



Forces

Year 3

Knowing More, Remembering More

Remembering previous learning

What are materials like? Some can change shape, and some cannot. Some can be bent, twisted, squashed or stretched.

In this unit children will...

- Compare how things move on different surfaces.

Working scientifically:

- 3.3 Make relevant predictions.
- 3.4 Identify what they will change, observe and keep the same.
- 3.5 With support, set up simple practical enquiries.
- 3.6 Begin to use scientific equipment to make observations.
- 3.12 Use results, findings or observations to answer questions.
- 3.13 Make simple conclusions.

Key Learning Steps:

1. Explore forces.
2. Friction
3. Plan - friction experiment.
4. Investigate - friction experiment.

Key Scientists:



Classic

Leonardo da Vinci
(1452-1519)

The first person to study friction systematically.



Classic

Sir Isaac Newton
(1642 - 1727)

English scientist and mathematician famous for his laws of motion.

Key Vocabulary:

- push
- pull
- force
- contact force
- friction
- smooth
- rough
- data
- prediction
- independent variable
- dependent variable

Knowing More, Remembering More

Knowing more in Y3

What is a force? Forces are pushes or pulls.

What is a contact force? A push or a pull that affects objects which are touching.

What is friction? Friction is a contact force that pushes against a moving object.

What does Friction cause? Friction can make objects slow down or stop.

What type of surface has low friction? Smooth surfaces, such as ice, wood, and plastic, have lower levels of friction.

What type of surface has high friction? Rough surfaces, such as concrete, sand and carpet, have higher levels of friction.

The smoother the surface, the _____ an object will travel.

The rougher the surface, the _____ an object will travel.