### TEACHER'S ACTIVITY GUIDE







## earlySTEM™ Cylinder Attribute Puzzle

#### Here's What You Get!

- 1 Puzzle Tray
- 3 Cylinders
- 1 Teacher's Activity Guide

#### Introduction

Young children are inherently curious about the world around them – they make great scientists! By fitting the Cylinders into the Puzzle Tray, young children increase their fine motor coordination and develop emergent math skills while having fun! The tray and cylinders are made of solid wood for years of durability and exploration.

# Use the Cylinder Attribute Puzzle to address these Head Start Early Childhood Learning Outcomes:

PERCEPTUAL, MOTOR, & PHYSICAL DEVELOPMENT - Fine Motor

- Goal IT-PMP 6: Child coordinates hand and eye movements to perform actions.
- Goal P-PMP 3: Child demonstrates increasing control, strength, and coordination of small muscles.

#### **COGNITION - Reasoning**

- Goal IT- 6: Child learns to use a variety of strategies in solving problems.
- Goal IT- 7: Child uses reasoning and planning ahead to solve problems.

#### **MATHEMATICS** - Measuring

 Goal P-MATH 8: Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.

#### **Suggested Activities:**

#### It Fits!

Show the child the Puzzle Tray with Cylinders. Remove one Cylinder and demonstrate how you can fit it back into the tray. Remove the same Cylinder and encourage the child to place it in the Puzzle Tray. Now remove a different Cylinder and invite the child to place it in the tray. Repeat several times, removing only one Cylinder so the child can feel successful.

#### **All the Cylinders**

When the child is comfortable putting one Cylinder in the tray, try removing two Cylinders at a time. Encourage the child to determine which Cylinder goes in each hole. If the child experiences difficulty, guide him by putting a Cylinder near the correct hole. When the child can successfully put two Cylinders in the correct holes, try all three. Finally, encourage the child to remove and replace the Cylinders independently.

#### **Discovering Attributes**

Encourage the child to develop listening skills and vocabulary. Remove the Cylinders from the tray and place them in size order, describing an attribute of each such as small, short, wide, big, tall, thin. Ask the child to find the tallest or shortest Cylinder. Encourage the child to place the Cylinders in order, from short to tall or thin to wide.

