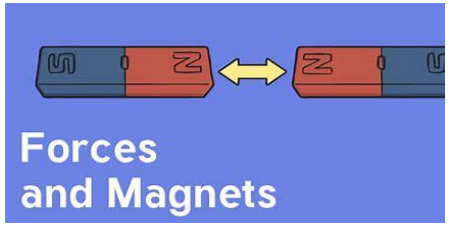
May the force be with you!



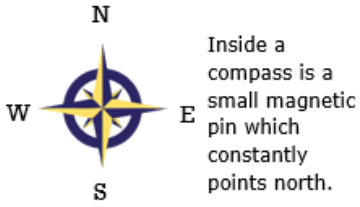
St. Mary's Church of England Primary School and Nursery

Be the BEST you can be

	Key Vocabulary
force	A push or pull action on an object
direction	A course along which something moves
strength	How strong something is
forward	A direction that is facing or travelling towards the front
backwards	A direction that is facing or traveling towards the back.
magnet	An object which produces an area of magnetic forece around itself
attract	Exert a force on an object that is firect towards the source
repel	A drive of force back or away from the source
predict	Say or estimate what will happen.

Did you know?

The most powerful magnet in the universe is a star called 'Magnestar'.



Inside a compass is a small magnetic pin which constantly points north.

General Knowledge

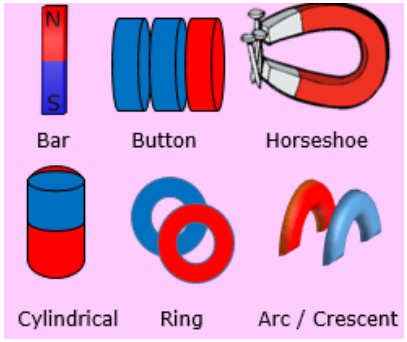
PUSHING AND PULLING

A force is a push or pull acting on an object as a result of the object's interaction with another object. Forces can make objects stop or start moving.

What is a magnet?

A magnet is a special object which produces an area of magnetic force around itself called a magnetic field.

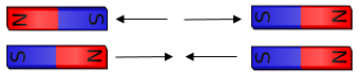
If a metal object enters this magnetic field, they will be attracted towards the magnet and end up sticking to it. (Non-metallic objects such as wood, plastic or fabric would not be attracted to it.)
Here is a range of different magnets:

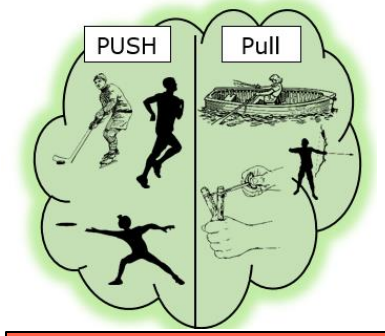


Magnetic Poles

When two magnets are close, they create pushing or pulling **forces** on one another. These forces are strongest at the ends of the magnets. The two ends of a magnet are known as the **north pole** (N) and the **south pole (S).**

The Same poles repel / The opposite poles attract





Friction

When objects are pushed or pulled, an opposing force can be felt. This opposite force is called 'friction'. Friction causes things to slow down or stop. The grip on our shoes stops us slipping. Therefore, friction is great.

Ice-skates on an ice-rink will move for a long time because there is very little friction. The rougher the surfaces, the greater the friction.

This rubbing of two surfaces can release energy, causing heat. (Try rubbing your hands together!)