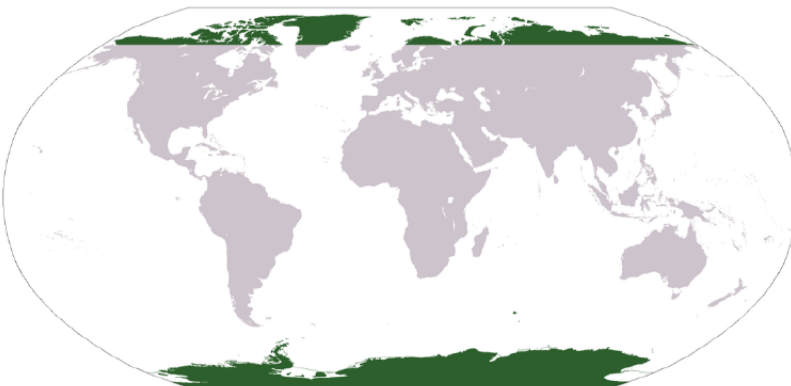


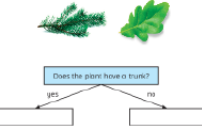


Ridgeway Farm CE Academy - Knowledge Organiser

Topic	Geography - Polar Biomes	Theme	Children	Year Group	4
Key Question	How are Polar Biomes being affected by climate change and what can we do to protect these unique environments for the future?				
What should I already know?		Key Vocabulary			
- The seven continents (including Antarctica) and five oceans of the world. - Where the biomes are located and what the vegetation is like in each biome. - Examples of some countries around the world and what the climate is like there. - What plants need to survive. - How seasonal changes can affect the weather and vegetation.		arctic	The area of the world around the North Pole. It is extremely cold. There is very little light in winter and very little darkness in summer.		
		barren	Used to describe land that is dry and bare. A barren landscape has very few plants and no trees.		
		biome	A large natural area of the earth that has similar weather, climates, landscapes, animals and plants.		
		climate	The general weather conditions that are typical of a place.		
		climate change	The process of our planet heating up.		
Key Learning		continent	A large solid area of land. Earth has seven continents.		
- Locate where the polar biomes can be found using maps, globes and atlases. Locate the countries that the arctic tundra can be found in. - Describe the climate in the polar biomes and explain why this is the case. - Explain why there is a lack of vegetation in the polar biomes. - Compare the vegetation in the polar biomes to that of a woodland or forest and explain the similarities and differences. - Explain the effect that climate change has on the arctic tundra. - Explain what humans can do to help combat the effects of climate change.		environment	All our surroundings. Air, soil, water, plants and animals make up an environment.		
		global	Something that happens in all parts of the world or affects all parts of the world.		
		habitat	The place where living things naturally live and grow.		
		landscape	Everything you can see when you look across an area of land, including: hills, rivers, buildings, trees and plants.		
		melting	To change from a solid to a liquid state through heat or pressure.		
What I will know by the end of the unit		permafrost	A layer of ground beneath the top layer of soil that is frozen all year and only found in the Tundra.		
Polar Biomes: Polar biomes (including the arctic tundra) are areas close to the North and South Pole and have harsh environments. For plants and animals to survive, they must be able to adapt in order to cope with their harsh environment. - The tundra is a large, barren region with no trees. The word tundra means "treeless plain." - The tundra are the coldest of all biomes. - The arctic tundra is under threat due to climate change. Polar ice caps are shrinking and melting as a result of increasing global temperatures, and this is also causing the permafrost to melt. Permafrost and the landscape: - Below the topsoil, the ground is permanently frozen all year round. A thin layer of topsoil thaws during summer and plants such as mosses can grow. Permafrost prevents trees from growing in the tundra because trees need to have deep roots and they can't grow in the frozen ground. Permafrost is difficult to build on and this is one of the reasons very few people inhabit the tundra. Climate: - The tundra has two distinct seasons: a long winter and a short summer. Being so far north, the tundra has long nights in the winter and long days in the summer.		permanent	Something that is permanent lasts forever.		
		plain	A large area of flat land that has very few trees on it.		
		polar	The area around the North or South Pole.		
		seasons	Four different times during the year with different types of weather.		
		sustainability	Small changes we can make to help look after our planet.		
		temperature	A measure of how hot or cold something is.		
		tundra	A flat layer of land where the top layer is frozen. There is hardly any vegetation.		
		vegetation	Plants, trees and flowers in an area.		
					
