### Blocks Measure Up

# Lesson 1: Blocks in a Row

# **Material Preparation**

#### MATERIALS

- large bowl or container
- small bowls
- 20 1" wooden blocks
- flatbed toy truck
- copy paper

#### For each child:

- small bowl
- ten 1" wooden blocks
- photocopy of the Trucks Page
- Ask Me About Blocks sticker

### PREPARE IN ADVANCE

- Place 20 1" blocks in a large bowl or container.
- Place 10 1" blocks in each small bowl for each child.
- Make one photocopy of the *Trucks Page* for each child.



#### SET UP THE LESSON AREA

- Place large container of 1" blocks and flatbed toy truck on the table.
- Gather a bowl of blocks and a *Trucks Page* for each child in the group.





### TEMPLATES

Trucks Page

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### OBJECTIVE

Children will use 1" blocks to develop a conceptual understanding of comparison words: same, longer and shorter.

#### EXCITE

Gather the children in the ECHOS lesson area. **I wonder how many small blocks we can fit on the bed of this toy truck.** Place one block from the container of 1" blocks into the flatbed truck. **Let's take turns.** Have children take turns adding a block to the bed of the truck. Guide the children to create a row of five blocks on the truck's bed. When each child has had one turn to place a block on the flatbed truck, tip the bed to dump off the blocks.

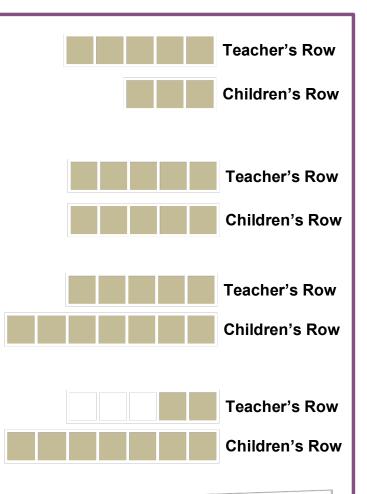
#### INTRODUCE

- 1. Today we are going to use all of these blocks to *measure* and learn about *length*. Length tells us how *long* something is. Collect all of the blocks or have the children help you gather them and place them in the large container.
- 2. Watch me. Select three blocks from the large container and place them in a straight row in front of you. Give each child a bowl of blocks. Can you use some of your blocks to make a *row* of blocks the *same*? Allow time for children to attempt to make their row of blocks the same length as yours. If children need extra help, place your row of blocks next to theirs.
- 3. Is your row of blocks the same as mine? If it isn't, ask: What do you think you can do to make your row of blocks the same? Accept responses. Children may recommend adding or taking away some of the blocks they used. When they are the same length, reinforce by saying: Now our rows of blocks are the same length—they are equal.





- 4. Everyone, close your eyes. Add two blocks to your row of three blocks. Now open your eyes. How long is my row of blocks? Let's count: one, two, three, four, five. It is five blocks long. Count the blocks in your row: one, two, three. My row of blocks is five blocks long and your row is three blocks long. My row of blocks is *longer* than your row.
- 5. Can you add some blocks to make a row of blocks the same length as mine? Allow time for children to attempt to make their row of blocks the same length as yours. If children need extra help, place your row of blocks next to theirs. Follow procedure as described in Step 3, above. Count the blocks together with the children.
- 6. Now I have a challenge for you. Can you make a row of blocks that is longer than mine? Allow time for children to try to make their row of blocks longer than yours. Prompt children to notice they have to use more blocks than you.
- 7. Good, now everyone has a row of blocks longer than mine! Everyone, close your eyes again. Take away three blocks from your row of five blocks. Now how long is my row of blocks? Let's count: one, two. It is only two blocks long. Now count how long your row of blocks is. Count one, two, three...How many blocks did you count? Your row of blocks is still longer than my row of blocks.
- 8. Ask children to put their blocks back into their bowls.





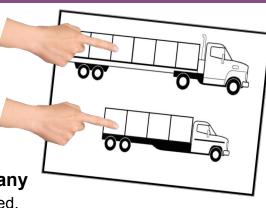
#### EXPLORE

- 1. Give each child a copy of the *Trucks Page*. How many trucks do you see on your paper? Yes, two. What do you notice about the trucks? Yes, they are different sizes.
- 2. Hold up a *Trucks Page*. Point to the longer truck. **This is the longer truck**. Point to the shorter truck. **This is the** *shorter* truck.
- 3. The back of the truck is called a bed. Let's use our blocks to see how many blocks long each bed is. Place one block over each square. Assist as needed.
- 4. Let's count how many blocks long each truck's bed is. Count with the children. Prompt children to notice that each truck's bed has a different length.









### INTERACT

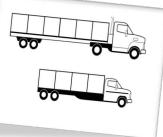
Interact to accommodate children's individual needs and strengths. Use these suggested strategies as needed:

- If children are having difficulty with the words *same, longer, and shorter*, use other examples to promote conceptual understanding.
- Children may need special assistance in placing their blocks on each flatbed.

Оитсомез	Vocabulary
<ol> <li>Regroup the children in the ECHOS lesson area. What did we discover today? Listen to the children's responses. Use suggested prompts to elicit key concepts and vocabulary. Encourage responses from everyone.</li> <li>What did we do with the blocks today?</li> <li>What did we measure?</li> <li>Give each child an <i>Ask Me About Blocks</i> sticker.</li> <li>Remind the children to tell their family something they have measured using blocks.</li> <li>After you have completed <i>Lesson #1: Blocks in a Row</i> with all children in your classroom, add the ECHOS materials suggested below to your science area to encourage exploration.</li> </ol>	<ul> <li>equal</li> <li>length</li> <li>long/longer</li> <li>measure</li> <li>row</li> <li>same</li> <li>shorter</li> </ul>



bowl or container with 20 1" wooden blocks



Trucks Page

