Home activity:

Textured Ramp Challenge

What textured do you think will move the block faster and farther down ramp? Challenge a friend or family to a ramp race!

Materials Needed:

- Blocks or other identical-sized objects to send down the ramp
- Objects to prop up the ramp (such as books)
- Cardboard sheets (4–6 identical-size pieces at least 16" long)
- Pieces of textured materials large enough to wrap around the cardboard, such as a washcloth, sandpaper, felt, bubble wrap, non-slip rug pad, aluminum foil
- Tape
- Ruler to serve as a "starting gate"

Learning Goals:

- Ask questions to define a problem
- Compare different solutions

Part 1. Get Ready

1. Wrap a sheet of cardboard in each textured material. Tape it along the back to keep it in place.
2. Have your child use a flat palm to run their hand over each texture. Encourage them to describe the texture. (Texture word examples: smooth, bumpy, rough, soft, slippery, cottony, fuzzy, etc.
   -- You may need to provide the texture word by asking: *Which ramp feels the smoothest/bumpiest, etc.?*
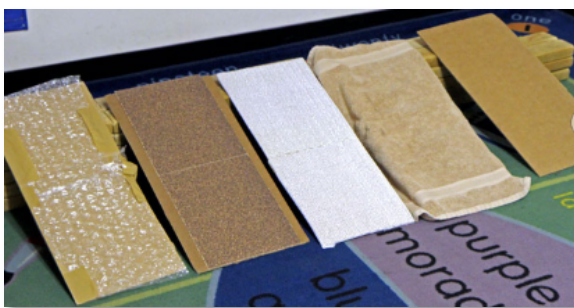
Part 2. Ready, Set, GO!

1. You and your child each choose one ramp. Ask your child:
   -- *What ramp do you think will make the block move farther down the ramp? Let's race and find out. Ready, set, go!*
2. Check your child's prediction. Ask,
   -- *Which ramp made the block move the farther down the ramp?*
   -- *Why do you think [your] block went all the way down the ramp and my block only went half way down?*
3. Continue racing down two ramps at a time. Eliminate the ramp that is the slowest each time. Discuss results after each challenge.
4. When you finally determine the two ramps that send the block the farthest, compare the textured material on each ramp.
   -- *What is similar about the two textures?*
   -- *How are these two textures different than the others?*
   -- *Why do you think this block slid (faster, slower)?*
   -- *What do you think would happen if you pushed the block harder? Would it go faster? Farther? Why do you think so?*

Nico & Nor