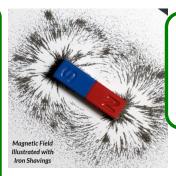
## Science - Year 3—How do magnets work?



## **Glossary:**

- Magnet—an object which produces a magnetic force that pulls certain objects towards it.
- Magnetic—objects which are attracted to a magnet are magnetic. Objects containing iron, nickel or cobalt metals are magnetic.
- Magnetic field—the area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.
- Poles—north and south poles are found at different ends of a magnet.
- Repel—repulsion is a force that pushes objects away. For example, when a north pole is placed near the north pole of another magnet, the tewo poles repel (push away from each other).
- Attract—Attraction is a force that pulls objects together. For example, when a north pole is placed near a south pole of another magnet, the two poles attract (pull together).

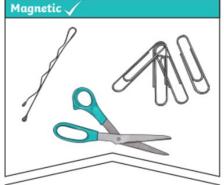


A magnetic field is invisible. You can see the magnetic field here though. This is what happens when iron filings are placed on top of a piece of paper with a magnet underneath.



The needle in a compass is a magnet. A compass always points north-south on Earth.





These objects contain iron, nickel or

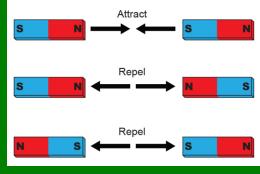
cobalt. Not all metals are magnetic.



These objects do not contain iron, nickel or cobalt.

## **Sticky Knowledge:**

 To know that magnetic forces can act at a distance.



 To know | that a magnetic

field is the area around a magnet that has a magnetic force which will pull magnetic items towards it.

- To know magnets produce a force that attracts some materials.
- To know how to compare and group together a variety of everyday magnetic and non-magnetic materials.
- To know how to gather, record and present data.
- To know how to use results to draw simple conclusions.
- To know how to use scientific evidence to answer questions.
- To know that opposite poles attract and poles that are the same will repel.
- To know that repulsion and attraction are forces that pull or repel items.
- To know how to compare and group together a variety of everyday magnetic and non-magnetic materials.