Polar Region Locations					
North Pole					
South Pole					
Arctic Circle					
Antarctic Circle					
Includes parts of Russia, Norway, Sweden, Finland, Canada, Alaska, Greenland and Iceland		Has no countries and no one living there permanently.			



Ridgeway Farm CE Academy - Knowledge Organiser

Topic	Science - Group and classify living things, habitats and deforestation.	Theme	Children	Year Group	4
What should I already know?		Key Learning			
- Animals can be grouped into vertebrates and invertebrates. - Animals can be grouped into carnivores, herbivores and omnivores. - The names of some common wild and garden plants and deciduous and evergreen trees. - Examples of habitats (including microhabitats) and the animals and plants that can be found there.		- Living things can be sorted into groups based on their features. - Use classification keys to help group, identify and name a variety of living things in their local and wider environment. - Explore the differences between urban and rural habitats and compare this with our local habitat. - Habitats can change throughout the year and this can have an effect on the plants and animals that live there. - Understand that humans can have positive and negative effects on the environment. - Explore how deforestation impacts habitats in our local area and the rest of the world.			
Key Vocabulary		What I will know by the end of the unit			
amphibian	an animal with a spine that can live on land and in water	 			
biodiversity	the variety of living things in a habitat	How can living things be grouped?			
bird	an animal with a spine, feathers, wings and a beak				
classification key	a way of separating living things using closed questions	Living things can be grouped according to different criteria (where they live, what type of organism they are, and what features they have). All mammals, birds, fish, amphibians and reptiles are vertebrates. Insects and spiders are invertebrates. Slugs and snails are soft-bodied invertebrates. Non-flowering plants include mosses and ferns. Flowering plants can produce flowers and fruit. Deciduous trees lose their leaves in autumn. Evergreen trees keep their leaves all year round.			
deforestation	clearing trees from a woodland or forest habitat so the land can be used by humans	What is a classification key? 			
endangered	when a type of living thing is at risk of becoming extinct	A classification key is a tool that is used to group living things to help us identify them. 			
exoskeleton	a type of skeleton on the outside of an animal's body that provides support and protection	How can habitats change?			
extinct	when a type of living thing no longer exists				
fern	a non-flowering plant with long stems and feather like leaves	What are the impacts of deforestation on the planet? 			
fish	an animal with a spine, fins and gills, that lives in water	- Habitats can change throughout the year and this can have an effect on the plants and animals that live there. Human effects on the environment: - positive effects: nature reserves, ecological parks - negative effects: litter, urban development 			
habitat	an area where animals and plants live	- Deforestation impacts animals and plants by destroying their habitats and reducing the biodiversity of an area. - When habitats are destroyed, the plants and animals that live there become at risk of becoming endangered or extinct. - Palm oil is used in lots of products. - It can come from sustainable sources which reduces the impact of deforestation. 			
invertebrate	an animal without a spine				
mammal	an animal with a spine, fur or hair on its body, and feeds its young on milk				
moss	a non-flowering plant that grows in damp, moist conditions				
natural resources	materials that humans use that have been removed from the environment				
pistil	the female part of a flowering plant				
pollination	the transfer of pollen from the male parts to the female parts				
reptile	an animal with a spine and dry scales on its body				
rewilding	a method of increasing biodiversity by reducing human activity				
stamen	the male parts of a flowering plant				
sustainable	does not cause long-term damage to the environment				
vertebrate	an animal with a spine				



Topic	RE	Theme	Children	Year Group	4
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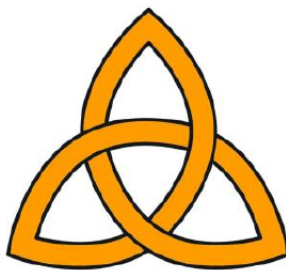
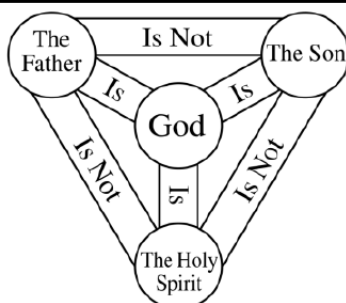
Key Question	What is the 'Trinity' and why is it important for Christians?				
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What should I already know?

