

# Year 4: Changes in pitch, tempo and dynamics (Rivers)

## 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**

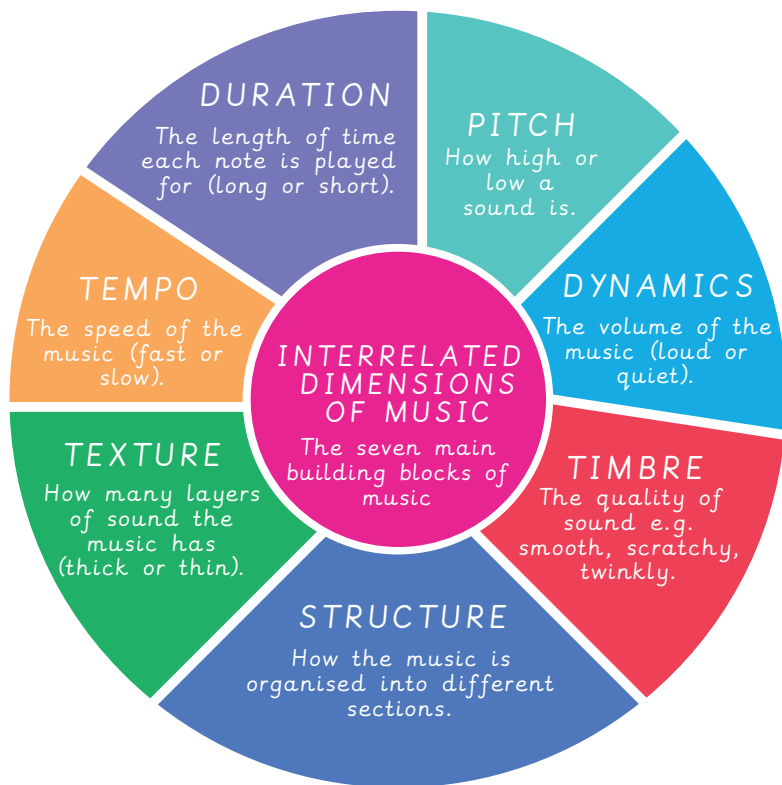
A song which is sung by two groups of people. One group starts singing, then the other group begins shortly after. The first group finishes first.

