalized plastic storage box. The storage box lid can be used as a template or shape sorter.

Attribute Blocks can be used to:
- identify shapes, colors, and sizes
- sort and classify by size, color, shape, and thickness
- create and identify sets
- create and identify patterns
- develop logical thinking

Exploring with Attribute Blocks
Students at all grade levels should be allowed time to freely explore and experiment with the Attribute Blocks before guided activities begin.

LOGICAL THINKING

Group Size: Pairs or Small Groups

Procedure: Provide a set of Attribute Blocks for each group of students. Allow students a few minutes to explore the blocks before the directed activity begins.

Explain to the students that they will solve story problems. The students will be using the Attribute Blocks to solve each story problem.

Say:
- I have 4 equal sides. I am large and thin. I am not red or yellow. I am the _____ Attribute Block. **[square, large, thin, blue]**

- There are 3 blocks displayed. All the blocks are large triangles. The blocks are all thick. The red triangle is not last. The blue triangle is in the middle. What is the order of the blocks? **[First–large thick red triangle. Second–large thick blue triangle. Third–large thick yellow triangle.]**

- We are the small thin circles. How many ways can we be arranged? **[6—red-yellow-blue; red-blue-yellow; yellow-red-blue; yellow-blue-red; blue-red-yellow; blue-yellow-red]**

Challenge student volunteers to create story problems for the other members of their groups to solve.

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