

Forces and Magnets

Pushes



Pulls



Magnetic



Non-magnetic

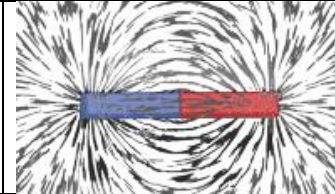


Key knowledge

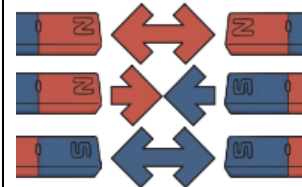
Different surfaces create different amounts of friction. The amount of friction created by an object moving over a surface depends on the roughness of the surface and the object, and the force between them.

Forces will change the motion of an object. They will either make it start to move, speed up, slow it down or even make it stop.

A magnetic field is invisible. You can see the magnetic field here though. This is what happens when iron filings are placed on top of a piece of paper with a magnet underneath.



Like poles repel.
Opposite poles attract.



The needle in a compass is a magnet.
A compass always point north-south on Earth.



Investigations to do at home

- Use a magnet to test what is magnetic and non-magnetic at home. What do you notice about the objects that are magnetic? Are they all the same material?
- Using a toy car push it on different surfaces. What do you notice about the speed and distance the car travels?

Key Vocabulary

forces	Pushes or pulls
friction	A force that acts between two surfaces or objects that are moving, or trying to move, across from each other.
surface	The top layer of something
magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic	Objects which are attracted to a magnet are magnetic.
magnetic field	The area around a magnet where there is a magnetic force which will pull magnetic objects towards it.
poles	North and South poles are found at different ends of a magnet.
repel	Repulsion is a force that pushes objects away. E.g. when a north pole faces another north pole, they repel.
attract	Attraction is a force that pulls objects together.