



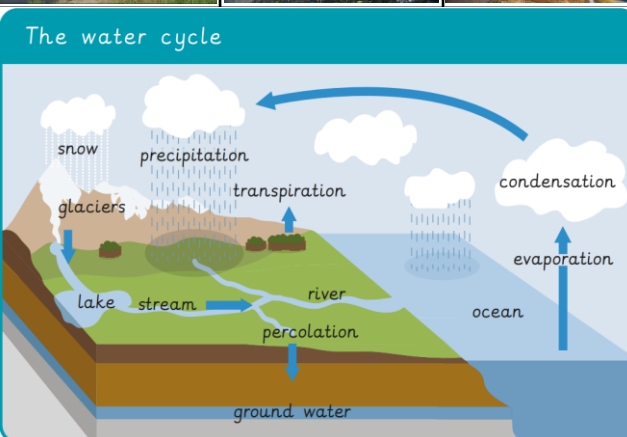
Ridgeway Farm CE Academy - Knowledge Organiser

Topic	Geography - Rivers	Theme	Explorers	Year Group	4
Key Question	What are rivers and how are they used?				

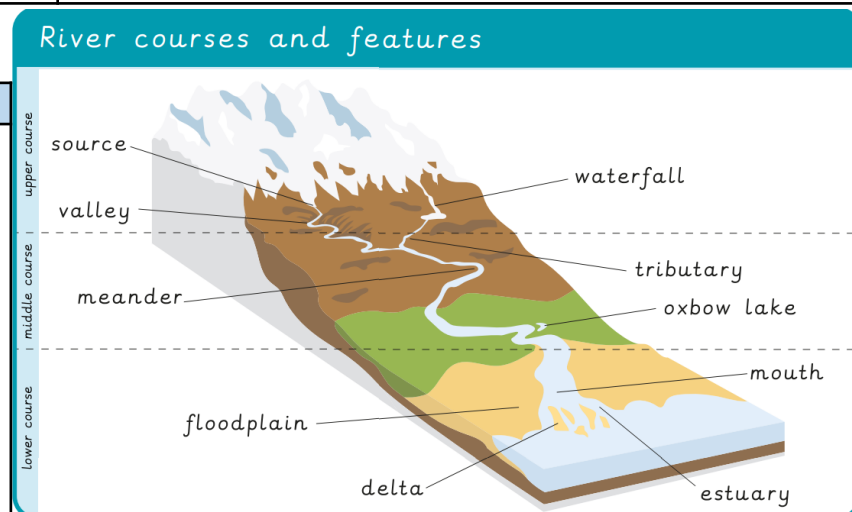
What should I already know?	Learning outcomes	Vocabulary	
<ul style="list-style-type: none">❑ The seven continents, five oceans and surrounding seas of the United Kingdom.❑ The names of some key rivers around the world including the Thames and Nile.❑ The water cycle and where our water comes from.❑ How sedimentary rocks are formed.❑ The effects of climate change on the poles.	<ul style="list-style-type: none">❑ Describe how the water cycle works.❑ Recognise key features and courses of a river.❑ Name and locate some of the world's longest rivers.❑ Describe how rivers are used.❑ Identify and locate human and physical features on a map.❑ Collect data on the features of a local river.❑ What are rivers and how are they used?	evaporation	The process in which warm water turns from a liquid to a gas in the air (water vapour).
		condensation	The process in which water vapour rises in the air, cools down and turns into small water droplets.
		dam	A man-made structure that helps to restrict and control the flow of water in a river.
		delta	A wide area near where a river meets the sea which features sand and sediment.
		erosion	The gradual destruction and removal of rock or soil in particular areas by rivers, the sea or the weather.

