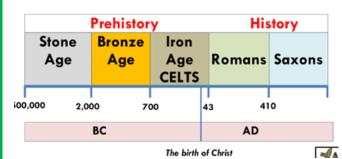
What was life like in an iron age fort and why were they important?

Vocabulary	Definition.	
Fort	A structure used to keep people stay safe from enemies	
Defence	Something that protects people from being hurt or attacked.	
Ditch	A deep, narrow hole dug in the ground, often around a fort.	
Iron age	A time when people started using iron to make tools and weapons.	
Smelting	Heating rocks to get metal out of them	
Trade	Giving something to someone and getting something else in return.	
Tribe	A group of people who live together and share the same way of life.	
Kingdom	A place ruled by a king or queen.	
Hill fort	A fort built on a hill to help people see far and stay safe.	
Roundhouse	A round house with a roof made of straw, used a long time ago.	
Celt	A person who lived in parts of Europe a very long time ago, especially during the Iron Age.	
Archaeologist	A person who digs in the ground to find old things and learn about the past	
Artefact	An old object made or used by people long ago.	
Rampart	A big wall of earth or stone that protects a fort.	
Source	A piece of evidence from the past that tell us about that time.	

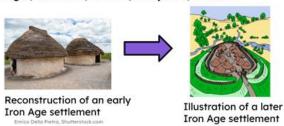
wattle and daub process being used wooden ramparts roundhouses straw roof

Key Knowledge

- The Iron age was around 3000 years ago and lasted from 700BC to 43AD
- The Celts lived during the iron age.
- The Iron age came after the bronze age and before the Romans
- An artefact is an object form the past that was made by humans.
 They are primary sources
- Iron age settlements became much larger.
- Celts built forts on hills so they were better protected
- Celts protected their forts with wooden ramparts
- The celts used patterns such as tri spirals and celtic knots
- The celts used coins which helped with trading goods.



Describe how settlements changed during the Iron Age. Use the following words in your answer: larger, farmland, hillfort, ramparts, enclosed







Larkhill Primary - Science

and: Chamistry

Topic: States of Matter

Year: 3/4 Strand: Chemistry

Vocabulary			
condensation	small drops of water which form when water vapour or steam touches a cold surface , such as a window		
cooling	lowering the temperature of something		
evaporation	to turn from liquid into gas; pass away in the form of vapour .		
freezing	If a liquid or a substance containing a liquid freezes , it becomes solid because of low temperatures		
freezing point	The freezing point of a particular substance is the temperature at which it freezes . The freezing point of water is OOC.		
gas	a form of matter that is neither liquid nor solid . A gas rapidly spreads out when it is warmed and contracts when it is cooled .		
heating	raising the temperature of something		
liquid	in a form that flows easily and is neither a solid nor a gas .		
melting	to change from a solid to a liquid state through heat or pressure		
melting point	The melting point of a particular substance is the temperature at which it melts .		
particles	a tiny amount or small piece		
precipitation	rain, snow, sleet, dew, etc, formed by condensation of water vapour in the atmosphere		
process	A series of actions used to produce something or reach a goal		
properties	the ways in which an object behaves		
solid	having a firm shape or form that can be measured in length, width, and height; not like a liquid or a gas		
temperature	a measure of how hot or cold something is		
vibrations	when something vibrates , it shakes with repeated small, quick movements		
water cycle	the process by which water on the earth evaporates, then condenses in the atmosphere, and then returns to earth in the form of precipitation.		
water vapour	water in the gaseous state, especially when due to evaporation at a temperature below the boiling point.		

What should I already Know?

I can distinguish between an object and the material from which it is made I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

I can describe the simple physical properties of a variety of everyday materials I can compare and group together a variety of everyday materials on the basis of their simple physical properties

I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

	19 mayor	
	What I will know by the end of the unit/	
What a particle is.	 Particles are what materials are made from. They are so small that we cannot see them with our eyes. The properties of a substance depend on what its particles are like, how they move and how they are arranged Particles behave differently in solids, liquids and gases. 	
. What a solid is	 In the solid state, the material holds its shape. Solids have vibrating particles which are closely packed in and form a regular pattern. This explains the fixed shape of a solid and why it can't be poured. Solids always take up the same amount of space 	
What a liquid is	 ✓ In the liquid state, the material holds the shape of the container it is in. ✓ This means that liquids can change shape, depending on the container. ✓ Liquids have particles which are close together but random. ✓ Liquid particles can move over each other. ✓ Liquids can be poured. 	
What a gas is.	 ✓ In the gas state, particles can escape from open containers. ✓ Gases have particles which are spread out and move in all directions. 	





Liquid



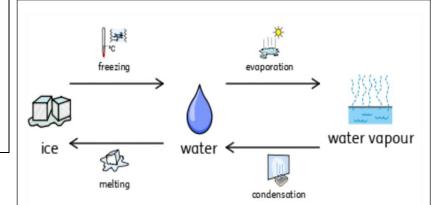
Gas

What happens to the **particles** in water when it is **heated** or

cooled?

- When water (in its liquid form) is heated, the particles start to move faster and faster until they have enough energy to move about more freely. The water has evaporated into a water vapour.
- When water is cooled, the particles start to slow down until a solid structure (ice) is formed. The water has frozen.
- The temperature at which water turns to ice is called the freezing point. This happens at OoC.

