

# Ramp Experiments



## M14 Playing With Toys

**Primary Objective: 22**  
Compares and measures  
a. Measures objects

Related Objectives: 1b, 2c, 11b, 11d, 11e, 21a, 24

### What You Do

**Background:** In this activity, children make predictions about how everyday objects will act when they are placed on a ramp. Children love to watch the balls, cars, and other objects roll down ramps.

**Materials:** flat boards for making ramps; objects to roll down the ramps (e.g., blocks, cars, balls, crayons)

To make ramps, you can use materials that you already have in your classroom, such as a felt board (use the back for the ramp) or a sturdy piece of cardboard from a box.

- 1. Set up at least two ramps, one at a low angle and one at a higher angle. Collect materials for the children to roll down the ramps.**
- 2. Introduce the experiment to the children. Tell them that you have two ramps and you are going to see what happens when you roll toys and balls down both ramps. Model rolling a ball down each ramp and encourage the children to tell you what they see.**

“We have two ramps. I am going to roll a ball down this ramp. See, it is higher than the other ramp. There it goes! What happened to the ball on this ramp?”
- 3. Give each child the opportunity to roll an object down each ramp. Support the children in making observations about how the objects roll.**

Teacher: “You are right: The ball rolled fast down the tall ramp. What happens when you roll it down the low ramp?”  
Child: “Goes.”  
Teacher: “You’re right. It goes. I noticed that it goes slowly on the low ramp. Try it again and see whether you think it goes slowly.”
- 4. After they have had many opportunities to practice, invite the children to make predictions before rolling the objects down the ramp.**

“Okay, you are going to roll the car down the tall ramp. Hmm, do you think it will go fast or slowly? You think it will go slowly? Let it roll down, and we will see.”

### Including All Children

- Offer children the opportunity to work with the ramps on the floor or a table.
- Provide large objects that are easy to grasp and manipulate.
- Give all children time to express themselves.\*\*
- To increase a child’s vocabulary and comprehension, explain your actions in real time or explain what other children are doing.\*\*

### Teaching Sequence

RED	<b>During tummy time or while the child plays on a mat, roll balls and cars so that the she can watch them as they move.</b>
ORANGE	“Vroom! I see you watching the car. There it goes! Back and forth.”
ORANGE	<b>Invite the child to roll objects down the ramps. Make observations about what you see as the child plays.</b>
YELLOW	“Wow, that car rolled fast. Here is the car. Do you want to roll it down the ramp again?”
YELLOW	<b>As the child rolls the objects down the ramps, model simple comparative words for her to repeat, such as <i>fast</i> and <i>slow</i>.</b>
GREEN	“Roll the ball down the ramp. Oh, it went slowly. You said, ‘Slow.’”
GREEN	<b>Talk with the child about what he notices as he rolls the objects down the ramps. Encourage him to make comparisons between the two ramps.</b> <p>“Did the crayon roll fast or slowly down the tall ramp? Oh, it went fast. What do you think will happen if you roll the crayon down the low ramp? Let’s try it and see.”</p>
GREEN	<b>Invite the child to line up the cars from slowest to fastest after testing them on the ramp.</b> <p>“Where should this car go? It went really fast!”</p>

See *The Creative Curriculum® for Infants, Toddlers & Twos, Volume 3: Objectives for Development & Learning* for the progression of development beyond the green colored band for this objective and dimension.

### Questions to Guide Your Observations

- What comparisons did the child make, if any? (22a)
- How did the child interact with others during the experience? (2c)
- In what ways did the child experiment with the materials? (11e)

### Related LearningGames®

- 53. Build Together