How are rivers used?	Vocabulary	
<ul style="list-style-type: none">• Rivers are important habitats for plants and animals.• They provide a supply of food and drink for humans and animals.• Rivers can help crops grow by dispersing nutrients and making soil more fertile.• Rivers contain valuable minerals such as gold and diamonds which people can find and sell.• They offer transport routes for people and goods.• Rivers can be used for leisure activities such as boating, swimming, fishing and many other fun activities.• Many settlements and communities are built along rivers.• Some people live on rivers in houseboats.• Water from rivers can be used for irrigation on farmland.• Renewable energy, called hydroelectric power, can be generated by moving water.	estuary	The wide part of a river where it joins the sea.
	meander	A bend in the river.
	mouth	Where the river flows into another body of water. It could be where the river meets the sea, a lake or a larger body of water.
	oxbow lake	When part of a river gets cut off through erosion.
	precipitation	The process in which water falls from clouds to the ground, in the form of rain, sleet or snow.
	river	A flow of fresh water across the land into a lake, sea or ocean.
	sediment	Natural material that is carried and deposited by a river.
	settlement	A place where people create a community.
	source	The start of the river, usually found in the hills or mountains.
	stream	A small narrow river.
	tributary	A stream or river that flow into a larger river.
	valley	An area of low land between two hills or mountains, usually with a river running through it.

Notable Rivers				
River Ray - River in Wiltshire	Thames - River in England	Danube River - River in Europe	Nile - River in Africa.	Amazon River - River in South America
				



Water cycle
<ul style="list-style-type: none">• Water on Earth is always moving. It is constantly being recycled. This is called the water cycle.• The water cycle is the journey water takes as it moves from the land to the sky and back again.
Stages of the water cycle:
1. The Sun heats up the water in the sea, lakes, rivers and on land. The warm water turns into a gas called water vapour. Water evaporates into the air.
2. As the water vapour rises, it gets colder and condenses. Water vapour condenses to form clouds. The clouds are moved by the wind.
3. As the droplets of water in the clouds get larger, they get heavier. Eventually, water falls as precipitation.
4. The water returns to the sea, and the cycle starts again.





Key learning:

- ☐ To explore solids, liquids and gases.
- ☐ To sort materials into solids, liquids and gases and explain why some cannot be categorised easily.
- ☐ To observe how some materials can change states between a solid, liquid and gas.
- ☐ To explore equipment used to measure temperature.
- ☐ To plan and investigate a melting experiment.
- ☐ To identify the part played by evaporation and condensation in the water cycle.
- ☐ To plan, investigate and evaluate an evaporation experiment.

Vocabulary

boiling	the change of state from a liquid to a gas, which happens quickly when heated and creates bubbles of the gas
condensation	the change of state from a gas to a liquid
controlled variable	things in an experiment that we need to ensure remain constant
dependent variable	the things that are being measuring or focused on during the experiment
evaporation	the change of state from a liquid to a gas, which happens slowly from the surface of the liquid
freezing	the change of state from a liquid to a solid
gas	a state of matter with no fixed shape and no fixed volume
independent variable	the one thing that you change in an experiment
liquid	a state of matter with no fixed shape but a fixed volume
melting	the change of state from a solid to a liquid
melting point	the temperature at which a given solid will melt
pouring solid	a solid that can be poured like a liquid
solid	a state of matter with a fixed shape and a fixed volume
states of matter	the different forms that materials can take
stopwatch	equipment that measures time, with start and stop buttons
sublimation	the change of state from a solid to a gas
temperature	the measure of how hot or cold something is
thermometer	equipment that measures temperature
volume	the amount of space a solid, liquid or gas takes up

What should I already know?

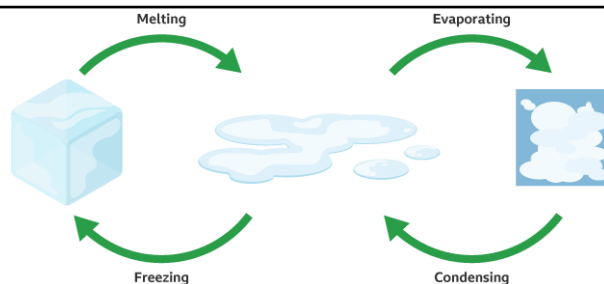
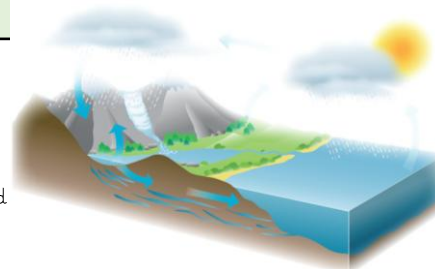
- ☐ Why some materials are used for certain purposes because of their properties
- ☐ The water cycle, and the processes of evaporation, condensation and precipitation.

