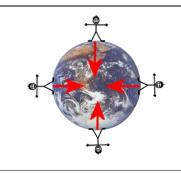
St Mary's Horsforth - Science Knowledge Organiser

Year 5 - Forces - Physics - Autumn Half Term 1.









What should I already know?

- That some forces need contact between two objects but magnetic forces can act at a distance.
- Know that magnets attract some objects but not others.
- The strength of the force determines how far and fast an object moves.
- Friction is the resistance of motion when there is contact between two surfaces.

What will I know at the end of the unit?

- I can explain what gravity is and that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- I can identify and investigate the effects of air resistance (friction) on different surface areas.
- I can identify and can explain the effects of water resistance (friction) on a shape.
- I can identify and explain friction on different surfaces by using a Newton force meter.
- I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Knowledge Vocabulary	Working Scientific Vocabulary
gravity	classify
resistance	compare - similarities - differences
friction	observe
streamlined	gather
Newton	record
surface	suggest
mechanism – gears, pulleys, levers	investigate
	average
	reliable

Recommended Reads





Inventor/ Scientist

Sir Isaac Newton



The Newton Meter

Suggested Investigations

Comparative and fair testing: How does the surface area of an object affect air resistance?

Pattern Seeking: Which shape parachute takes the longest to fall?

Comparative Testing: How does the surface area of a container affect how long it takes to sink?