

Science Subject Knowledge Bank Year 3: Forces and Magnets

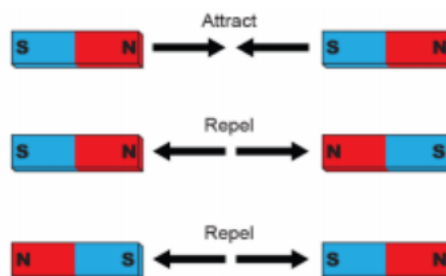
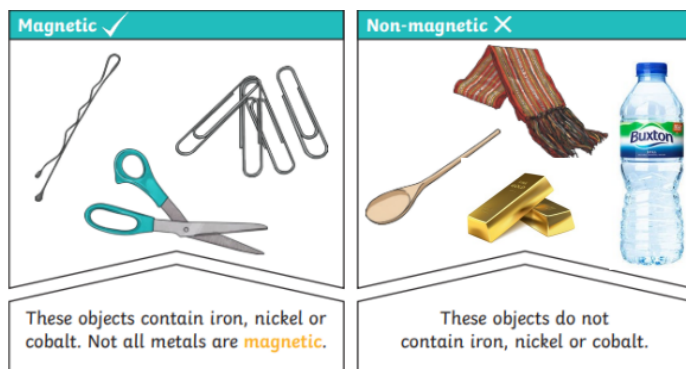
<u>Vocabulary</u>	<u>Definition</u>
Magnetic	An invisible force that causes objects to attract or repel each other.
Attract	To exert a force that draws something in.
Repel	To exert a force that pushes something away.

What are magnets?

- Magnets produce an area of force around them called a magnetic field.
- When objects enter this magnetic field, they will be attracted to or repelled from the magnet if they are magnetic.
- When magnets repel, they push each other away
When magnets attract, they pull together.

How do forces act upon magnets?

- Forces act in opposite directions to each other.
- When an object moves across a surface, friction acts as an opposite force.
- Friction is a force that holds back the motion of an object.
- Some surfaces create more friction than others which means that objects move across them slower.
- On a ramp, the force that causes the object to move downwards is gravity.
- Objects move differently depending on the surface of the object itself and the surface of the ramp.
- Magnetism is an invisible force. You can't see it, but you can see its effects.



How do magnets work?

- Magnets produce an area of force around them called a magnetic field.
- When objects enter this magnetic field, they will be attracted to or repelled from the magnet if they are magnetic.
- When magnets repel, they push each other away.
- When magnets attract, they pull together.

How are magnets useful?

- Magnets play a key role in a maglev train, an MRI machine, a crane, a button magnet and a compass.

