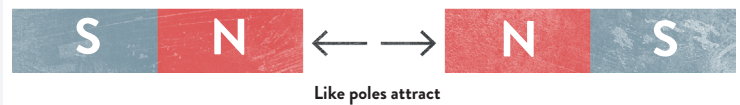


# FORCES

## KEY FACTS

- 
- Magnetism is a **non-contact force**: it does not need to be physically touching another object to have an effect.
- A **magnet** is an object that produces a **force** that pulls on only a few other metals: iron, nickel and cobalt.
- The **magnetic field** is the area around the magnet in which magnetism is felt.
- The most common forms of magnet are bar magnets, horseshoe magnets.
- The magnetic force is strongest at the ends of a magnet, which are called **poles**.
- Like poles repel: unlike poles attract.**
- Some uses of magnets in everyday life include: fridge doors, storing data on computers, Maglev trains, medical equipment (Magnetic Resonance Imaging)
- The Earth's magnetic field is caused by the molten metal in the Earth's core.

## MAGNETIC FORCE



## EVERYDAY USE OF MAGNETS



Magnets keep fridge doors closed.



Headphones contain magnets that turn electrical signals into sound.



Debit Cards have special magnetic patterns inside that contain coded information linked to your bank account.

## WORKING SCIENTIFICALLY



OBSERVING



GROUPING



COLLECTING AND RECORDING DATA



PRESENTING FINDINGS



TESTING/EXPERIMENTING



MEASURING



WRITING SCIENTIFICALLY

## KEY VOCABULARY



- 
- Force**: a push, pull, twist or turn caused when two objects interact with each other.
- Magnet**: an object or device that attracts iron or another magnetic material.
- Contact**: touching.
- Non-contact**: not touching.
- Attract**: pull towards.
- Repel**: push away.
- Magnetic**: attracted to a magnet.
- Non-magnetic**: not attracted to a magnet.
- Iron**: a metal that can be made into a magnet.
- Pole**: the area of a magnet where the magnetic force is strongest.
- Magnetic North**: the direction of the Earth's magnetic North pole.

## SIGNIFICANT PEOPLE



**Archimedes**, the famous scientist from ancient Greece, is supposed to have pulled the nails out of enemy ships by using lodestone (magnetite). The ships then came apart, causing them to sink.