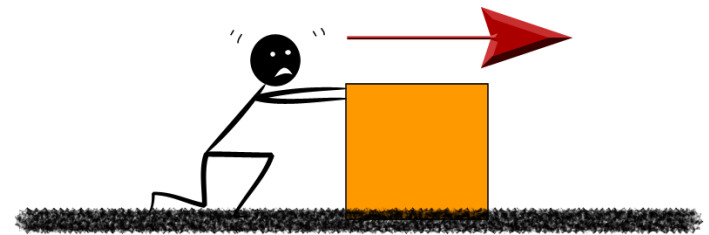


Unit 4E: Friction



Learnanywhere

Friction



Useful Words

Friction

A force acting between two surfaces

Air resistance

Friction caused by a body moving through air

Water resistance

Friction caused by a body moving through water

Forcemeter

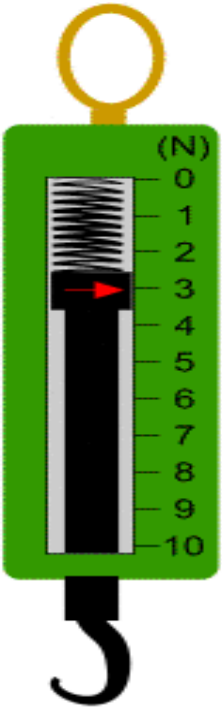
A piece of equipment for measuring force

