



The UK – John O’Groats to Land’s End	
What you will know by the end of the unit:	
Geographical skills and knowledge:	
<ul style="list-style-type: none"> Identify countries of the UK (their capital cities, flags and symbols) Identify UK counties, including the county they live in and those surrounding it Identify UK’s main hills and mountains (e.g. Ben Nevis, Scarfell Pike and Snowdon) Identify UK seas and rivers, e.g. River Severn Use aerial photographs to compare land use in Coventry and land use in Falmouth. Create a key using symbols to show what different features are. Research how the population of Coventry has changed over time. Present this in a graph. Compare this to a similar graph showing the population of Falmouth. Compare different sources for population numbers. Which is the most reliable? Why is it hard to measure population? Land use and economy - Coastal areas attract tourism, and residential areas. Coastal erosion can threaten land use, and so beach protection measures, such as rock armour, groynes, and sea walls, are created. Holding back the floods – e.g. Coastal village of Coverack in Cornwall Impact of tourism in Cornwall Impact of trawling on the Cornish reef and sustainable fishing 	

Key Vocabulary	
	<p>City - a large town. Coventry is a city.</p> <p>Coastal - an area of land close to the sea</p> <p>Compass points - any of the main points of a compass: north, south, east, west, north-east, north-west, south-east, south-west</p> <p>Country - an area of land that is controlled by its own government, e.g. England</p> <p>County - a region of Britain or Ireland which has its own local government, e.g. West Midlands and Cornwall</p> <p>Human features - features of land that have been impacted by human activity</p> <p>Landmark - a building or feature which is easily recognised</p> <p>Landscape - everything you can see when you look across an area of land, including hills, rivers, buildings, trees, and plants.</p> <p>Physical features - natural features of land, e.g. lake</p> <p>Population - all the people who live in a country or area</p> <p>Rural - places that are far away from large towns or cities</p> <p>Topographical - the physical features of an area of land, for example its hills, valleys, and rivers</p> <p>Urban - belonging to, or relating to, a town or city</p>

Characteristics of the UK - Landmarks			Characteristics of the UK - Physical Features		
Canterbury Cathedral	Stonehenge	Angel of the North	The River Severn	Ben Nevis	The Lake District
Clifton Suspension Bridge	Roman Baths	Edinburgh Castle	The White Cliffs of Dover	Land’s End	The Needles

Oceans, Seas and Rivers	
What will I know by the end of the unit	
Geographical skills and knowledge:	
<ul style="list-style-type: none"> Use the index in atlases to find oceans, seas and rivers Label maps to show where oceans, seas, lakes and rivers can be located in the UK Complete a table to show the length of different rivers Describe the features of a river using the correct terminology Describe how oxbow lakes are formed because of erosion and deposition Explain how erosion and deposition have an effect on meanders and deltas Understand Ocean processes, e.g. waves are created by the movement of air across the sea. Tides are created by the gravitational pull of the moon. Understand how coastal land forms are formed, e.g. The sea’s waves lead to hydraulic action and erosions of the land. The land is made up of different rocks, some hard some soft, leading to bays and headlands. Further erosion leads to cracks, caves, arches, stacks and stumps. Understand what coasts are, e.g. where the land meets the ocean. This can take different forms such as beach (sand, shingle, pebble) and cliffs. Understand the different layers of the ocean Explain how the vegetation and animal life changes in the different layers of the ocean Investigate the effects of climate change and plastic pollution on oceans, seas and rivers 	