**Harmony**

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

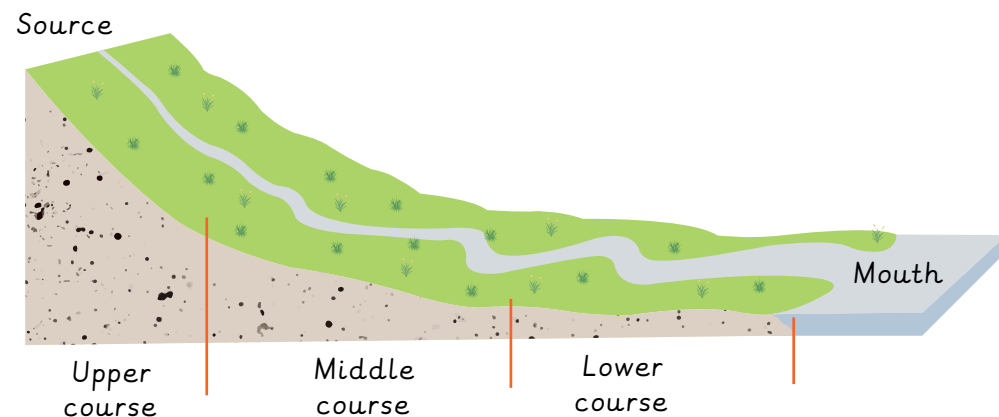
**Cue**

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

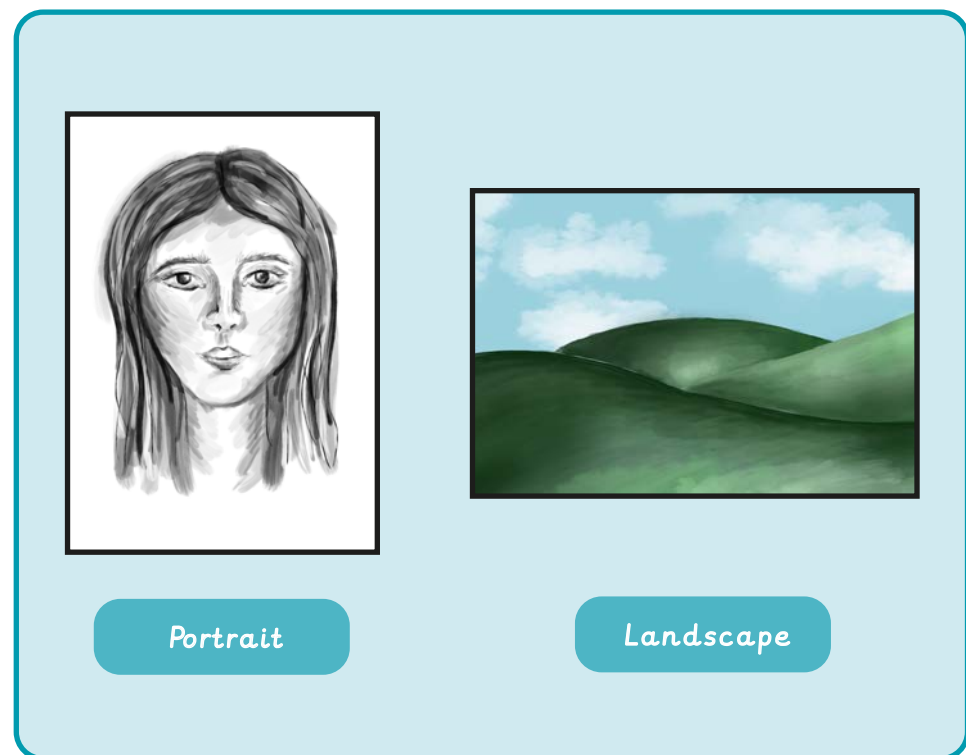
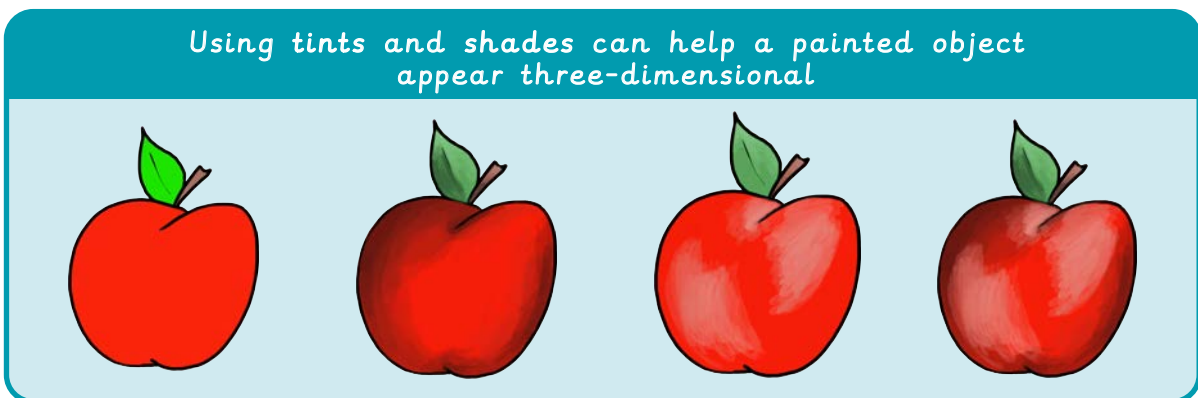
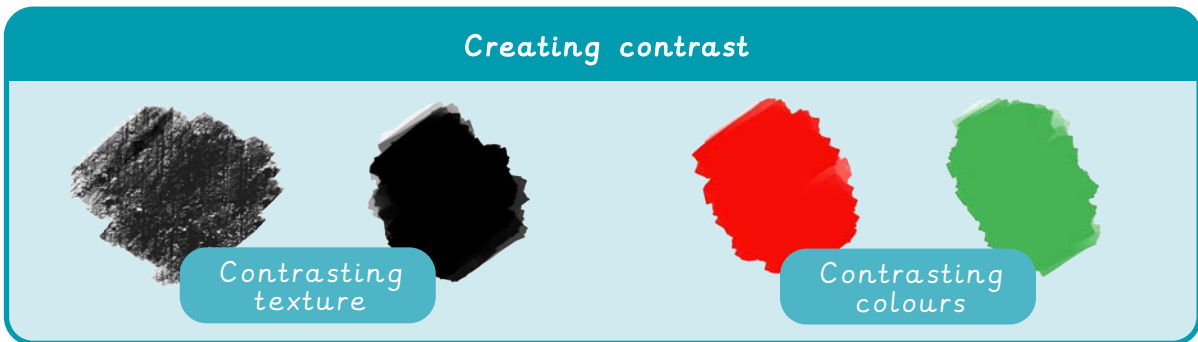


## River course

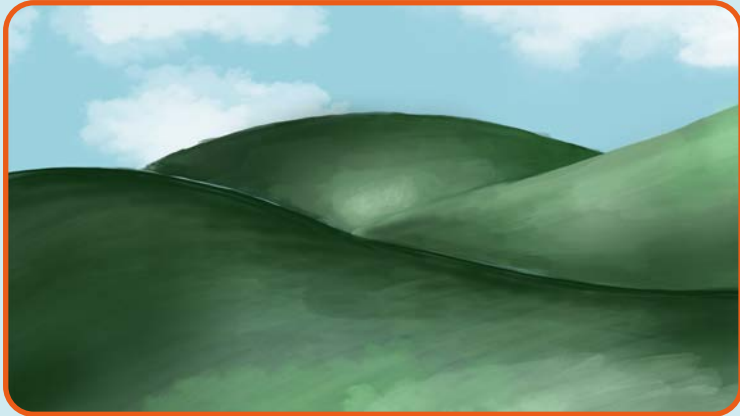
We are making links between the course of a river and music.