- Christians are followers of God.
- Jesus spread the word of God when he was on Earth.
- Christians believe that God wants people to look after the world he created.
- Gospels tell the life and teaching of Jesus.
- Why and how people pray.

What I will know by the end of the unit.

- The meaning of the Trinity in Christian faith and how Christians describe the Holy Trinity.
- What the Bible says about the baptism of Jesus.
- How the Holy Trinity is described in artwork and poetry.
- How Christians show their belief in God the Trinity in worship and in the way they live.
- How Christians celebrate the Holy Trinity.
- Why the trinity is important to Christians.



Key Vocabulary

Baptism	A ceremony that symbolises a commitment to living a life as a Christian.
Belief	The feeling of being certain that something exists or is true
Bible	The Christian holy book. It is separated into the Old Testament and the New Testament.
Christianity	A religion focussed on the life and teachings of Jesus Christ, who Christians believe to be the Son of God.
Christians	A follower of Christianity.
Gospel	Four books of the Bible found at the start of the New Testament that tell the stories of Jesus' life.
Holy Spirit	The Holy Spirit is the Love between God the Father and God the Son
Holy Trinity	A way of describing God the Father, God the Son and God the Holy Spirit. God is three-in-one.
Incarnation	The earthly form of a god or spirit.
Prayer	A way to communicate with God.
Worship	Showing words, thoughts and actions about how great God is.

Key Knowledge

- Christians believe God is the Trinity: Father, Son, and Holy Spirit. This is called the Holy Trinity.
- The Holy Trinity symbol demonstrates the three parts of God being equal and intertwined, with no beginning or end.
- Christians believe the Father creates; he sends the Son, who saves his people; and the Son sends the Holy Spirit to his followers.
- Christians find that understanding God is challenging; people spend their whole lives learning more and more about God.
- Christians really want to try to understand God better, so try to describe God using symbols, similes, and metaphors in song, stories, poems, and art.
- Christians worship God as Trinity. It is a huge idea to grasp, and Christians have created art to help express this belief.
- Christians believe the Holy Spirit is God's power at work in the world and in their lives today, enabling them to follow Jesus.

God the Father God the Son God the Holy Spirit

God the Father is absolute holiness and goodness. Just as an earthly father would care for his children, God the Father cares for all people on Earth. 	God the Son is God in human form. This is called incarnation. Part of God became human when Jesus came to Earth. 	The Holy Spirit is the part of God that is living inside Christians. It is God's power at work on Earth. Christians believe that the Holy Spirit guides them and reveals God's nature to them. 
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Year 4 - Online safety

ad	Short for advertisement, companies pay to have their website at the top of the list of search engine results.
belief	Something we accept to exist or be true, usually without proof.
bot	A computer program, sometimes referred to as a chatbot, that can act like a living thing (e.g. speaking to Alexa).
fact	Something that can be proven to be true by evidence.
in-app purchases	Extra content or services that are advertised and can be bought when using an app.
influencer	A person who recommends products or services on social media.
opinion	A view or judgement about something.
respectful	Being considerate and polite to others, such as treating people kindly and with good manners.
snippets	A short summary.

Kapowiverse x Burgers

https://www.kapowiverse.com

search bar

Search... UK best burgers Go

search results

adverts

snippets

All Images Videos News

https://www.bettysburgers.co.uk
Advert
Grab your 99p burger at BettysBurgers
Burgers Snacks Delivery

https://www.UK_BestBurgers.co.uk
Top 10 Burger restaurants in the UK
1.BettysBurgers
2.PattyBurger
3.BurgerSlim
See more...

https://www.PattyBurgers.co.uk
Best UK Burgers
Menu
5* Ratings

All search engines work slightly differently. It is important to understand how the results are found and displayed.

