Knowledge Organiser – Coasts (Year 3)

Key Vocabulary

Arches — **Arches** form at headlands where powerful waves pound at both sides. The waves erode (wear away) the rock to form sea caves. The waves eventually break through the headland, creating an **arch**.

Beach — A **beach** is an area of sand or stones beside the sea.

Caves — Powerful waves crash against again and again, causing the rock at sea level to wear away (erode). This process creates sea **caves** at the base of cliffs.

Harbour — A **harbour** is an area of the sea which is partly enclosed by land or strong walls, so that boats can be left there safely.

Pier — A **pier** is a platform sticking out into water, usually the sea, which people walk along or use when getting onto or off boats.

Seaside — You can refer to an area that is close to the sea, especially one where people go for their holidays, as the **seaside**.

Stack — A sea **stack** is a column of rock that is cut off from the coastline.

Rocks along the coast get constantly battered by powerful waves. Where the coastline juts out into the sea at headlands, the rock is battered by waves from both sides.

The breaking waves erode the rock bit by bit, forming sea caves and arches.

Softer rock falls away more quickly than harder rock.

When the rock above is left without any support, it collapses under its own weight, forming cliffs and stacks.

White Cliffs of Dover

Headlands are formed when the sea attacks a section of coast with alternating bands of hard and soft rock.

Caves occur when waves force their way into cracks in the cliff face. The water contains materials that grind away at the rock until the cracks become a cave. When the rock above is left without any support, it collapses under its own weight, forming cliffs and stacks.

If the cave is formed in a headland, it may eventually break through to the other side forming an **arch**.

The arch will gradually become bigger until it can no longer support the top of the arch. When the arch **collapses**, it leaves the headland on one side and a **stack** (a tall column of rock) on the other.

The stack will be attacked at the base in the same way that a wave-cut notch is formed. This weakens the structure and it will eventually **collapse** to form a **stump**.

Knowledge Organiser – Magnets (Year 3)

Key Vocabulary

Force	Forces are the things that allow the movement of all objects around us.
Magnet	An object which produces a magnetic force that pulls certain objects towards it.
Attract	To pull together. The north pole of a magnet attracts (pulls) the south pole of another magnet and vice-versa.
Repel	To push away. The north pole of a magnet repels (pushes away) the north pole of another magnet and vice-versa.
Pole	The ends of a magnet are called the poles (the north and south poles). The magnetic force is strongest at the poles.
Magnetic field	The area around a magnet in which there is magnetic force.
Aluminium iron, nickel	Metals. Some metals such as iron and steel (which contains iron) are attracted to magnets. Aluminium is not attracted to magnets.

Magnetic materials

Iron

Stainless steel

Steel

Nickel

Non-magnetic materials

Aluminium

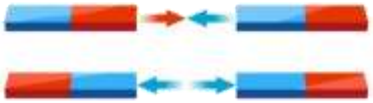
Wool

Plastic

Wood

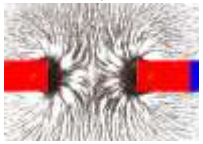
Pottery

Opposite poles attract

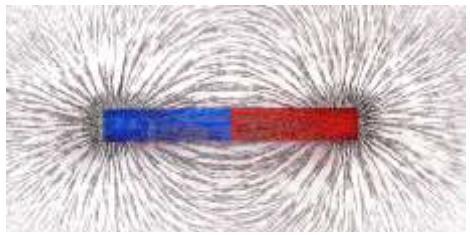


Same poles repel

(push away from each other as you can see with the iron filings in this picture)



A magnetic field is invisible. However, you can see a magnetic field in this picture where iron filings have been sprinkled on top of a piece of paper which has a magnet underneath it.



The needle in a compass is magnetic. It always points north-south on Earth.