

Key facts:

- Forces can make an object change direction, change shape, start to move, stop moving, move faster or move slower.
- Mass is how much matter is inside an object. It is measured in kilograms.
- Weight is how strongly gravity is pulling an object down. It is measured in Newtons (N).
- Isaac Newton is famously thought to have developed his theory of gravity when he saw an apple fall to the ground from an apple tree.
- A shark is streamlined. It has a pointed nose to cut through the water and a smooth, low curved back to allow water to flow around it.

Important questions:

- What are forces?
- What effect do they have everyday objects?
- How were forces discovered?
- Can you give examples of different forces?

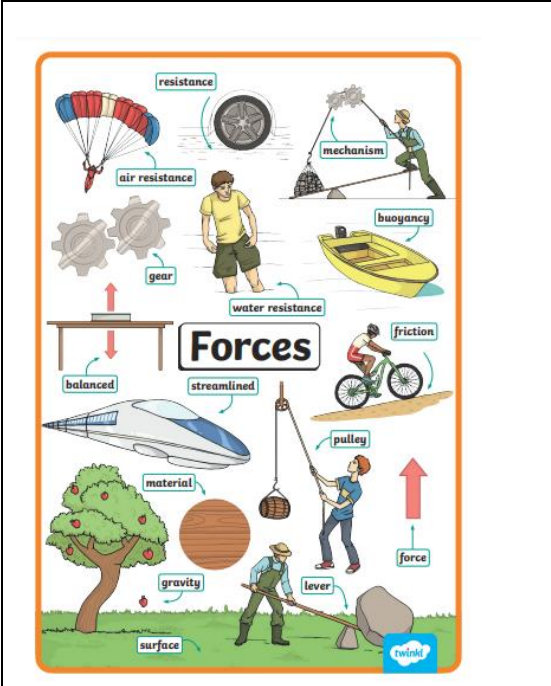
Key skills for you to practice:

- Planning fair and reliable experiments, thinking about variables.
- Carrying out experiments accurately.
- Reviewing findings from experiments to check for anomalies.
- Collect information on different theorists.

Hopton Primary School

Knowledge Organiser for KS2 Year 5 Topic: Science - Forces

Key images to discuss



What do we need to learn?

What forces are and where might they be used.
The effect of forces on everyday objects.
Who are the key theorists/inventors behind different forces.

What I should already know:

Year 3	Children will have an idea of what forces are especially magnetism and friction.
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Links to Future Learning:

Year 6	Fair and reliable testing/experiments.
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Key Vocabulary:

Word	What does it mean?
Forces	Pushes or pulls
Gravity	A pulling force exerted by the Earth (or anything else that has mass)
Streamlined	When an object is shaped to minimise the effect of air or water resistance.
Friction	A force that acts between two surfaces or objects that are moving.
Air resistance	A type of friction caused by air pushing against a moving object.
Water resistance	A type of friction caused by water pushing against any moving object.
Upthrust	A force that pushes objects up, usually in water.