Composition	Putting different elements together in a pleasing way
Hue	Describing an exact colour: sky blue, dark green, rose pink
Proportion	How big a part of something looks compared to the rest of it
Shade	Adding black to a colour makes a shade
Shadow	A dark area created when light is blocked
Still life	An artwork showing a collection of things that don't move, e.g. objects rather than people
Tint	Adding white to a colour makes a tint
Tone	How light or dark a colour is



### Colour mixing



#### Making colours lighter:

+ a lighter colour  
+ water  
+ white

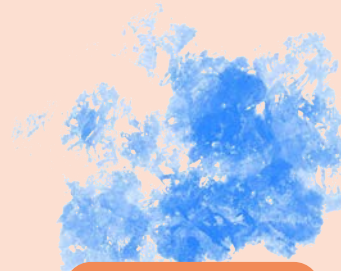


#### Making colours darker:

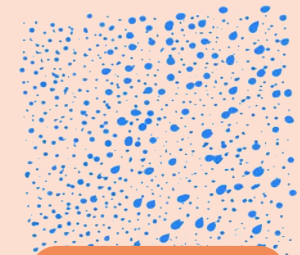
+ a darker colour  
+ black



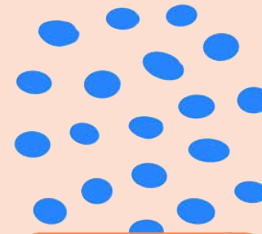
### Painting techniques



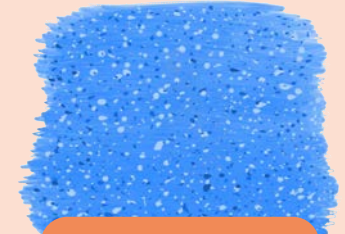
Dabbing



Stippling



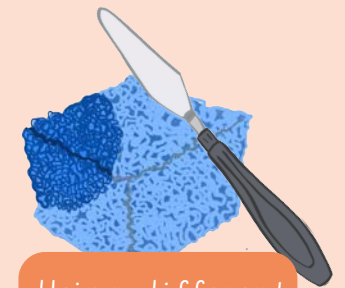
Pointillism



Adding texture to paint



Washes



Using different tools



# Subject: Maths

# Topic: Multiplication and Division

During this unit your children will cover the following during their Maths lessons, as well as weekly arithmetic tests

- ▶ Divide 2-digits by 1-digit (2)
- ▶ Divide 2-digits by 1-digit (2)
- ▶ Divide 3-digits by 1-digit
- ▶ Correspondence problems
- ▶ 11 and 12 times-table
- ▶ Multiply 3 numbers
- ▶ Factor pairs
- ▶ Efficient multiplication
- ▶ Written methods
- ▶ Multiply 2-digits by 1-digit (1)
- ▶ Multiply 2-digits by 1-digit
- ▶ Multiply 3-digits by 1-digit
- ▶ Divide 2-digits by 1-digit (1)
- ▶ Divide 2-digits by 1-digit (1)
- ▶ 7 times table and division 1

Children are introduced to the 'Associative Law' to multiply 3 numbers. This law focuses on the idea that it doesn't matter how we group the numbers when we multiply e.g.  $4 \times 5 \times 2 = (4 \times 5) \times 2 = 20 \times 2 = 40$  or  $4 \times 5 \times 2 = 4 \times (5 \times 2) = 4 \times 10 = 40$

They link this idea to commutativity and see that we can change the order of the numbers to group them more efficiently, e.g.  $4 \times 2 \times 5 = (4 \times 2) \times 5 = 8 \times 5 = 40$

$7 \times 4 \times 6 =$   
- Multiply in any order.

$7 \times 6 = 42$

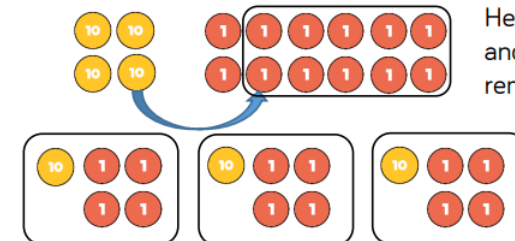
$$\begin{array}{r} 42 \\ \times 4 \\ \hline 168 \end{array}$$

Children divide 2-digit numbers by a 1-digit number by partitioning into tens and ones and sharing into equal groups.

They divide numbers that involve exchanging between the tens and ones. The answers do not have remainders.

Children use their times-tables to partition the number into multiples of the divisor.

Ron uses place value counters to divide 42 into three equal groups.



He shares the tens first and exchanges the remaining ten for ones.