Key Knowledge

- Solids have a fixed shape and volume. A solid material will keep its shape if it is transferred from one container to another.
- Liquids have no fixed shape and will take on the shape of the container they are transferred into. The volume will remain the same.
- Gases have no fixed shape and no fixed volume. They will spread out and fill any available space.
- Some solids, such as sand, salt, flour and rice, can be poured but they are still classified as solid materials.
- Liquids maintain the same volume when transferred to different containers.
- Some liquids, like water, flow easily while other liquids, such as treacle, do not flow as easily.
- Some materials can change state between a solid, a liquid and a gas.
- Water can be a solid (ice), a liquid (water) or a gas (water vapour).
- When heat is applied to ice, the ice melts and turns to water. When water is heated, it turns into a gas.
- To change water vapour (gas) back to water (liquid) it needs to be cooled down as it returns to its liquid state.
- To change water to ice, it needs to be frozen.

Water Cycle

- Nearly three-quarters of planet Earth is covered in water.
- The water cycle began around four billion years ago.
- Water is in constant movement through a process called the water cycle. As the water moves, it is in different states of matter.
- Water is recycled in the water cycle - no new water is made.
- Evaporation is one stage of the water cycle. Evaporation is when a liquid changes state to a gas.
- Condensation is when a gas changes state to a liquid.



Solid



Solids

Liquid

Gas



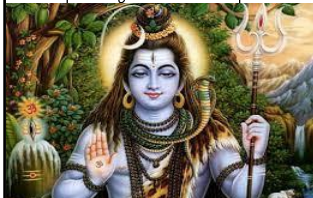





Gases



Liquids



Topic	RE	Theme	Explorers	Year Group	4
Key Question	What does it mean to be Hindu in Britain today?				
Learning outcomes		Key knowledge			
<ul style="list-style-type: none">❑ Explain similarities and differences between the life of a Hindu child and the life of a child from another religion or a non-religious child.❑ To describe ways in which Hindus express their faith through puja, aarti and bhajans.❑ To explore two of the four aims in Hindu life: Dharma and Moksha.❑ To describe how vibrant British Hindu life is.❑ To explore Hindu weddings in Britain and India.		<ul style="list-style-type: none">• Religion is an important part of lots of people's lives, but even very religious people still have lots of other aspects in their lives. <p>Puja</p> <ul style="list-style-type: none">• Puja is how Hindus show their faith in God. Puja is Hindu worship, and it involves praying to a deity and giving offerings to the deity. It happens at least once a day.• Most Hindu homes have a holy shrine where puja takes place. <p>A puja tray is set up during worship, and this holds several important items.</p> <p>Aarti</p> <ul style="list-style-type: none">• Aarti worship is one of the main ceremonies. An aarti lamp is passed around, and it symbolises that worship removes darkness. <p>Bhajans</p> <ul style="list-style-type: none">• Bhajans are worship songs devoted to different deities. Some are fast and upbeat, and some are peaceful and meditative. They have been developed to help worship. <p>The metaphor of 'life as a journey' can be used about Hindu aims and duties.</p> <p>Dharma</p> <ul style="list-style-type: none">• There are 10 religious duties Hindus should follow that encourage them to be good.• 1) not getting angry 2) being truthful in speech 3) working for justice 4) forgiving people 5) having children when you are married 6) trying not to quarrel 7) living a simple life 8) looking after your family 9) fulfilling religious duties such as worship 10) study the scriptures. <p>Moksha</p> <ul style="list-style-type: none">• The Hindu view of life is once you die, you are born again in another body and live another life. This is called reincarnation.• Hindus believe life is a cycle of birth, death and rebirth.• Eventually, Hindus hope to not be reborn anymore. They hope to join God and not live any more lives, which is called 'moksha'. <p>Hindu Life in Britain</p> <ul style="list-style-type: none">• Leicester has one of the biggest Diwali celebrations outside of India.• Holi is a festival that celebrates the arrival of spring, love and new life. It is a colourful festival with dancing, singing and throwing powder paint and coloured water. <p>Hindu Weddings</p> <ul style="list-style-type: none">• Hindu weddings are very big. In India, weddings are not only attended by the two families but also two whole communities coming together.• There are lots of traditions at Hindu weddings. The couple is treated like king and queen for the day. A special necklace is given. The priest lights a fire. The couple walks around the fire 7 times. Nuts are shared together. Each nut represents a different quality that a couple need in their new life.			
		 			
