

Friction fair test: which surface slows a car most?

energy-forces

What you need: toy car · ramp board (about 50–80 cm) · shared long run-out surface stations (carpet, wood, sandpaper, tile/laminate), each long enough that the car stops on that surface (about 1 m or more) · metre stick · masking tape · Investigation Journal pages

Words to use

Friction · Fair test · Middle value

Our question

Which surface slows a toy car the most?

I predict...because...

One extra keep-the-same we will check on every run

The order we will visit the four surfaces

How far did the car roll on each surface? (in cm)

Surface	Middle distance (cm)

Draw a bar chart of our results

Which bar is shortest? What does that tell us about friction?

Which surface slowed the car most?

Did the evidence match our predictions?