Then he shares the ones.  
 $42 \div 3 = 14$

## Mathematical Talk

Which multiplication and division facts in the 11 and 12 times-tables have not appeared before in other times-tables?

Can you partition 11 and 12 into tens and ones? What times-tables can we add together to help us multiply by 11 and 12?

If I know  $11 \times 10$  is equal to 110, how can I use this to calculate  $11 \times 11$ ?

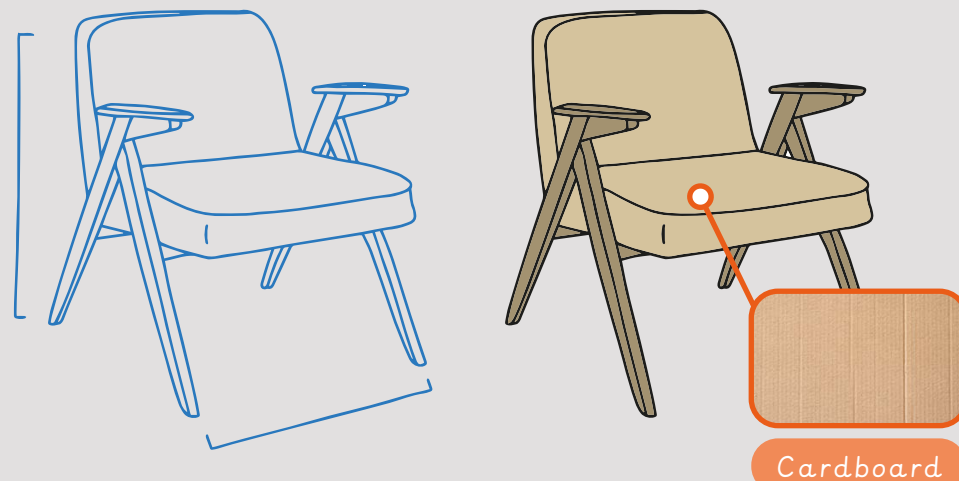
$142$	
$\times 3$	
$\hline$	
$6$	Multiply Ones
$120$	Multiply Tens
$\hline$	
$+ 300$	Multiply Hundreds
$\hline$	
$426$	

## Year 4 - Digital world: Mindful moments timer

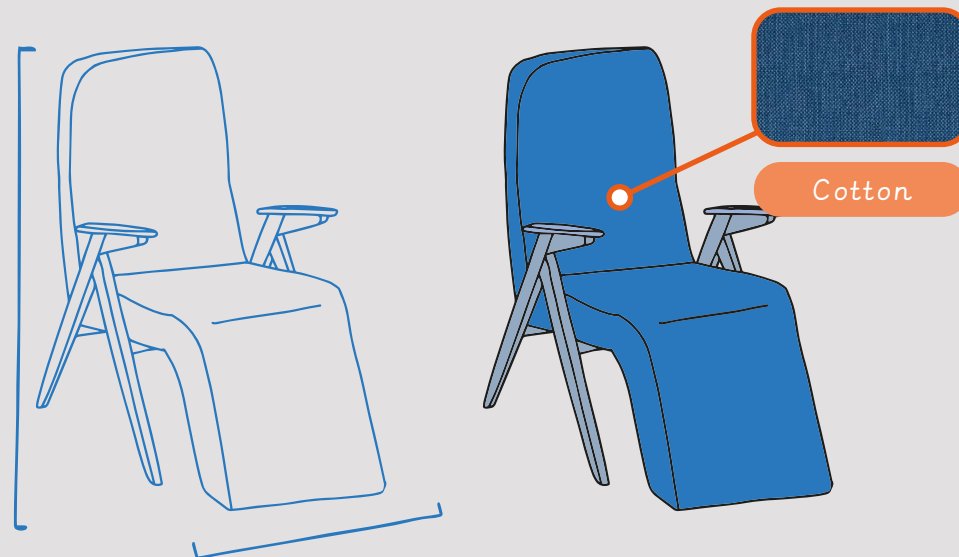
Advantage	A positive gain or benefit.
Design process	The steps taken to develop a new product (design-make-evaluate).
Disadvantage	A negative circumstance or condition.
Ergonomic	Designed to be comfortable.
Program	A series of code which instructs an electronic device to perform specific tasks.
Programming loop	A piece of code that repeats until instructed to stop.
Prototype	A simple model that lets you test out your idea - how it will look and work.
Variable	This could be a number or text, that can change each time the program is run. Variables often work in combination with selection to change the end result of the program.

## Key facts

Creating a prototype is an important part of the design process. Prototypes are cheap models that let us test the form and function of an idea.



They help us to make better decisions about size, shape and materials for the next version or final design.



Many products are made in a variety of forms and some also have digital and analogue versions.