What should I already know?

- How social media platforms are used to interact.
- That different information is shared online, including facts, beliefs and opinions.
- How to identify reliable information when searching online.
- How to stay safe on social media.
- The impact technology can have on mood.
- That not everything on the internet is true: people share facts, beliefs and opinions online.
- That privacy settings limit who can access important personal information, such as names, ages, gender etc.
- What social media is and that age restrictions apply

Companies use lots of techniques to try and encourage you to buy online.



special offers



extra lives/objects



pay to stop advertisements

We should behave safely and respectfully both on and offline.



Technology can be both a positive and negative distraction. If technology is making you feel sad, angry or you are spending too much time on it, then try to find something else to do that does not involve screentime.



Topic	Computing - Computing systems and networks: Collaborative learning	Theme	Children	Year Group	4
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collaborate	Working with others to achieve a specific goal.
comment	Notes to express an opinion on something.
e-document	An electronic file with text, images, tables or charts.
edit	To change and amend something.
reply	To say or write a message in response to something said.
reviewing comments	Looking at comments written by others on a document to help the collaborative process.
share	To show or give a part of something to someone else.
spreadsheet	An electronic document that organises numbers and information into rows and columns.

You can work together online on presentations, documents and spreadsheets.



Working on an online document editor together

Animals that live in the desert

- > Bactrian camels.
- > Emperor penguins.
- > Snakes
- > Addax antelope.
- > Scorpion.

Comments:

- Hiya, please can we change the font? I don't like this one...
- Yes I think the same! Which one?
- 17:30: Annie wrote 'Animals that live in the Arabian Desert'
- 17:30 Derek wrote '> Bactrian camels'
- 17:31 Derek left a comment
- 17:33 Annie left a comment
- 17:49 Jack replied to a comment
- 17:55 Jack left a comment
- 18:12 Sophie replied to a comment
- 18:38 Layla left a comment
- ...Layla is editing the background...
- ...Jack is editing 'Scorpion'
- Ooo I like this! I think the background could be brighter?
- I think you spell this 's-c-o-r-p-i-o-n'
- Okay I will check the dictionary :)

Offline/Online status:

- offline
- away
- online
- online

What should I already know?

- How to log in and out of an email account.
- How to write an email including a subject, 'to' and 'from'.
- How to send an email with an attachment.
- How to reply to an email.
- The purpose of emails.
- That not all emails are genuine, recognising when an email might be fake and what to do about it.
- That email stands for 'electronic mail.'
- That an attachment is an extra file added to an email.
- That emails should contain appropriate and respectful content.
- That cyberbullying is bullying using electronics such as a computer or phone.



les yeux

eyes



les cheveux

hair

les cheveux
châtains

brown hair

les cheveux
blonds

blonde hair

les cheveux
rouxginger/red
hairpetit (m) /
petite (f)

small

grand (m) /
grande (f)

big/tall

fort (m) /
forte (f)

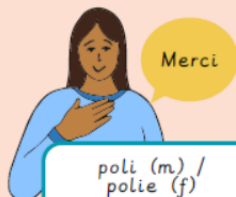
strong

sportif (m) /
sportive (f)

sporty

travailleur (m) /
travailleuse (f)

hard-working

poli (m) /
polie (f)

polite

heureux (m) /
heureuse (f)

happy

sérieux (m) /
sérieuse (f)

serious

Prior Knowledge

I can listen carefully and follow instructions.
I can listen and put 3-4 blocks in the correct order.
I can recognise and name some shapes.
I can show which shape I hear by pointing to it or drawing it in the air.
I can spot words that look or sound similar to English words.
I can say "please" and "thank you".
I can use words to describe colour, size and shape.
I can listen for a colour and choose the correct decoration.

Sentence structure and phrases



In French, the word for 'hair' - cheveux - is plural

il a/elle a = he has/she has + noun + adjective

il a les cheveux châtain.

He has brown hair

il a les yeux bleus

He has blue eyes

Il s'appelle Henri et il a les yeux bleus et les cheveux châtain.

He is called Henry and he has blue eyes and brown hair.



