What are forces and magnets?

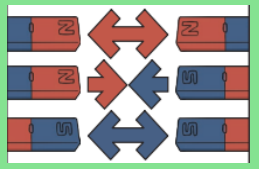
Vocabulary	Definition
forces	Pushes or pulls that act on an object.
friction	A force created when two surfaces rub against each other. It slows objects down.
magnet	An object which produces a magnetic force that pulls certain objects towards it.
magnetic force	A force produced by a magnet that can pull magnetic materials towards it or push another magnet away.
poles	North and south poles are found at different ends of the magnet.
repel	A force that pushes objects away.
attract	A force that pulls objects together.

Magnets and magnetic forces

Magnets have two poles- North and South

<u>Like poles repel (North and North or South and South)</u>

<u>Opposite poles attract (North and South)</u>



A magnetic force is a non-contact force.

Pushes and pulls





Forces can be a push or a pull.

Push- hitting a cricket ball

Pull- tug of war

Contact and non-contact





Forces can be contact or non-contact.

Contact- need objects to touch

Non-contact- work without touching

Forces can make things: start moving, stop moving, speed up, slow down, change direction.

Magnetic materials







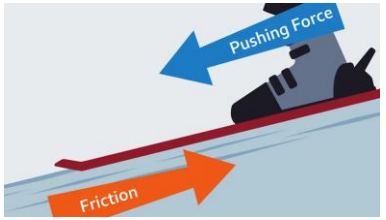
Magnets attract some materials.

Magnetic materials contain iron, nickel, steel or cobalt.

Not all materials are magnetic.

Magnets are used for many things like fridge doors and compasses

Friction



Friction slows objects down

Rougher surfaces create more friction than smoother surfaces.