

# FUN WITH FRICTION

**How do different surfaces affect the wheels of a car?  
Let's learn about friction and have some fun!**

## **INSTRUCTIONS**

**STEP 1:** Build a ramp with books, tape, and cardboard.

**STEP 2:** Place different textured items at the bottom of the ramp.

**STEP 3:** Launch your car from the top of the ramp onto each different surface.

**STEP 4:** Use your ruler to measure the distance each launch travels on each surface.

## **SUPPLIES**

**Toy car**  
**Ruler**  
**Different textured surfaces**  
**(shelf liner, corrugated cardboard, cement etc)**  
**Books**  
**Cardboard ramp**  
**Tape**

## **THE SCIENCE**

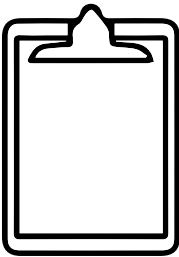
Try feeling each different texture with your fingers. Do you feel any differences? Record your predictions on your observation sheet.

As the car's wheels move through each surface, they are met with different levels of friction. The type of surface the car is driving on, like a rough road or a slippery icy road, can make the friction stronger or weaker. The tires of the car also matter because some tires are better at gripping the road than others.

# Fun with Friction Observations

Use this worksheet to process and evaluate your work.

Which surface do you think will slow the car the most?



RECORD

Test and measure how far the car went on each surface.

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ITEM

DISTANCE IN INCHES

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ITEM

DISTANCE IN INCHES

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ITEM

DISTANCE IN INCHES

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DISTANCE IN INCHES

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ITEM

DISTANCE IN INCHES

What did you learn about friction?

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