Other phrases

il s'appelle

he is called

elle s'appelle

she is called

Adjectives must agree with the gender of the noun that they are describing. This is usually achieved by:

No change for masculine nouns

il est poli

He is polite

Adding an e for feminine nouns

elle est polie

She is polite

However some may have different endings:

il est sérieux

he is serious

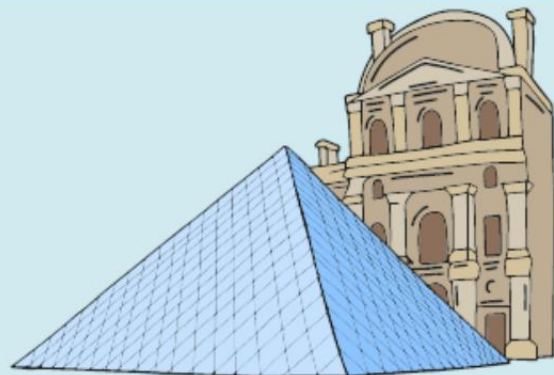
elle est sérieuse

she is serious

The Louvre Museum is in Paris and used to be a royal palace.

It is the largest art museum in the world, and is home to the famous portrait, Mona Lisa.

The entrance to the Louvre is a large glass and metal pyramid.





Topic

Design Technology - Structure: Pavilions

Theme

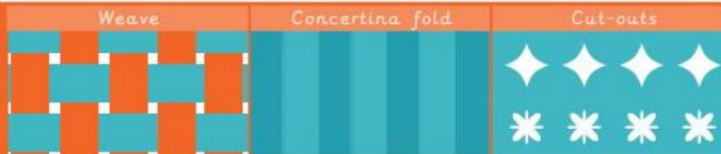
Children

Year Group

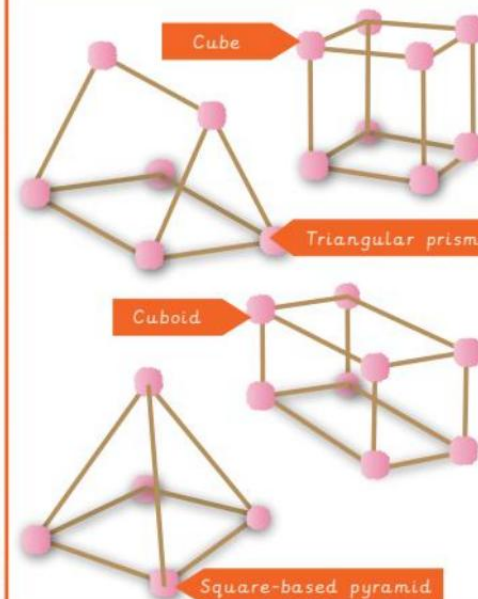
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Aesthetic	How an object or product looks.
Cladding	A material put on top of another material or on a structure as protection or to improve appearance.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Frame structure	A way of building something so that the inside supports are built first and the outside covering is added afterwards as cladding.
Function	The purpose of an object (for example a chair needs to hold a person when sitting down); or how the product works (for example a torch needs to provide light in a dark space).
Inspiration	To gain ideas from different sources such as the internet, magazines and books.
Pavilion	A decorative building or structure for leisure activities.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Stable	Object does not easily topple over.
Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).
Target audience	A person or particular group of people at whom a product is aimed.
Target customer	A person or particular group of people who you expect to buy the product.
Texture	The way that something feels when you touch it (e.g. soft, rough, smooth).
Theme	An idea or specific design that your product or structure is based on (e.g. space-themed).

You can create all sorts of **textures** for your **cladding** designs using different materials and techniques.



There are variety of ways to assemble a **frame structure**.



What materials and equipment could you use to make your **structure**?

What should I already know?

- How to draw and label a design using 2D shapes.
- How to construct a range of 3D geometric shapes using nets.
- How to evaluate your own work and the work of others based on the aesthetic of the finished product and in comparison, to the original design.
- How to suggest points for modification of the individual designs.
- That wide and flat based objects are more stable.
- The importance of strength and stiffness in structures.
- A facade is the front of a structure.