Newtons

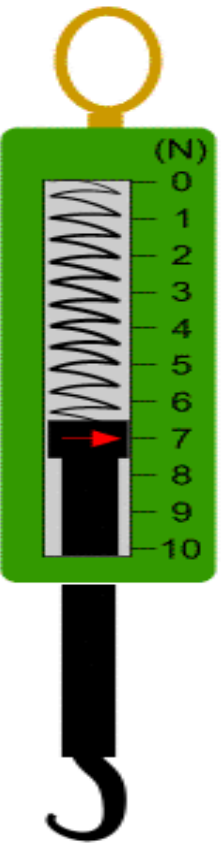
The units in which force is measured

Surface area

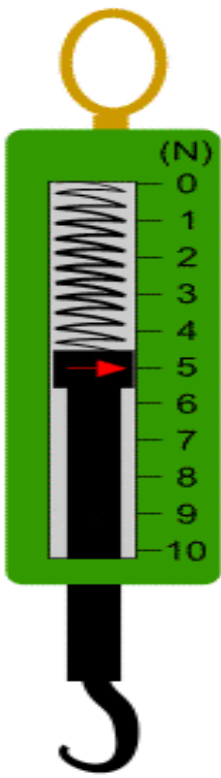
The face of a body



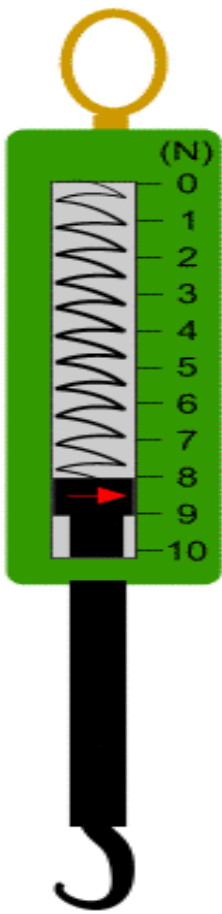
3
Newtons



7
Newtons

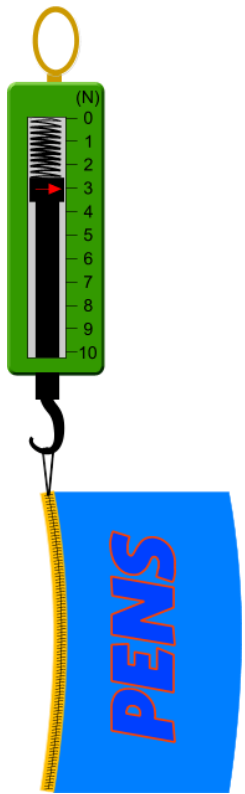


5
Newtons



8.5
Newtons

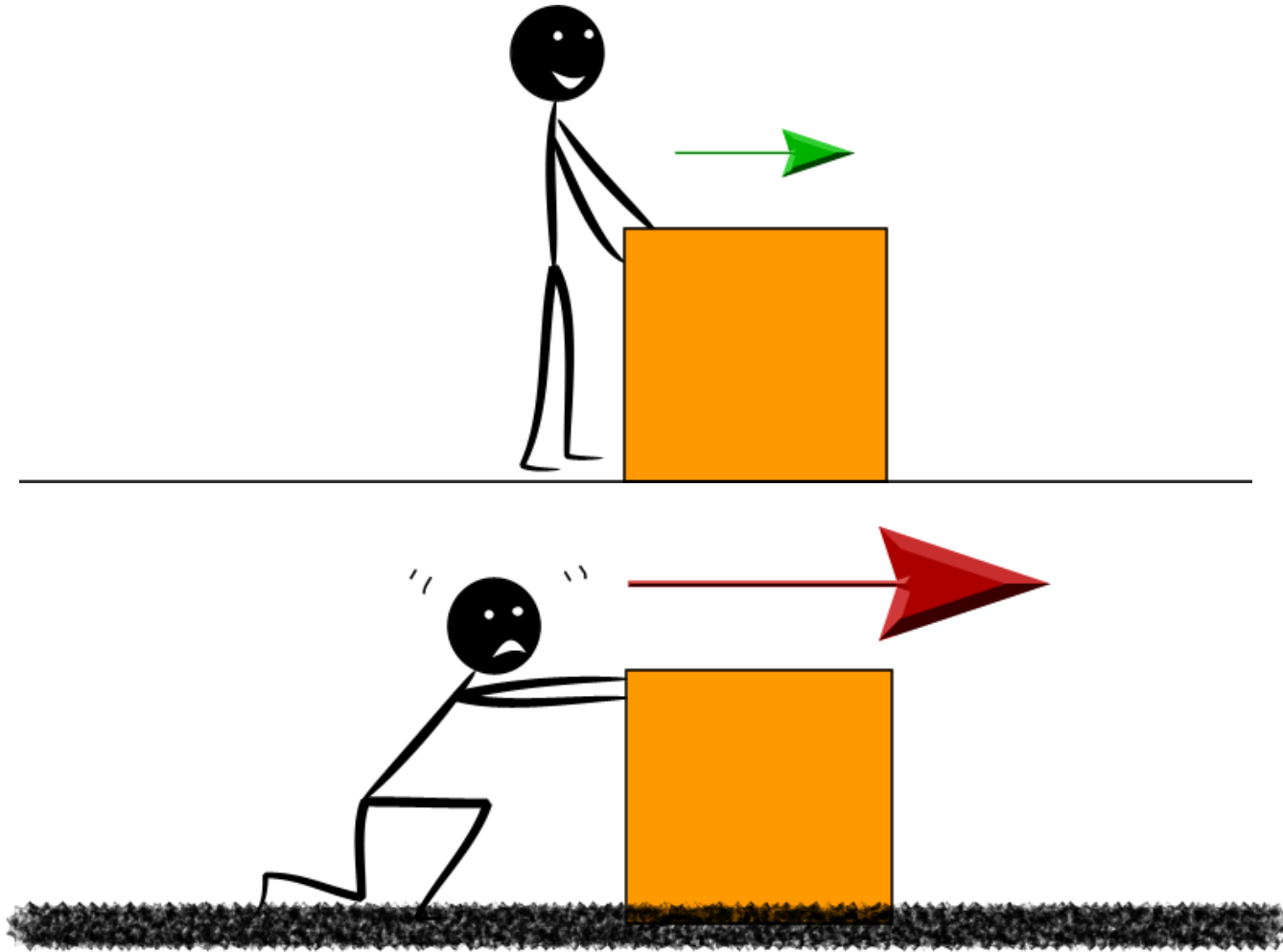
Try hanging different objects from around the classroom on the forcemeter.



Write down the readings you get!