Microwave timer



Sand timer



Egg timer



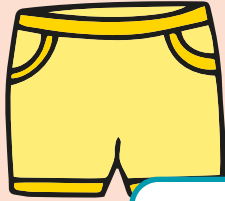
On-screen timer





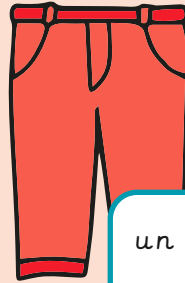
un t-shirt

a t-shirt



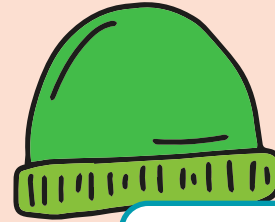
un short

shorts



un pantalon

trousers



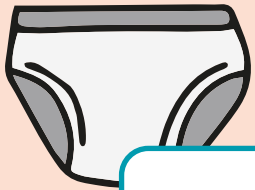
un chapeau

a hat



un maillot  
de bain

a swimsuit



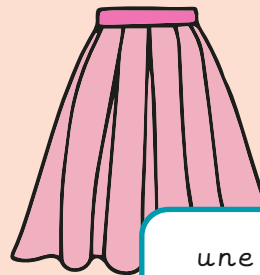
une culotte

pants



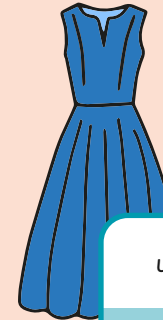
une chemise

a shirt



une jupe

a skirt



une robe

a dress



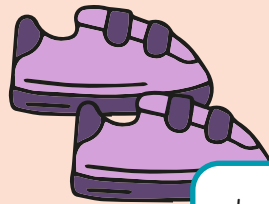
une veste

a jacket



des bottes

boots



des baskets

trainers



des chaussettes

socks



des lunettes

glasses



## Sentence structure and phrases

French nouns are either

masculine  
(boy)

or

feminine  
(girl)

Difference between **un** and **une**.  
Both mean 'a' or 'an'.

masculine

feminine

**un**

**une**

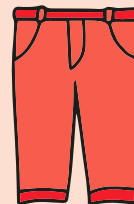
**Un** is used for masculine nouns and  
**une** is used for feminine nouns.

Colour adjectives come after the noun and must agree with the gender and number that they are describing. This is usually achieved by:

No change for masculine singular nouns

le pantalon rouge

a red pair of trousers



Adding an **e** for feminine singular nouns

une robe bleue

a blue dress



Adding an **s** for masculine plural nouns

des baskets violets

some purple trainers



Adding **es** for feminine plural nouns

des chaussettes vertes

some green socks



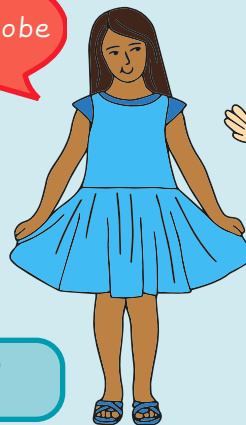
Different ways to say my:

mon	my (masculine singular)
ma	my (feminine singular)
mes	my (plural)

Other phrases

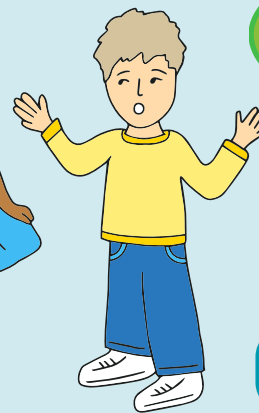
il porte / elle porte	+ clothing - he is wearing / she is wearing
j'aime	I like 👍
je n'aime pas	I don't like 👎

J'aime **ma** robe



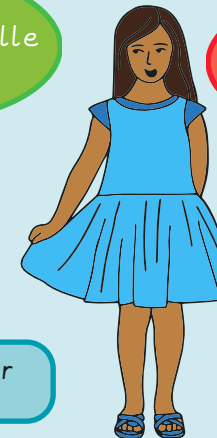
I like my dress

C'est de quelle couleur ?



What colour is it?

C'est **une** robe bleue



It is a blue dress



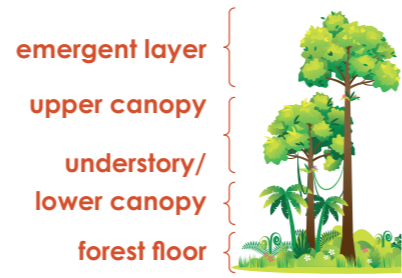
Where is the Amazon?

Both the Amazon River and the Amazon Rainforest are located in South America. South America is one of the 7 continents of the world and is located in the Southern Hemisphere. On the image below you can see the continent which has the Andes mountain range running down the western side. The Amazon Rainforest can be seen in the north of the continent, it is the dark green colour you can see across the top. The Amazon River is can be seen flowing through the rainforest, also in the north of the continent, moving from west to east.



What does the Amazon Rainforest look like?