Key vocabulary					
Mandir	A special place for Hindus to worship				
Dharma	Means duty in Hinduism				
Deities	The word in English is often used for Hindu gods and goddesses. Deity means god				
Aarti	Light, which removes darkness				
Puja	Act of worship for Hindus				
Bhajan	Hindu worship songs				
Moksha	The ultimate aim of Hinduism is to leave the cycle of rebirth and become one with god.				
Hindu	Someone who follows Hinduism				
Karma	The sum of a person's actions that decides their future fate				
Reincarnation	The cycle of birth, death and rebirth. Key Hindu belief.				
Murti	Special statues or images of Hindu gods and goddesses.				
What should I already know?					
People follow different religions, with different stories, beliefs, and ways of worship. Religious people celebrate special festivals and events. Places of worship are important to people of faith. Beliefs can affect how people live their daily lives.		   			



Key Learning

- To explore how font size and style can affect the impact of a text.
- To use a simulated scenario to produce a news report.
- To use a simulated scenario to write for a community campaign.

Key Questions

Why should I change the font when I am writing?

Changing the appearance of the font can help make things easier to read and highlight important parts of the text.

Font styles

What character would these font styles give a text?

BALLOON

Curlz

Old English

Armstrong

SWIL

Times New Roman

Blackadder

Adventure

Script

Magneto

Handwriting

Adhesive

Stencil

Gothic

chill Coding

Nunito bold

Poppins

SCIENCE FICTION

Key Vocabulary

Campaign

An organised course of action to achieve a goal.

Format

The way in which something is arranged or set out.

Font

A set of type which shows words and numbers in a particular style and size.

Genre

The style or category type of a piece of art, music or writing.

Opinion

A view or judgment someone forms about something, not always based on fact.

Reporter

A person who reports news or conducts interviews for the press or broadcasting media.

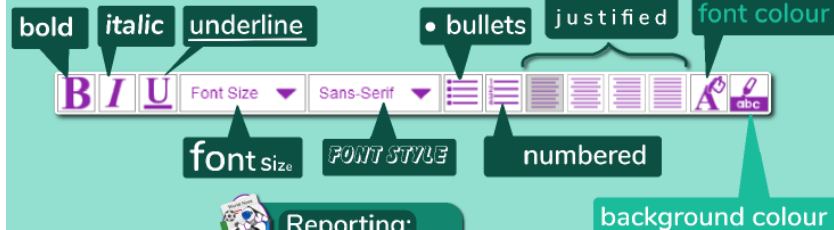
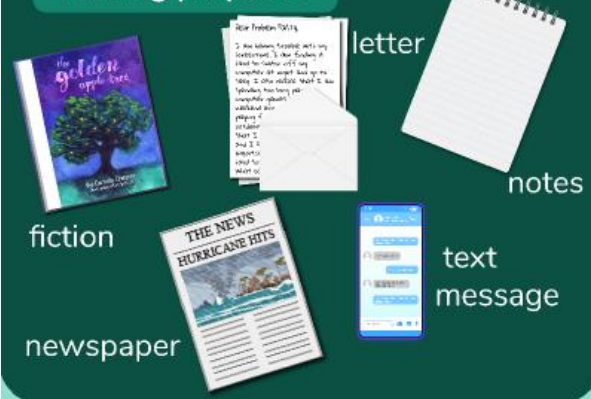
Viewpoint

The way someone sees or thinks about something.

What should I already know?

Text can be typed and edited on a computer. You can change how text looks (font, size, colour, style). Text is presented differently depending on who will read it (posters, stories, instructions). Using a computer requires basic keyboard and mouse skills.

Writing purposes



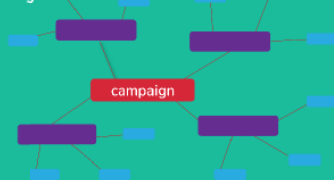
Reporting:
the 5 W's

- 2 What happened?
- 2 Who?
- 2 Where?
- 2 When?
- 2 Why?



Mind map

How can a mind map help you to organise thoughts and debates?