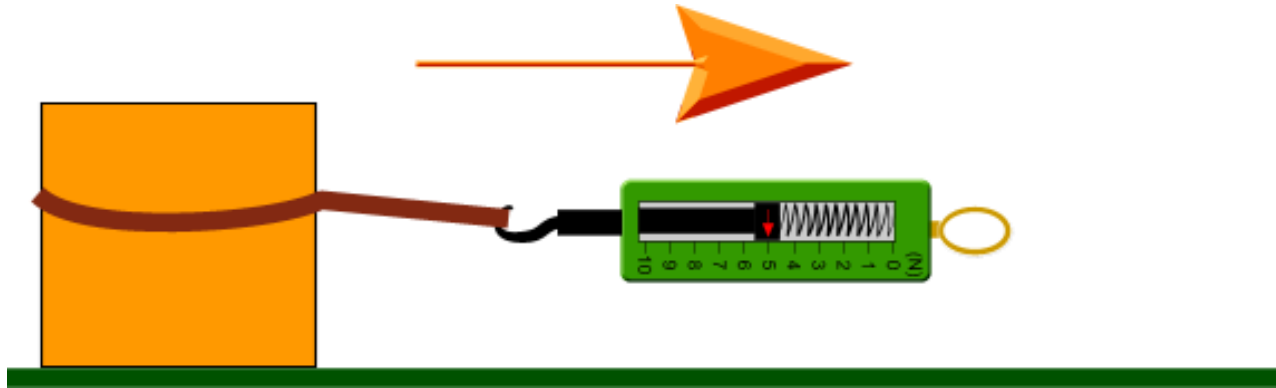
Object	Forcemeter reading in Newtons

This picture shows the same box being pushed on different surfaces.





Investigation: Which surface do objects slide on most easily?



Which of these surfaces will a weighted box slide across most easily?

- A) Vinyl
- B) Wood
- C) Carpet

When you have chosen, explain why you think this surface will be the easiest to slide across

Investigation: How are you going to test this?

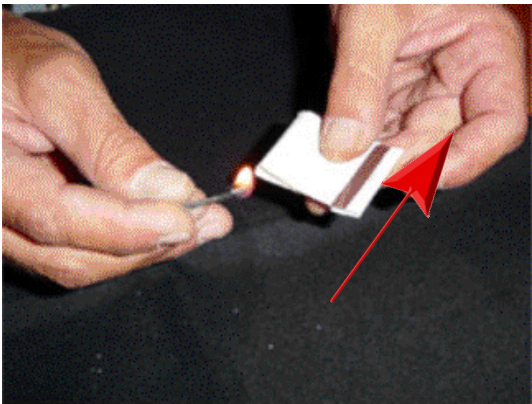
"What variable are you testing? (the thing that changes)"

"What variable will you change?"

"What variables will remain the same to make it a fair test?"