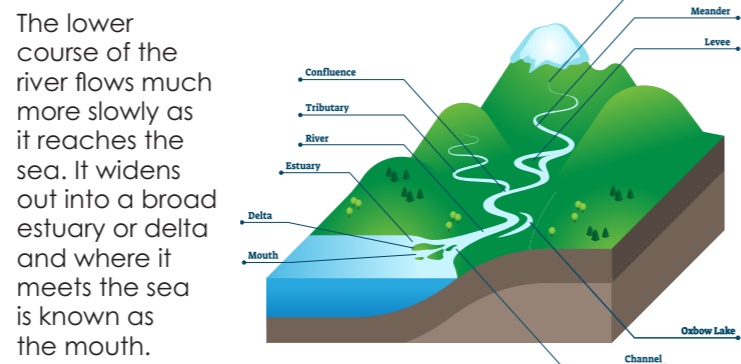
The Amazon, like other rainforests, has different layers: the forest floor at the bottom; the understory layer above; the canopy layer; the emergent layer at the very top. Each layer is home to different plants and animals and because of the huge number of trees and their leaves, different amounts of sunlight reach each of them.



What are the features of a river?

The water in a river comes from rainfall, snow, melting ice and from water inside the Earth. Each river has a source, usually found in mountainous areas, where different streams flow downhill and join together to form a river. A small stream or smaller river which flows into the main river is called a tributary. This is the upper course of the river.

The river has a middle course, where the channel of the river is wider and it flows across land and through valleys. The river here meanders because the flow of the river causes erosion of the land. Sometimes meanders form oxbow lakes which are cut off from the river.



What is it like in the Amazon Rainforest?

The Amazon Rainforest is the largest tropical rainforest in the world and it is responsible for producing 40% of the oxygen in the world. A tropical rainforest experiences a large amount of rainfall and has a very warm and humid climate for most of the year. It also has many, many tall trees and a huge number of different plant and wildlife species. The rainforest is located mostly in Brazil but also in parts of Peru, Equador and Bolivia. There are only a small number of cities found in the rainforest and many tribes live there.

Glossary

1	<b>South America</b>	one of the 7 world continents — found in the Southern Hemisphere
2	<b>Amazonia</b>	the area within the Amazon Rainforest and around the Amazon River
3	<b>climate</b>	the general weather conditions in an area over a long period of time
4	<b>rainfall</b>	how much rain falls in an area
5	<b>rainforest</b>	a dense forest found in tropical areas with high levels of rainfall
6	<b>river</b>	a natural stream of water which flows in a channel to the sea or a lake
7	<b>oxygen</b>	a colourless gas that we breathe and need for life
8	<b>forest floor</b>	the bottom layer of the rainforest which receives small amounts of light
9	<b>understory layer</b>	the layer found above the forest floor and under the main canopy
10	<b>canopy layer</b>	the layer above the understory and below the emergent layer
11	<b>emergent layer</b>	the highest layer of the rainforest, found above the canopy
12	<b>indigenous</b>	meaning something is naturally from that place
13	<b>tribe</b>	a group of people who live in a traditional way
14	<b>tributary</b>	a smaller stream or river which feeds into a larger river
15	<b>confluence</b>	the point where two rivers (of near equal size) meet and join
16	<b>meander</b>	the winding curve or bend of a river
17	<b>estuary</b>	the mouth of a river — where it meets the sea
18	<b>erosion</b>	the process of being worn away by water or wind
19	<b>deposition</b>	the process of depositing something — leaving it behind
20	<b>deforestation</b>	the cutting down of a large area of trees by humans

Who lives in the Amazon?

The Amazon is home to many plants and animals but also people. There are a small number of towns and cities — Manaus is the most major city in the rainforest and is known as 'the heart of the Amazon'. The rainforest is also home to a large number of indigenous tribes who still follow a traditional way of life — the largest is the Yanomami.

Amazingly however, some tribes have never been contacted and we know very little about them and the way they live.



What is the Amazon River?

The Amazon River is the second longest river in the world but carries the largest volume of water to the sea. The source of the river is located in Peru, in the Andes mountains — there are three smaller rivers which come together to create the Amazon. The Amazon has a large number of tributaries which spread through the rainforest but the main course of the river runs through Peru and Brazil. The mouth of the river is in the east of the continent and feeds into the Atlantic Ocean.

Significant Places

<b>Andes</b>	<b>Amazon Rainforest</b>	<b>Amazon River</b>	<b>Brazil</b>
A mountain range which runs along the western side of South America. The second highest peak is found here as well as the three sources of the Amazon River.	The largest tropical rainforest in the world, producing important oxygen that humans across the world need to breathe. The majority is located in Brazil and one in ten known species of animal lives there.	The second longest river in the world (after the Nile) but the largest in terms of the water it carries to the sea. The river flows through the rainforest and has many different tributaries.	The largest country in South America and where most of the Amazon Rainforest is found. The capital city of Brazil is Brasilia and the main language is Portuguese.

