

Y5 Science – Forces

Knowledge

Explain that unsupported objects fall towards the Earth because of gravity acting between the Earth and the falling object.

Identify forces as pushes or pulls.

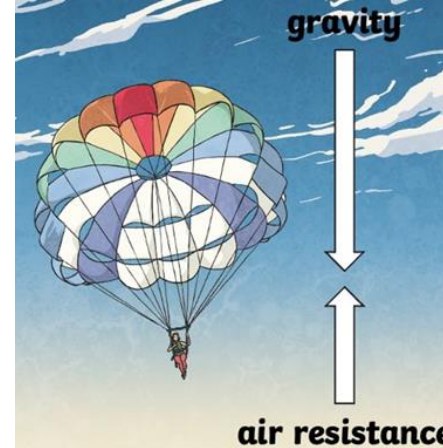
Explore the link between mass and weight and know that the mass stays the same but weight changes.

Identify the effects of air resistance on moving objects.

Identify the effects of water resistance on moving objects.

Identify the effects of friction on moving objects.

Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.



Cross Curricular links/Past knowledge

Y3 Science - Magnets, push and pulls

- compare how things move on different surfaces
- notice that some forces need contact between two objects, but magnetic forces can act at a distance
- observe how magnets attract or repel each other and attract some materials and not others
- compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- describe magnets as having two poles
- predict whether two magnets will attract or repel each other, depending on which poles are facing.
- Y5- Earth and Space

Vocab

support, fall, Earth, gravity, air resistance, friction, balancing force, mass, kilograms, grams, weight, Newton, resistance force, pull, push, buoyancy, pulley, gears, spring, accelerate, decelerate

Working Scientifically

Ask questions and offer ideas for scientific enquiry.

Set up a fair test, knowing what to change/measure/observe and what to keep the same.

Consider whether to take repeat readings.

Suggest reasons why similar enquires give different results.

Identify how much to trust my results.

Know when to answer questions by using a fair test.

Predict outcomes and where appropriate suggest reasons for my predictions.

Begin to take accurate readings on measuring equipment.

Make further predictions from results and set up further tests.