

# Cylinder Blocks

## Purpose

To develop a child's discrimination of height and diameter.

**Age:** 2 1/2–3 1/2 years old.

## NOTE

The Mastery checklists (see blackline masters) include a blank template for charting your child's progress working with additional activities such as the Cylinder Blocks.



## Background information

Cylinder Blocks, also known as Knobbed Cylinders, consist of four blocks, each with ten cylinders that vary in diameter and height:

- Block 1: Diameter and height decrease.
- Block 2: Diameter decreases and height remains constant.
- Block 3: Diameter decreases and height increases.
- Block 4: Diameter remains constant and height decreases.

The holes and cylinders of the Cylinder Blocks must match perfectly for all the cylinders to fit in a block, making the control of error independent of your child's judgment.

# Cylinder Blocks

## You will need

- Cylinder Blocks.

## Presentation

- Invite your child to learn how to work with the Cylinder Blocks, beginning with Cylinder Block 1.
- Demonstrate how to carefully place one hand at each end of the block and hold it horizontally while carrying it to a table.
- Place the Cylinder Block on the table with the largest cylinder on your child's left.
- Show your child how to use the thumb and two primary fingers to remove the cylinders. Moving from left to right, remove all the cylinders and place them in a row in front of the block in random order.
- Pick up the cylinder farthest to the left, turn it over, and look at the bottom to observe its diameter.
- Scan the holes in the Cylinder Block. Choose the hole with the same diameter as the cylinder, and carefully place the cylinder into the hole.
- Continue in this manner, placing the cylinders in their corresponding holes until the Cylinder Block is complete.



### NOTE

Because the Cylinder Blocks are a difficult material to reproduce in the home environment, we recommend that you consider purchasing this Montessori material.

### NOTE

Some children think of the cylinders as dolls. The Montessori approach does not encourage or discourage such playfulness, as long as the material is treated respectfully.

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- After putting the last cylinder into its hole, run your finger along the top of the block to verify that the cylinders are flush with the top of the block.
- Show your child how to return the Cylinder Block to its place in the sensorial area.
- Invite your child to repeat the exercise.
- Tell your child that she is now free to work with the any of the Cylinder Blocks in the same manner and remind her to return the material to the sensorial area when she is finished.

## NOTE

If a cylinder gets stuck in the wrong hole, it can be tricky to remove. To push the cylinder out, poke a chopstick or similar tool into the hole that is at the bottom of each cylinder hole.

## Variations

- After you have completed the presentation, perform the three-period lesson with the relevant vocabulary.

### and

- Place two Cylinder Blocks on a table, scatter all the cylinders in front of the blocks.
- Replace the cylinders in their holes.
- On another day, repeat this variation using three and then four Cylinder Blocks.

### and

- Scatter the cylinders from Cylinder Block 1 in front of your child.
- Invite your child to find the cylinder that fits a specific hole.
- Repeat this extension with the other Cylinder Blocks.

## Vocabulary

- Tall, taller, tallest
- Short, shorter, shortest
- Wide, wider, widest