Significant Places

<b>Manaus</b>	<b>Peru</b>	<b>Madidi National Park</b>	<b>Manu National Park</b>
A city located in the centre of the Amazon Rainforest and known as 'Heart of the Amazon' and 'City of the Forest'. The National Institute of Amazonia Research is found here.	A country found to the east of Brazil. Parts of the Andes, Amazon Rainforest and Amazon River are found here. The capital city of Peru is Lima and the main language is Spanish.	A national park found in Bolivia which is part of one of the largest protected areas in the world. There are more than 1,000 bird, 12,000 plant and 2,000 vertebrate species here.	A national park found in Peru. It has a restricted zone for native people and researchers, a cultural zone for human settlement and a recuperation zone for rainforest life recovery.



# Subject: Maths

# Topic: Multiplication and Division

During this unit your children will cover the following during their Maths lessons, as well as weekly arithmetic tests.

- ▶ 11 and 12 times-table
- ▶ Multiply 3 numbers
- ▶ Factor pairs
- ▶ Efficient multiplication
- ▶ Written methods
- ▶ Multiply 2-digits by 1-digit (1)
- ▶ Multiply 2-digits by 1-digit
- ▶ Multiply 3-digits by 1-digit
- ▶ Divide 2-digits by 1-digit (1)
- ▶ Divide 2-digits by 1-digit (1)
- ▶ Divide 2-digits by 1-digit (2)
- ▶ Divide 2-digits by 1-digit (2)
- ▶ Divide 3-digits by 1-digit
- ▶ Correspondence problems

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

## 2-digit Multiplication

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \end{array}$$

1. Multiply by the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 0 \end{array}$$

2. Put a zero to hold the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1541 \end{array}$$

3. Multiply by the ten's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1541 \end{array}$$

4. Add the numbers

## Multiplication

multiply times groups of lots of repeated addition product multiplied by array

## Division

divided by share divisible by share equally divide group divide into

$$186 \div 6 =$$

$$\begin{array}{r} 031 \\ 6 \overline{) 186} \\ \underline{6} \phantom{00} \\ 18 \phantom{0} \\ \underline{18} \\ 0 \end{array}$$

no groups of 6 can be made       $1 \times 6 = 6$   
 $3 \times 6 = 18$



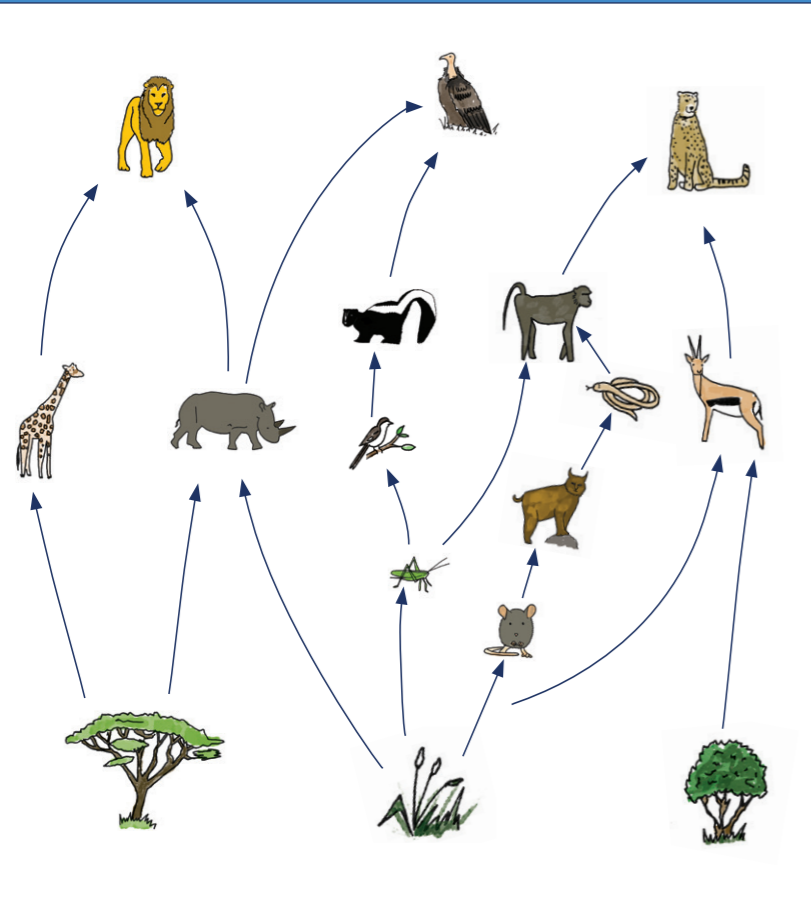
Where do organisms live?

A habitat is the natural home of a plant or animal (organism) and this can be in water or on land. An organism is suited to live in its own habitat. Together, the plants and animals within a habitat form an ecosystem.

Within an ecosystem or habitat, the organisms will be connected and linked together in a food chain or food web. A food chain always begins with a green plant known as the producer. The remainder of the food chain shows which animal eats the producer and which animal eats that animal, etc. An animal which eats something else is called a consumer. A food web shows how different food chains are linked together.