Making journalist's notes

- 2 title
- 2 who reported it?
- 2 timing details
- 2 location details
- 2 quotes
- 2 ideas
- 2 viewpoints/opinions



Topic

Computing - Logo

Theme

Creation

Year Group

4

Key Learning

- To learn the structure of the coding language of Logo.
- To input simple instructions in Logo.
- Using 2Logo to create letter shapes.
- To use the Repeat function in Logo to create shapes.
- To use and build procedures in Logo.

Key Questions

What is Logo?

Logo is a text-based coding language used to control an on-screen turtle to create mathematical patterns.

Key Resources



2Logo

Key Vocabulary

Debugging

The process of identifying and removing errors from computer hardware or software.

LOGO Commands (e.g FD, BK, RT, LT)

A list of commands inputted into 2Logo to move the turtle around the screen.

Pen Up

Raises the screen pen so the 2Logo turtle doesn't draw on screen.

Repeat

A set of instructions that is run a specified number of times.

Grid

The template around which the 2Logo turtle moves.

Multi Line Mode

Type several lines of commands in the text area.

Prediction

When you say what is going to happen when you run the instructions.

LOGO

A text-based coding language used to control an on screen turtle to create mathematical patterns.

Pen Down

Lowest the screen pen so the 2Logo turtle draws a line on the screen.

Procedure

Pieces of Logo text with a procedure name that can be run by calling them by name. Saves time if you want to print to screen lots of the same shape.

Run Speed

The speed at which the 2Logo turtle moves around the screen.

SETPC

Set pen colour to a given colour.

SETPS

Set the thickness of the pen's line.

Key Images



Open, close and share work



Choose the turtle style



Choose a background



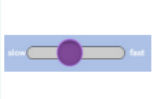
Switch the grid on and off



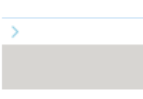
Press and the logo mouse follows the instructions



Reset the mouse to the start position



Change the speed at which the mouse moves



Write the Logo instructions here

What should I already know?

Computers follow instructions in the order they are given.
You can predict what will happen when you give commands.
If a program doesn't work, it can be fixed (debugged).
You can move objects on a screen using instructions.



La clase

phonics

sound in:

ca

• calculadora• sacapuntas

sound in:

cu

• culculadora• cuaderno

accents

Accents indicate the vowel is stressed. As seen in the word lá-piz. They can also be used to indicate a question as seen in:
'¿Qué tienes en tu estuche?'

vocabulary

The nouns & determiners for 12 common classroom objects.



The 2 words for the possessive adjective 'my' in Spanish:

mi

mis

Language to describe what I have/do have not in my pencil case.

En mi estuche
tengo un bolígrafo.

In my pencil case I have a pen.

En mi estuche ~~no~~
tengo un bolígrafo.

In my pencil case I do not have a pen.

grammar

To fully understand when to use the correct possessive adjective in Spanish.

mi lápiz

mi regla

Singular possessive adjective 'my' for both masculine and feminine nouns.

mis tijeras

Plural possessive adjective 'my' for both masculine and feminine nouns.

The negative structure 'no tengo'.

Tengo una goma.



I have a rubber.

~~No~~ tengo una goma.

I do not have a rubber.

What I will learn:

- ☐ Objective 1: I will learn the nouns and determiners for 6 classroom objects in Spanish.
- ☐ Objective 2: I will learn 6 more nouns and their determiners for classroom objects in Spanish .
- ☐ Objective 3: I will learn to answer the question '¿Qué tienes en tu estuche?' (What do have in your pencil case?)
- ☐ Objective 4: I will learn how to move from an indefinite determiner (a) to a possessive adjective (my) in Spanish.
- ☐ Objective 5: I will learn the negative response and use all my new knowledge to say what I have/do not have in my pencil case.

What should I already know?

La Fonética
Asking and answering simple questions.



Musical style: Classical

Classical music is music that has been composed by musicians who are trained in writing music (composing), such as Smetana, Vivaldi, Beethoven and Holst. The term 'classical music' can also refer to music composed in the classical period 1750 to 1825.



Vocabulary

Ostinato

A repeating musical pattern.

Acapella

Singing without an accompaniment (music).

Rounds

A song which is sung by two groups of people. One group starts singing, then the other group begins shortly after. The first group finishes first.

