

Year 3
Autumn

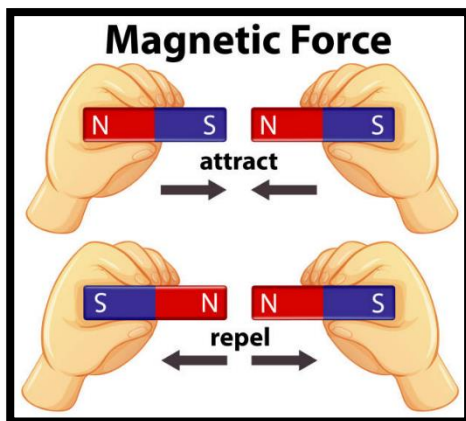
Science - Forces and Magnets

In this topic children observe that magnetic forces can act without direct contact, unlike most forces, where direct contact is necessary (for example, opening a door, pushing a swing). They should explore the behaviour and everyday uses of different magnets (for example, bar, ring, button and horseshoe).



Key Knowledge

- Magnetism is an invisible force. You can't see it, but you can see its effects.
- Magnetic materials contain nickel, iron or cobalt. Not all metals are magnetic.
- Like poles repel. Opposite poles attract.
- Different surfaces create different amounts of friction. Friction is always working against an object to slow it down.
- The rougher the surface, the more friction there is.
- The smoother the surface, the less friction there is.



Key Vocabulary

Attract - Attraction is a force that pulls objects together.

Forces - Pushes or pulls.

Friction - A force that acts between 2 surfaces or objects that are moving across each other.

Gravity - The force that pulls things to the ground. Gravity also holds Earth and other planets in their orbits around the sun.

Magnet - An object that produces a magnetic force that pulls certain objects towards it.

Magnetic - Objects which are attracted to a magnet are magnetic.

Poles - North and south poles are found at opposite ends of a magnet.

Pull - When a force brings an object closer, that is a pull.

Push - A push is a force that moves an object away.

Repel - Repulsion is a force that pushes object away.

Surface - The top layer of something.

Did you know?

The Earth is a giant natural magnet!