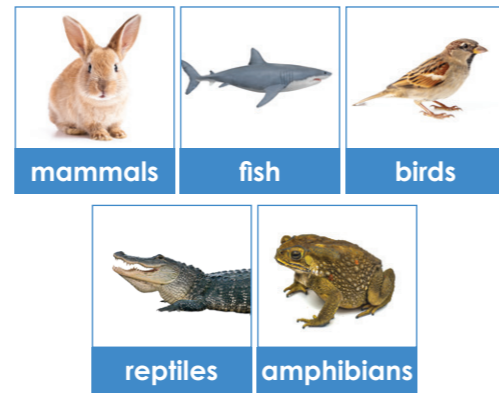
An animal which only eats plants is called a herbivore, an animal which only eats other animals is called a carnivore and an animal which eats both is known as an omnivore.

Food Web



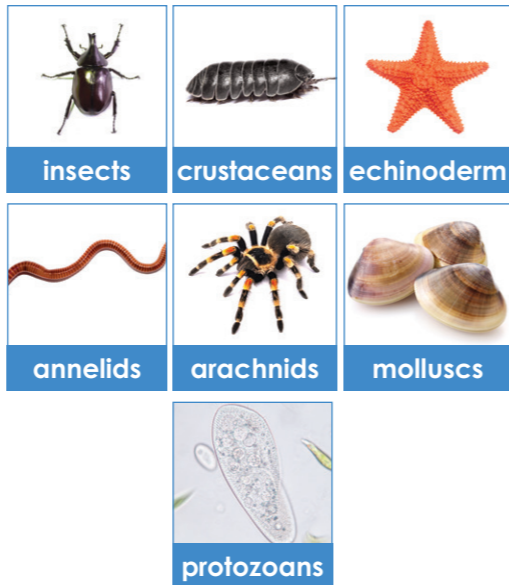
What is a vertebrate?

A vertebrate is an animal with a backbone — a long column of bones which supports the body. Vertebrate can be split into 5 groups, each with different characteristics. These groups are mammals, fish, birds, reptiles and amphibians.



What is an invertebrate?

An invertebrate is an animal without backbone. The animals have soft bodies and sometimes have a hard outer shell to protect them. They can be split into 7 groups. These groups are insects, annelids, molluscs, protozoa, arachnids, crustaceans and echinoderms.



Glossary

1	habitat	the natural home of a plant or animal
2	ecosystem	the living things and links between them in an area
3	organism	a living thing (plants or animals)
4	food chain	living things which need each other for nutrition
5	food web	many food chains and the connections between them
6	producer	the green plant at the beginning of every food chain
7	consumer	something which eats a producer or another consumer
8	carnivore	an animal which only eats other animals
9	herbivore	an animal which only eats plants
10	omnivore	an animal which eats both animals and plants
11	vertebrate	an animal with a backbone
12	invertebrate	an animals without a backbone
13	species	a set of animals or plants with similar characteristics
14	classification	a group that an animal or plant can be sorted into
15	environment	the air, land and water in which organisms live
16	impact	having an effect on something
17	pollution	damage caused to water, air or land by waste
18	deforestation	the cutting down of trees or destruction of forests
19	urbanisation	turning land into cities
20	protect	to look after something and avoid harm



How can environments change?

An environment can change naturally but will often change because of something that humans do. A volcano erupting is a natural change but deforestation is a human change. Climate change is natural but is also due to the actions of humans. Any change will impact the ecosystem, the habitats and the organisms living in an area.

Changes can be positive or negative. Negative changes are due to things like deforestation, littering, urbanisation and pollution. Humans can make positive changes by recycling, protecting habitats with nature reserves or by creating new spaces for organisms to live in.



How can we group plants?

Plants can be split into two main groups: flowering plants and non-flowering plants. Flowering plants include grasses and are plants which produce flowers and fruits.

Non-flowering plants do not produce flowers and fruits. There are three main types and these are: ferns, conifers and mosses.



hopeful  
loving  
curious  
wise  
grateful  
discerning  
compassionate  
active  
intentional  
eloquent  
generous  
faith-filled  
attentive  
learned  
prophecy

# Unit Name – Christmas

## Key Vocabulary

Angel, messengers, Zechariah, John the Baptist, angel Gabriel, crib, symbols, Jesse tree

### Learning Outcomes

- I can sequence the events of the Christmas Story.
- I can find out when the church celebrates the feasts of the annunciation, visitation and birth of John the Baptist.
- I can list the characters in the Christmas Story and what they did.
- I know the most important part of the message of the angels.
- I can explore the meaning of “full of grace”
- I know the role of the angels in God’s plan.
- I can think of ways that people can be messengers for God.
- I can research information about important Christians who have been messengers to God.

### Unit overview –

In this unit of work the children will study the role angels in the story of Christmas. They will learn about Christians being the messengers of Christ’s Good News in the world today and how the church celebrates the Feast of Christmas.

