

Ramp and Roll



Goal: Predict and measure the distance a group of toy cars will travel beyond a ramp.

You might use:

- Cardboard, boxes, blocks, books, toys cars of various sizes and shapes, a ruler, measuring tape, or yardstick

What to do:

- Build a ramp.
- Gather a group of toy cars. Predict which one will travel farthest when rolled down a ramp. Order the cars by the distance you think they will travel.
- One-by-one roll the toy cars down a ramp and measure how far each travels beyond the base of the ramp. Was your prediction accurate?
- What characteristics do you think allowed the first-place car to travel farthest beyond the end of the ramp?

Other things to try:

- Test to see whether the wheel size, weight, color, height, length, and number of doors influence the speed at which a toy car travels down a ramp.
- Test other objects on the ramp and measure how far they will travel.
- Consider how you can increase or decrease the speed of objects traveling along the ramp. What can you do to slow things down? What can you do to speed things up?

