

Key Vocabulary Overview	
magnet	a material that can attract (pull) or repel (push) other magnetic materials
magnetic	describes a material that can be attracted or repelled by a magnet
magnetic force	a non-contact force produced by a magnet
non-contact force	a force that occurs between objects that are not touching
poles	the two points at opposite ends of a magnet where the magnetic force is strongest: the north pole and south pole
attract	to cause an object to move towards another object
repel	to cause an object to move away from another object

Types of Magnets

The diagram illustrates seven different types of magnets with arrows pointing from text labels to the corresponding magnet shapes:

- horseshoe magnet**: A red U-shaped magnet with two white poles.
- bar magnet**: A rectangular magnet with a blue end marked 'N' and a red end marked 'S'.
- square magnet**: A square-shaped magnet with a central circular hole.
- cylindrical magnet**: A tall, grey cylindrical magnet.
- ring magnet**: A grey toroidal (donut-shaped) magnet.
- button magnet**: A small, blue cylindrical magnet with a flat top.
- arc/crescent magnet**: A grey, curved magnet.

Poles

All **magnets** have a north **pole** and a south **pole**.

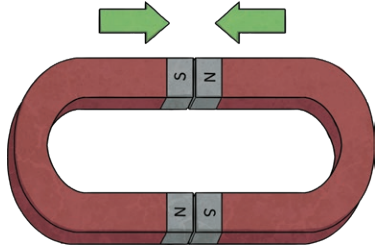
The diagram shows three magnets with their poles labeled:

- bar magnet**: A rectangular magnet with a red end labeled 'N' (north) and a blue end labeled 'S' (south).
- ring magnet**: A toroidal magnet with a red top surface labeled 'north' and a blue bottom surface labeled 'south'.
- horseshoe magnet**: A U-shaped magnet with a red pole labeled 'N' and a blue pole labeled 'S'.

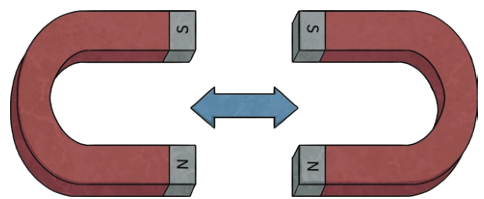
Key Vocabulary Overview	
metal	a material that is usually hard and shiny, such as iron and aluminium
non-metal	a material that is not a metal
iron	a strong, hard metal that is magnetic
steel	a strong, hard metal that is magnetic, made by combining iron and carbon
aluminium	a flexible, light metal that is not magnetic, used for cans and kitchen foil

Magnetic or Non-Magnetic
Magnetic objects are mostly made of iron , steel (which contains iron), nickel and cobalt.

Attract or Repel?



Magnets can **attract** (pull towards) each other.
Opposite **poles attract**.



Magnets can **repel** (push away from) each other.
Identical **poles repel**.

Magnetic Materials

Objects that are **magnetic** are made of **metal**. However, not all **metals** are **magnetic**. Materials such as plastic, wood, glass, paper, fabric and stone are non-magnetic materials.

Magnetic Metals

Magnetic	Non-Magnetic
iron steel	copper aluminium gold