Harmony

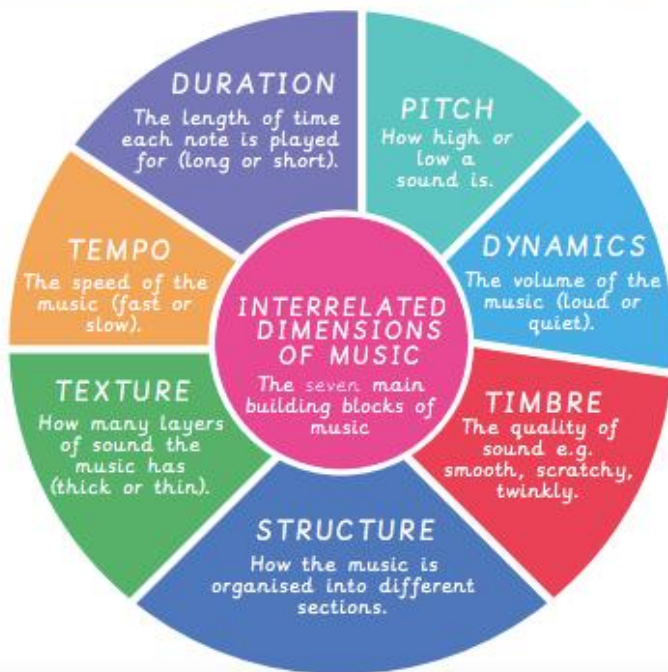
Playing or singing more than one pitched note at the same time.

Cue

A signal (in either the music or from a conductor) which helps the performer know when to begin.

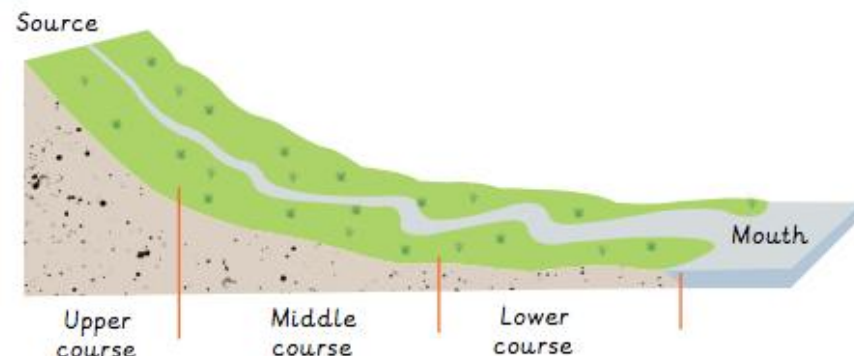
What should I already know?

Sounds can be high or low, fast or slow, loud or quiet. You can follow simple rhythms and patterns. You can sing or play instruments and control pitch and tempo a little. Simple symbols can show how music sounds.



River course

We are making links between the course of a river and music.





Topic

Design Technology - Cooking and Nutrition:
Adapting a recipe

Theme

Explorers

Year Group

4

adapt	To change something to make it suitable for a new purpose.	hygiene	Keeping things clean.
budget	A plan of how to spend money.	ingredients	The foods used in a recipe.
combine	Mixing two or more ingredients together.	market research	Gathering information from the target audience.
construct	To build something.	sieve	A piece of kitchen equipment often used to remove lumps.
cuboid	A 3D shape with six rectangular sides.	sift	The process of removing lumps and adding air.
design	A plan for a recipe or product.	target audience	Groups of people that a product is made for.
evaluate	To decide how good something is.	taste	The flavour of a food.
fold	To bend something for a purpose.	texture	The feel of a food when eaten.



Working to a budget is spending a certain amount of money so the final product is affordable for the people who want to buy it.

Skills



measuring



shaping



cutting out



sifting



mixing or stirring



Adapting a recipe is making a simple recipe unique by thoughtfully adding or removing ingredients.

A target audience is who will enjoy the product the most. Having a target audience makes it easier to choose how the product is designed.



family



people at work



tourists



gift givers

What should I already know?

Foods come from different groups and affect our health. Recipes give instructions for cooking, and you can follow or adapt them. Basic cooking skills and food hygiene are important. Trying new foods helps you understand taste and flavour combinations.