

Friction: which surface grips most?

energy-forces

What you need: old shoe or small sturdy cardboard box · weight to load the shoe (bag of rice, filled water bottle, or two heavy books) · surface set: carpet sample or carpeted floor area, smooth tile or laminate sample (or classroom tile), sandpaper sheet, folded towel · thick elastic band or short length of string · Investigation Journal page

Words to use

Friction · Grip · Fair comparison

Our question

Which surface grips a loaded shoe most?

I predict...because...

Sort these words into Change, Measure and Keep the same

the surface · how hard it feels to pull · the loaded shoe · how we pull

Change – the ONE thing we change

Measure – the ONE thing we measure

Keep the same – to make it fair

Our comparison

Head each empty column with one thing you tested for, then fill in a row for each thing you tested.

What we tested				



Lesson 18

Draw and label what you see



Labels I used



Look at your easy / medium / hard marks from the pulls.



Which surface needed the hardest pull?



Which surface needed the easiest pull?

