Year 3 Forces and magnets

Key vocabulary	
Attract	A force that pulls an object towards it
Contact-force	A physical power exerted against an object by touching it.
Force	The push or pull on an object with mass.
Magnetise	To cause an object to become temporarily or permanently magnetic.
Magnetism	A natural power of some objects and substances, especially iron, to attract other objects
Non-contact force	A physical power exerted against an object without touching it
Poles	The two opposite ends of a magnet
Repel	A force that pushes an object away

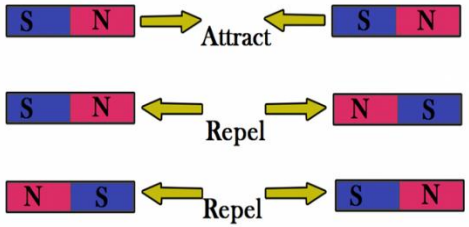
Key Knowledge

Preceding

- Say why a material might or might not be used for a specific job

Current

- A force is a push or pull that moves an object.
- For some forces to act there must be contact. Magnetic force can act from a distance.
- A magnet attracts magnetic material such as iron, nickel and stainless steel.
- The strongest parts of a magnet are the poles – named the north pole and the south pole.
- Opposite poles attract and pull towards each other.
- Like poles (north and north, south and south) repel and push each other away. See diagram
- A magnet does not need to touch the object that it attracts or repels
- When an object moves across a surface, the texture of the surface will affect how quickly it moves.



Scientific Enquiry

Identifying and classifying

Which materials are magnetic?

Comparative testing

Which magnet is the strongest?

Observing over time

If we magnetise a pin, how long does it stay magnetised for?

Pattern Seeking

Does the size and shape of a magnet affect how strong it is?