

THE IRON MAN - FORCES AND MAGNETS

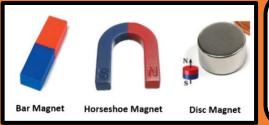
YEAR 3

NON-MAGNETIC



MAGNETIC





LINKS IN THE CURRICULUM:

Year 1 - Materials Year 2 - Materials Year 5 - Forces

Key Facts:

- Different surfaces create different amounts of friction. The amount of friction created by an object moving over a surface depends on the roughness of the surface and the object and the force between them.
- Gravity pulls an object down towards the centre of the Earth.
- Forces will change the motion of an object. They
 will either make it start to move, speed up, slow
 it down or make it stop.
- A magnetic field is invisible.
- Magnets have a North and South Pole. Like poles repel. Opposite poles attract.
- The needle in a compass is a magnet. A compass always points north-south on Earth.
- Magnets attract materials that contain iron, nickel and cobalt. Not all metals are magnetic.

ATTRACTION N S N S
REPULSION N S S N OR
S N S

KEY VOCABULARY To go from one place to another. Move The act or process of moving and Movement change place or position. A force that moves an object away Push from something. Pull A pull will pull an object closer. Attract To pull towards. Repel The push away. Accelerate To go faster. The pushing or pulling force that acts Magnetic between two magnets or between a magnet and magnetic material. Non-Something that is not magnetic. Magnetic The area around a magnet where there Magnetic is a magnetic force which will pull Field magnetic objects towards the magnet. The end of a magnet where the Poles magnetic field is strongest. The force that acts when two objects Friction touch each other. It is a contact force. A push or a pull which makes an object Force move, change speed, direction or shape. An act or the action of bending or Incline leaning.

Working Scientifically:

- By comparing how different things move and grouping them.
- By raising questions and carrying out tests to find out how far things move on different surgaces.
- By gathering and recording data to find answers to their questions.
- By exploring the streights of different magnets and finding a fair way to compare them.
- By sorting marterials into those that are magnetic and those that are not.
- By looking for patterns in the way that magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or which poles face another.
- By identifying how these properties make magnets useful in everyday items and suggesting creative uses for different magnets.