Changes of state in relation to water.



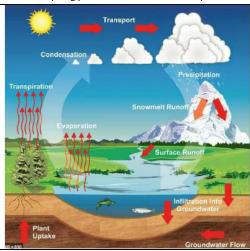
What I will know about the different changes of state.

What	Explanation	Name of process	Example
Solid to Liquid	When a solid melts it changes to a liquid.	Melting	When an ice cube melts.
Liquid to Gas	A liquid evaporates into a gas when it is heated.	Evaporation	When water on a roof is warmed up and turns to steam.
Gas to Liquid	When a gas it cooled it condenses into a liquid.	Condensatio n	When steam from the shower cools on the mirror it turns to water.
Liquid to Solid	When a liquid freezes it turns into a solid.	Freezing	When the water in a pond freezes, it turns to ice.

At what temperature does each happen?				
Boiling	Water boils at exactly 100°C (A hot bath is about 40°C)			
Melting	Different solids melt at different temperatures: lce melts at 0 degrees Celcius (0°C). Chocolate melts at about 35°C			
Freezing	Water freezes at 0 degrees Celcius (0°C).			
Evaporation and Condensation	Water can evaporate and condense at any temperature. But, the warmer it is the faster the evaporation takes place.			

What I will know about the Water Cycle

Water on earth is constantly moving. It is recycled over and over again. The recycling process is called the water cycle.



a. Water evaporates into thin air

The sun heats up the water on land, and in rivers, lakes and seas and turns it into water vapour. The water vapour rises into the air.

b. Water vapour condenses into clouds

Water vapour in the air cools down and changes back into tiny drops of liquid water, forming clouds.

c. Water falls as rain

The clouds get heavy and water falls back to the earth in the form of rain or snow.

d. Water returns to the sea

Rain water runs over the land and collects in lakes or rivers, which takes it back to the sea. The cycle starts all over again.

Investigate!

Group materials according to their states.

Explain the particle structure of solids, liquids and gases.

Explore the effect of temperature on substances such as chocolate, butter, cream. Compare their melting points and place them in a table.

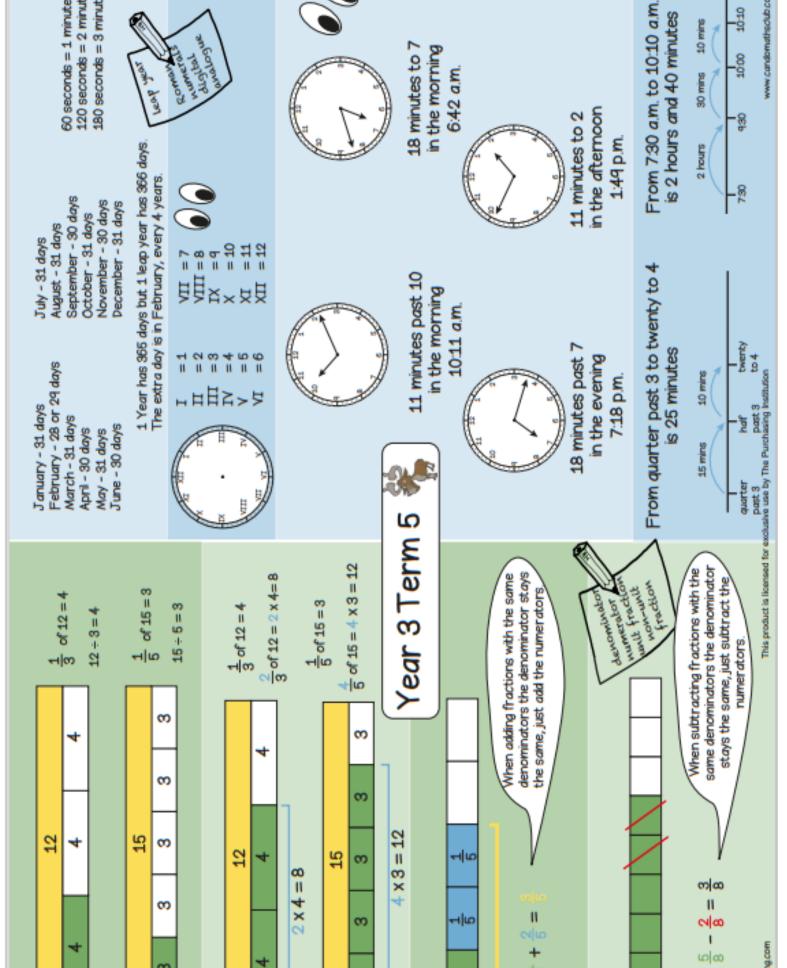
Research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid.

Observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line, and investigate the effect of temperature on washing drying or snowmen melting.

Analyse and interpret different forms of data (tables, graphs) to show the effects of temperature on states of matter.

Present what you know about the water cycle using a variety of skills using appropriate vocabulary.

Observe evaporation and condensation in action by using bowls of water and mirrors /glass.



6:42 a.m.

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10 mins

30 mins

120 seconds = 2 minutes 180 seconds = 3 minutes

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60 seconds = 1 minute