

PHYSICS - 'What is a Magnet and what can it do?'

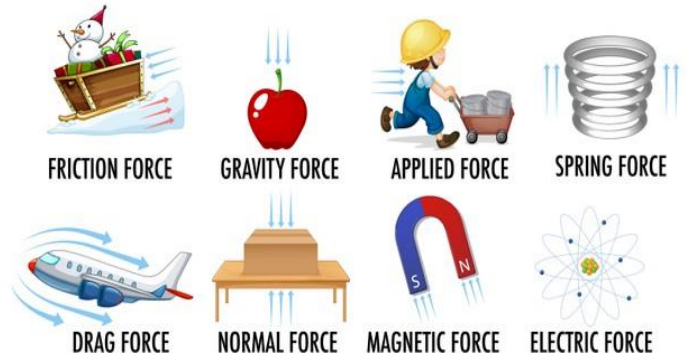
What is a force?

Forces are just pushes, pulls or twists in a particular direction.

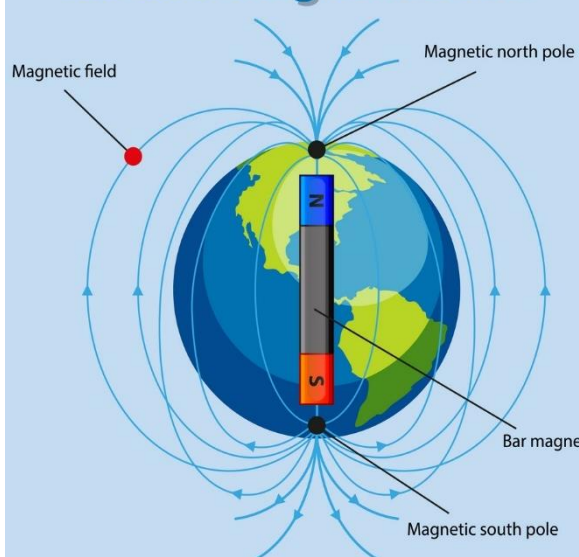
Balanced forces are the same size. They act in opposite directions. The object stays still.

Unbalanced forces are unequal and cause an object to move.

TYPES OF FORCE



Earth's magnetic field



What can a magnet do?

A magnet is a piece of metal that exhibits properties of magnetism, such as attracting other magnetic objects using a magnetic field. When two magnets are close, they create pushing or pulling forces on one another.

SUPERFACT: The gravitational force of the earth attracts smaller bodies to it.

Why do magnets repel and attract?

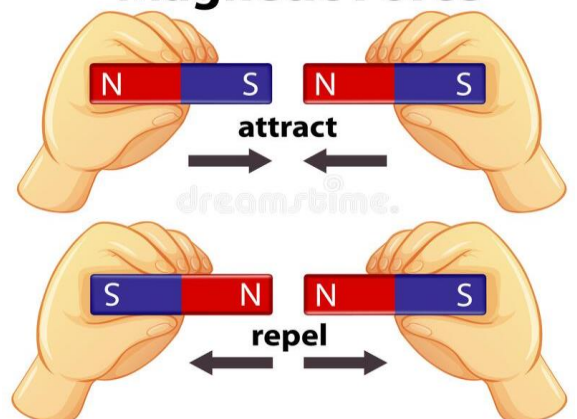
These forces are strongest at the ends of the magnets. The two ends of a magnet are known as the **north pole** and the **south pole**.

When put together two things happen.

Same poles (**N/N** or **S/S**) will **repel** each other (push away)

Different poles (**N/S** or **S/N**) will **attract** (draw closer)

Magnetic Force



Which materials are magnetic?

Magnetic refers to something that attracts **metal**, like iron or steel.

Which materials are non-magnetic?

Non-Magnetic refers to materials that do not attract metal such as wood, fabrics, glass, plastic and paper.

MAGNETIC OR NOT MAGNETIC? (answers)

MAGNETIC	NOT MAGNETIC
	
	
	
	

Magnetic vs Non-Magnetic Metals



Which metals are magnetic?

Iron, cobalt and nickel are magnetic. Metals that have these metals in them attract other magnets.

A steel paper clip contains iron while some 2p coins contain nickel.

Key vocabulary

Spelling	Definition
force	A push or pull that changes the movement or shape of an object.
magnet	A material or object that produces a magnetic field.
magnetic	Having the power to attract other magnetic objects.
non-magnetic	Not being attracted other magnetic objects.
repel	Drive back or force away
attract	The pull by a physical force causing objects to draw closer.
magnetic pole	Region at each end of a magnet where the magnetic field is strongest.
metal	Material that can be polished and shaped, conducts electricity and heat.