

Magnetism

1 What is magnetism?

Magnetism is a force that is exerted by a magnet.

Stronger magnets can lift heavier objects and attract magnetic objects that are further away.

2 Repel or attract?

A magnet consists of two poles: the north pole and the south pole.

There is an **attractive** force between the **opposite** poles of two magnets. You can feel the magnets pulling towards each other.



There is a **repulsion** force between the **same** poles of two magnets. You can feel the magnets pushing away from each other.



3 Magnetic materials?

Some metals, like iron and nickel, are magnetic.

Plastic, wood, fabric and glass are not magnetic.

Contact and non-contact forces

4

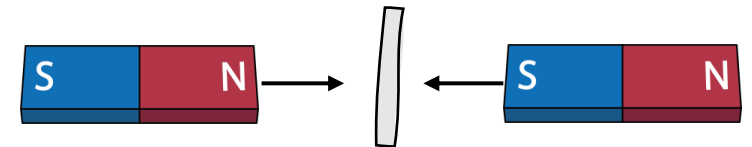
A contact force is a force that needs two objects to touch.

Friction is a contact force.



A non-contact force is a force that can act at a distance. Objects do not need to touch.

Magnetism is a non-contact force. Magnetic forces can act through materials.



Strength of magnetic force

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The stronger the magnet...

...the heavier the object it can attract and pull towards it.

...the greater the distance it can attract objects from.

