

# YEAR 3 FORCES AND MAGNETS

## Key Vocabulary

force	A push or pull on something.
push	To use force to move something away from you
pull	To use force to move something towards you.
contact	When two things touch each other.
friction	The force that slows things down when they rub together.
magnet	An object that can attract (pull) certain metals like iron.
attract	When one object pulls another object towards it.
magnetic	Something that can be attracted by a magnet.
repel	When one object pushes another object away.
poles	The ends of a magnet; one is the north pole, the other is the south pole.

## 1. What makes things move?

A **force** is a push or a pull.

Forces can **make things start moving, stop, or change direction.**

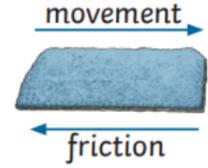
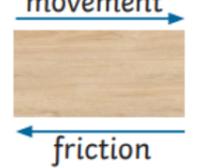
Forces can **touch objects** (contact) or act **without touching** (like magnets).

**Push** – a force that moves something away.

**Pull** – a force that moves something closer.



## 2. How does the surface affect how an object moves?

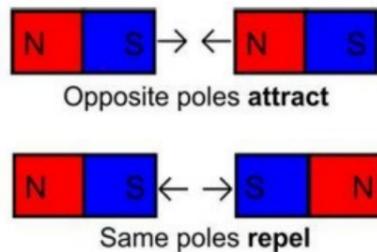
Moving on Rough Surfaces	Moving on Smooth Surfaces	Helpful Friction
Objects move differently on different surfaces because of a force called <b>friction</b> . <b>Friction</b> can be high on rough surfaces, causing objects to slow down more quickly.	An object will travel further on a smooth surface because there are fewer bumps. There is less <b>friction</b> to slow it down.	Bumpy surfaces, such as tyres or the soles of shoes, help to reduce the risk of sliding or skidding
		

## 3. What do magnets do?



Magnets are objects which push or pull without physically touching the object, instead using magnetic fields.

## 4. Can magnets push as well as pull?



Magnets have **poles: north and south.**

**Opposite poles attract** (north south).

**Like poles repel** (north north or south south).

Magnets can **push or pull without touching.**

## 5. Where do we use magnets in everyday life?



Magnetic objects are things that stick to a magnet, like iron, steel or some metals.



Non-magnetic objects are things that do not stick to a magnet, like wood, plastic, paper, or glass.