Topic

Art and Design - Drawing: Exploring Tone, Texture and Proportion

Theme

Children

Year Group

4

Tone

How light or dark something is.



Texture

The way that something feels when it is touched. For example, fluffy.



Composition

Arranging different materials together and sticking them to a surface.



Artists

- Sarah Graham.
- Nicola McBride.
- Joel Penkman.

Shadow

A dark shape that appears when something blocks the light.



Highlight

A bright spot or area that makes something stand out or look shiny.



Proportion

How big one element of an artwork appears compared to the whole thing.



The four rules of shading

1. Use the side of the pencil.
2. Work in one direction.
3. Press evenly.
4. Leave no gaps.



What should I already know?

- How to use and apply more complex lines and marks to represent texture, tone, pattern, etc. and describe their qualities, e.g. thick and thin.
- Three-dimensional forms are either organic (natural) or geometric (mathematical shapes, like a cube).
- Combining more complex lines and marks can represent texture, tones and patterns.
- Texture in an artwork can be real (what the surface actually feels like) or a surface can be made to appear textured.
- 'Tone' in art means 'light and dark'.
- Some basic rules for shading when drawing, eg shade in one direction, blending tones smoothly and with no gaps.
- Shading creates different tones in artwork by changing the applied pressure.
- Shading helps make drawn objects look realistic by giving them form (dimension).
- Artists experiment with different tools and materials to create texture.
- Artists can work in more than one medium.
- Artists make art in more than one way. There are no rules about what art must be. Art can be purely decorative, or it can have a purpose. People make art for fun and to make the world a nicer place to be. People make art to explore big ideas, like death or nature.

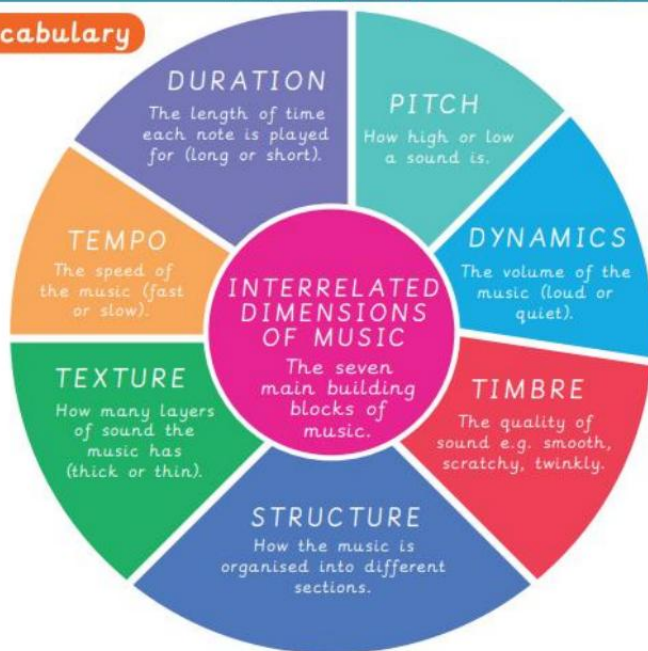


Musical style: Body percussion

Body percussion is a style of music where you use your body to make sounds. You can make many different sounds by slapping, hitting, stamping, and rubbing!



Vocabulary



Appraising

Assessing and discussing a performance or piece of music.

Melody

Notes of different pitches played in a sequence to create a tune.

Rhythm

A pattern of long and short sounds (and silences) within a piece of music.

Contrast

An obvious difference.

Layers

The different instruments, rhythms or melodies that build the overall texture.

Transition

Music that links one section of a piece of music to another.

What should I already know?

- How to discuss the stylistic features of different genres, styles and traditions of music using musical vocabulary.
- How to recognise and explain the changes within a piece of music using musical vocabulary.
- How to describe the timbre, dynamic, and textural details of a piece of music.
- How to use letter name and rhythmic notation (graphic or staff), and key musical vocabulary.
- How to sing and play in time with peers, with some degree of accuracy and awareness.
- That a 'drone' in music is a note that goes on and on, staying the same, a bit like someone humming a long-held note.