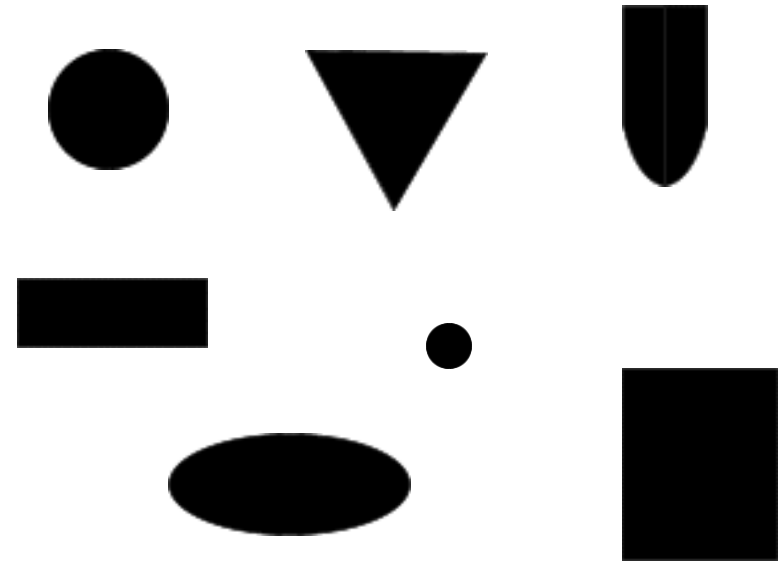
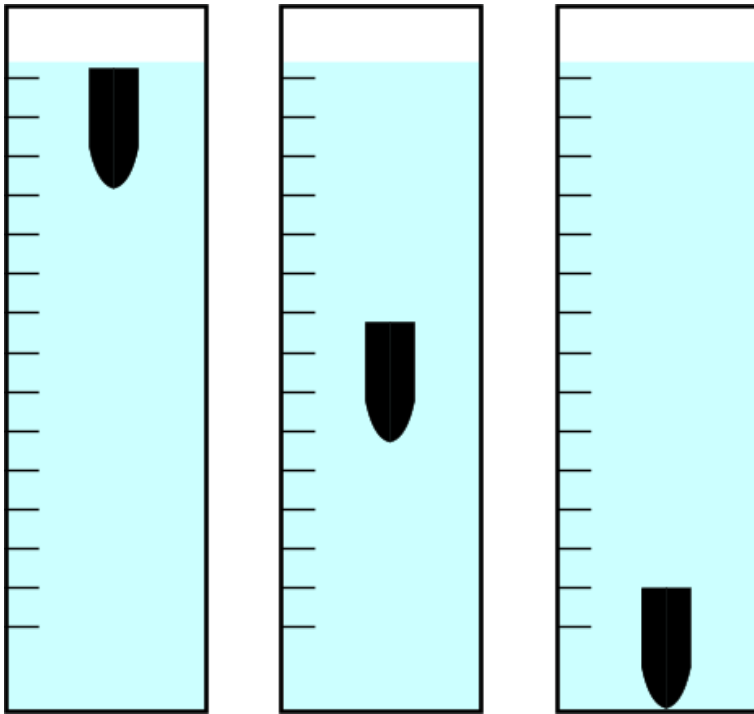
"What will you measure?"

Record the results as a bar chart, ask for help if you're unsure.



Is it best for each of the following to have high or low friction?

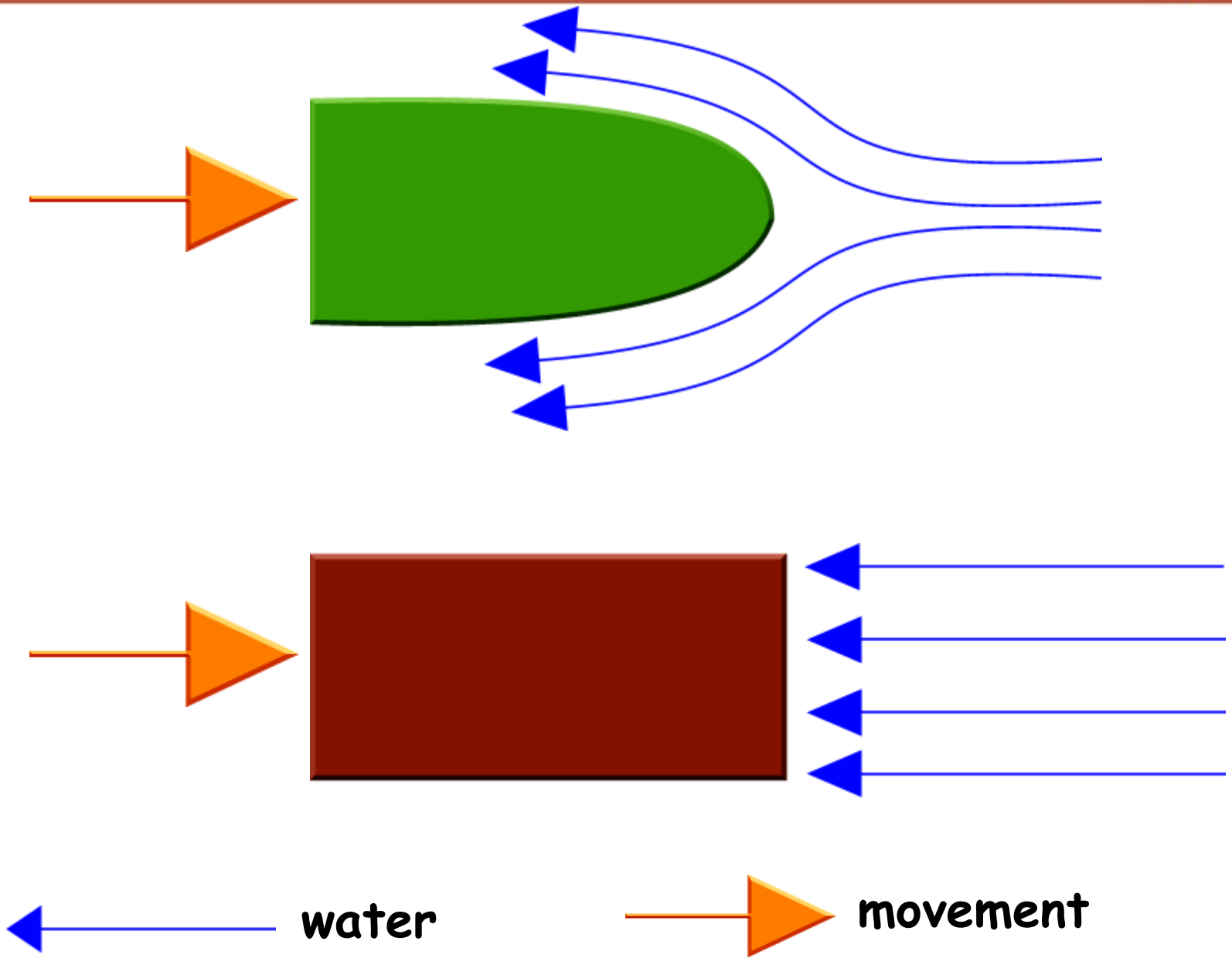
Situation	High Friction	Low friction
Tyres on a car	✓	
Playground slide		✓
Goalkeeper's gloves	✓	
Shoe laces	✓	
A drawer		✓
Ice skates		✓
Climbing rope	✓	

