

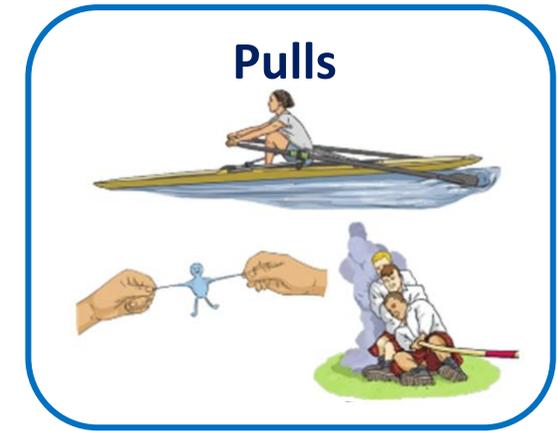
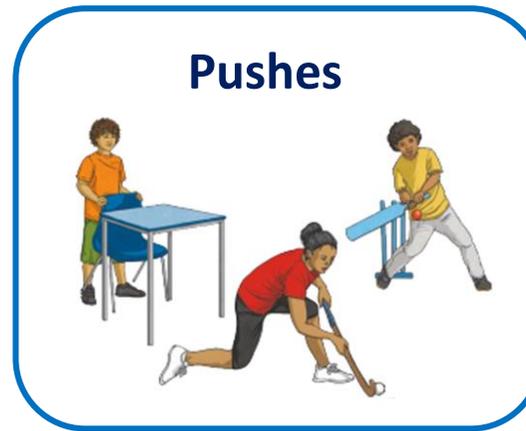


Year 3 – Autumn 2

Science: Forces and Magnets



Key Vocabulary	Definition
Force	A push or a pull.
Contact force	A force where objects need to touch each other to push or pull.
Non-contact force	A force where objects do not have to touch each other to push or pull. <i>A magnetic force is a non-contact force.</i>
Magnetic force	A force between magnets.
Magnet	A material that produces a magnetic field.
Attract	To pull together.
Repel	To push away.
Poles	North and South poles are found at different ends of a magnet.



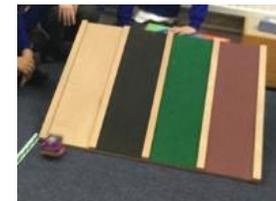
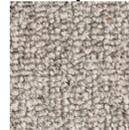
Some surfaces create more **friction** than others which means that objects move across them slower.

The **rougher** the surface, the **more friction** there is.

sandpaper



carpet



The **smoother** the surface, the **less friction** there is.

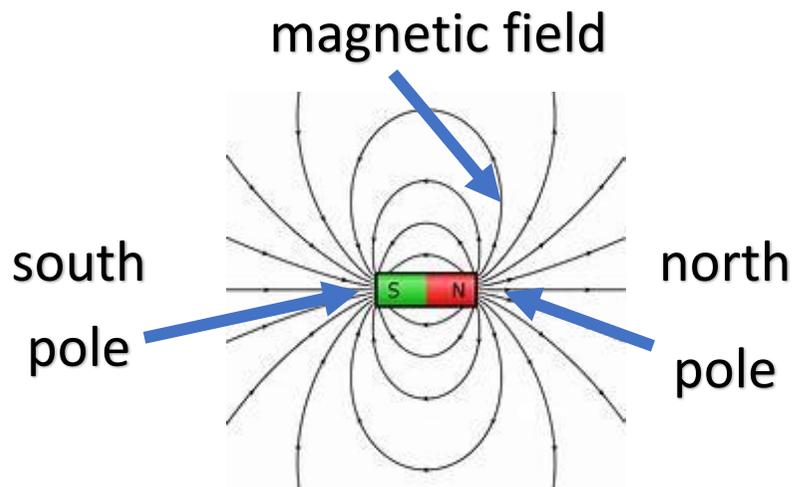
paper



wood

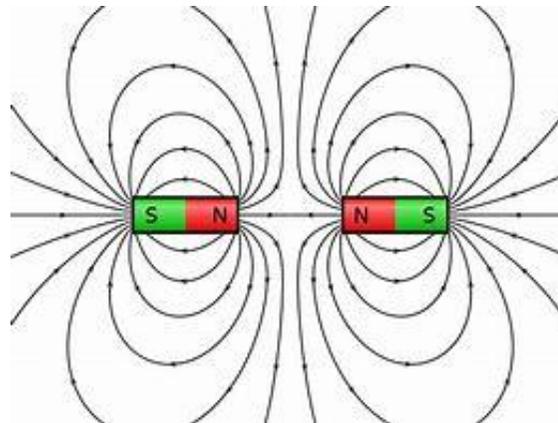


Magnets produce an area of magnetic force called a **magnetic field**.



Repel

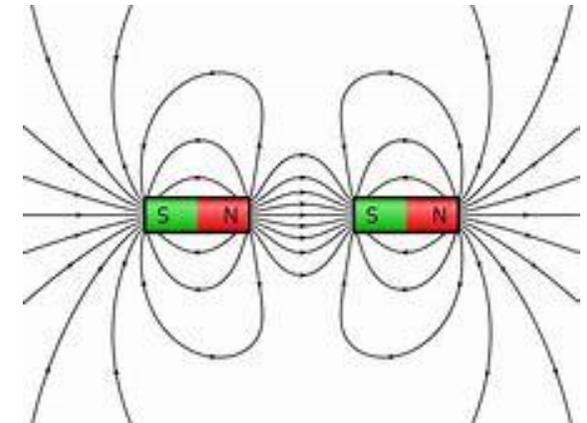
When magnets **repel**, they push each other away.



If north poles or south poles face each other, the magnets will repel.

Attract

When magnets **attract**, they pull together.



If a north pole is next to the south pole, then the magnets will attract.



Magnetic materials



Iron



Cobalt



Nickel



Non-magnetic materials



Aluminium



Gold



Copper



Steel contains different amounts of iron, so it will sometimes be magnetic.