

STEM

starts now

Ramps

STEM concepts: Science (observing, experimenting, motion), Math (shapes)

Materials: a plastic ball, a soft ball, a cardboard toilet paper tube, toy cars, a flat surface (could be a book or a larger piece of cardboard)

What to do: Set up a ramp on the floor where your child likes to play. To do this, you can lean a flat surface such as a book, cereal box, or cardboard against a small pile of books. Allow your child to experiment with rolling various toys and balls down the ramp. Different materials will either go faster or slower down the ramp. Encourage him to look at the shapes of the things rolling down the ramp.

Language and Communication: As your child rolls things down the ramp, use words like near and far to show distance. Use words like round and square when describing the shapes that roll down the ramp. For example, you can say “Wow, this car has round wheels. It rolled far away from our ramp” or “This square block did not roll far”. You can also talk about things rolling slow or fast down the ramp. Make comparisons.

Expand the Activity: The taller the pile of books (or whatever the ramp is resting on), the steeper the ramp. To expand this activity, you could adjust the ramp to make it steeper and see if things roll down the ramp faster or slower. You could also encourage your child to compare how far something rolls compared to another thing. For example, if your child has a lot of toy cars, she could see which toy car rolls the farthest down the ramp. You can mark how far things roll after they leave the ramp and travel across the floor. Then you can make [comparisons](#).