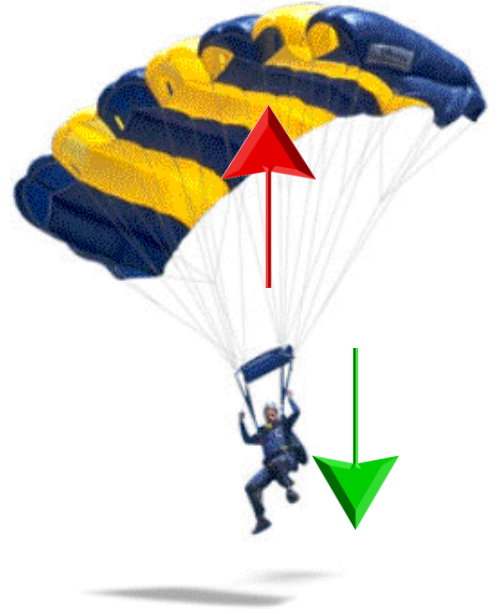
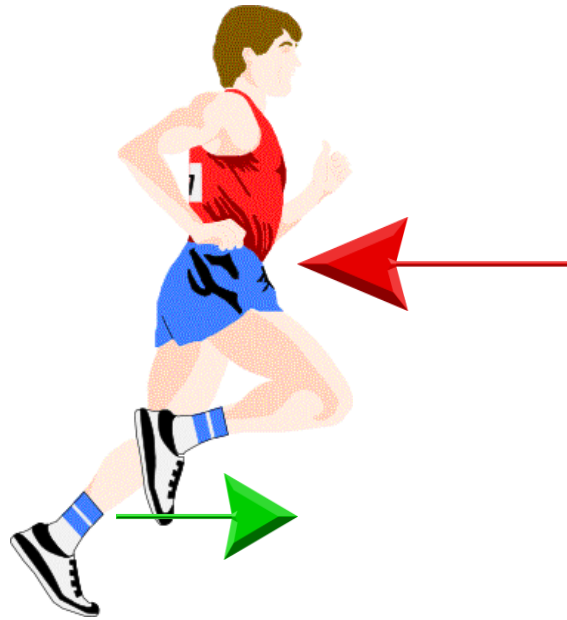


Which shape do you think will travel through the water the quickest?

Why do you think this one will be the quickest?

Test different shapes to see how quickly they move through the liquid.





 **movement**
  **air resistance**