Key Vocabulary	
<p>Features of a River</p> <p>Sometimes, two meanders can join together to form a ‘shortcut’. Water will flow down the shorter route, deposition will block off the old route and this will create an oxbow lake.</p>	<p>Rivers - natural streams of fresh water that flow into seas, oceans and lakes.</p> <p>Confluence - where two rivers join and become a larger river</p> <p>Course - the channel along which the river flows</p> <p>Delta - an area of low land where a river splits and spreads out into several branches before entering the sea</p> <p>Deposition - when a substance has been left somewhere as a result of a process</p> <p>Erosion - the gradual destruction and removal of rock or soil in a particular area by rivers, the sea, or the weather</p> <p>Estuary - the wide part of a river where it joins the sea</p> <p>Lake - a large area of fresh water, surrounded by land</p> <p>Meander - a large bend in a river</p> <p>Mouth - where a river flows into the sea</p> <p>Sedimentary - solid material that settles at the bottom of a liquid, especially earth and pieces of rock that have been carried along and then left somewhere by water, ice, or wind</p> <p>Source - where something comes from</p> <p>Spring - a natural outflow of ground water</p> <p>Stream - a small narrow river</p> <p>Tributary - a stream or river that flows into a larger one</p> <p>Water cycle - the circulation of the earth’s water</p> <p>Waterfall - a place where water flows over the edge of a steep, high cliff in hills or mountains, and falls into a pool below</p> <p>Vegetation - plants, trees and flowers</p>

Layers of the Ocean	
	<p>Oceans - very large areas of salt water that cover approximately two-thirds of the Earth’s surface.</p> <p>Sunlight zone (0 – 200m)</p> <p>Twilight zone (200 – 1000m)</p> <p>Midnight zone (1000 – 4000m)</p> <p>Abyss (4000 – 6000m)</p> <p>Trench (lower than 6000m)</p> <p>Seas - smaller areas of salt water that separate oceans and land.</p> <p>Current - a steady and continuous flowing movement of some of the water in a river, lake, or sea</p>

Mixtures and Reactions—Year 5—Science

Did you know?

Irreversible changes often result in a new product made from the old materials.

Different materials are used to do particular jobs based on their properties; conductivity, flexibility, hardness, insulation, magnetism, solubility, transparency.

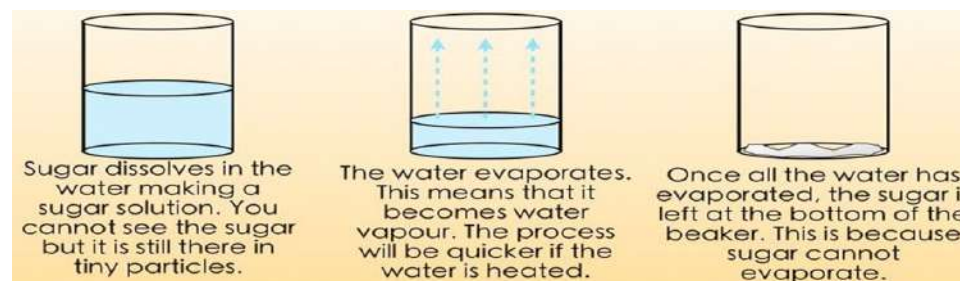
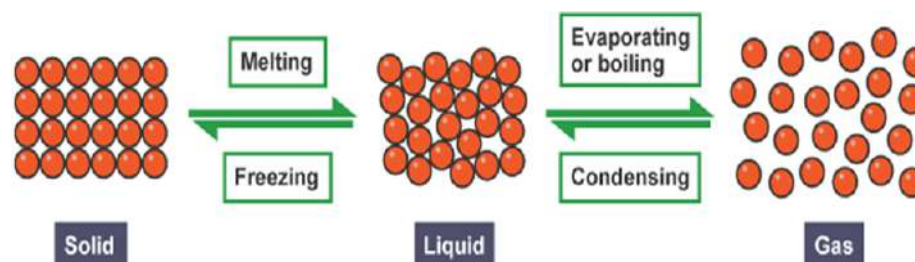
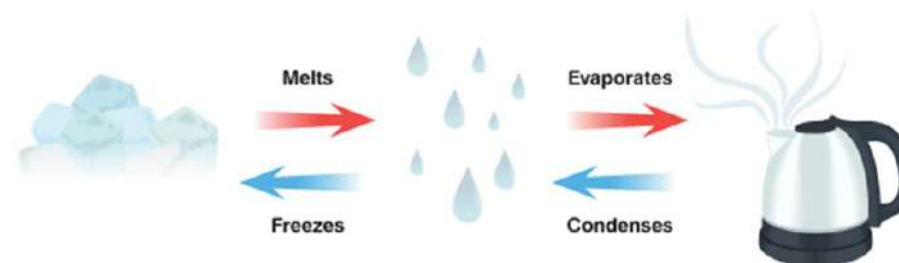
Key Vocabulary

Conductor	A material or device which allows heat or electricity to carry through
Dissolve	When something solid mixes with a liquid and becomes part of the liquid
Evaporation	The process of turning from liquid to vapour
Flexible	Capable of bending easily without breaking
Gas	An air-like fluid substance which expands freely to fill any space available
Insulator	A substance which does not readily allow the passage of heat or sound
Irreversible	Cannot be reversed back to its original state
Liquid	A substance that flows freely but can be measured by volume e.g. water or oil
Magnetic	Capable of being magnetised or attracted by a magnet
Material	The matter from which a thing is or can be made from
Opaque	Not able to be seen through, not transparent
reversible	Able to be reversed back to its original state
Solid	Firm and stable in shape, not a liquid or fluid
Soluble	Able to be dissolved, especially in water
Thermal	Relating to heat
transparent	Allows light to pass through so that objects behind can be seen

Key Concepts

- know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

- demonstrate that dissolving, mixing and changes of state are reversible changes
- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda



Forces—Year 5—Science

Key Concepts

By the end of this term you will know how to...

- about the forces of gravity and friction and investigate the friction of different surfaces.
- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms including levers, pulleys and gears allow

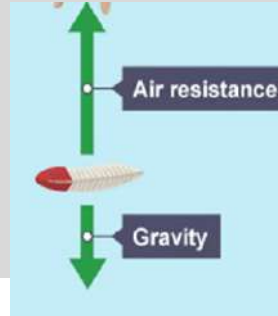
Key Vocabulary

Air resistance –	A force that is caused by air with the force acting in the opposite direction to an object moving through the air
Force –	A push or pull upon an object resulting from its interaction with another object
Friction –	The resistance that one surface or object encounters when moving over another
Gravity –	The force that attracts a body towards the centre of the earth
Water resistance -	A force that is caused by water with the force acting in the opposite direction to an object moving through the water
Mass –	The weight measured by an objects acceleration under a given force or by the force exerted on it by gravity
Levers –	A rigid bar resting on a pivot that is used to move a heavy or firmly fixed load
Gears –	A toothed wheel that works with others to alter the relation between the speed of a driving mechanism (e.g. engine) and the speed of the driven parts (e.g. the wheels)
Pull force –	To draw or haul towards oneself or itself, in a particular direction
Pulleys –	A wheel with a grooved rim around that changes the direction of a force applied to the cord
Push force –	To move something in a specific way by exerting force

Did you know?

The Moon has a smaller mass than the Earth so the gravitational pull of the Moon is smaller than it is on Earth.

Jupiter has a greater mass than Earth so the gravitational pull of Jupiter is stronger than on Earth



Air resistance is a form of friction—the air particles hit the front of the object causing it to slow down as it moves through the air.

Cross curricular opportunities

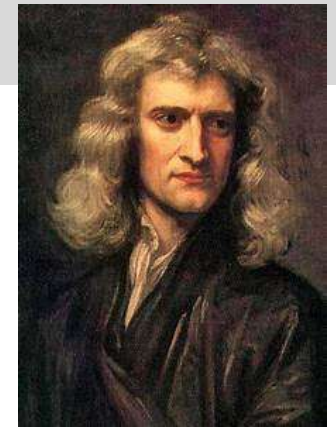
Maths

Mass— this is measured in kg and measures how much matter is in the object

Weight— measuring how strongly gravity is pulling the object down. This can be done with a force meter measured in Newtons (N)

Isaac Newton is famously thought to have developed his theory of gravity when he saw an apple fall from a tree.

Force meter— measures the force of an object and this is measured in Newtons.



Balanced and unbalanced forces

