

Fractions

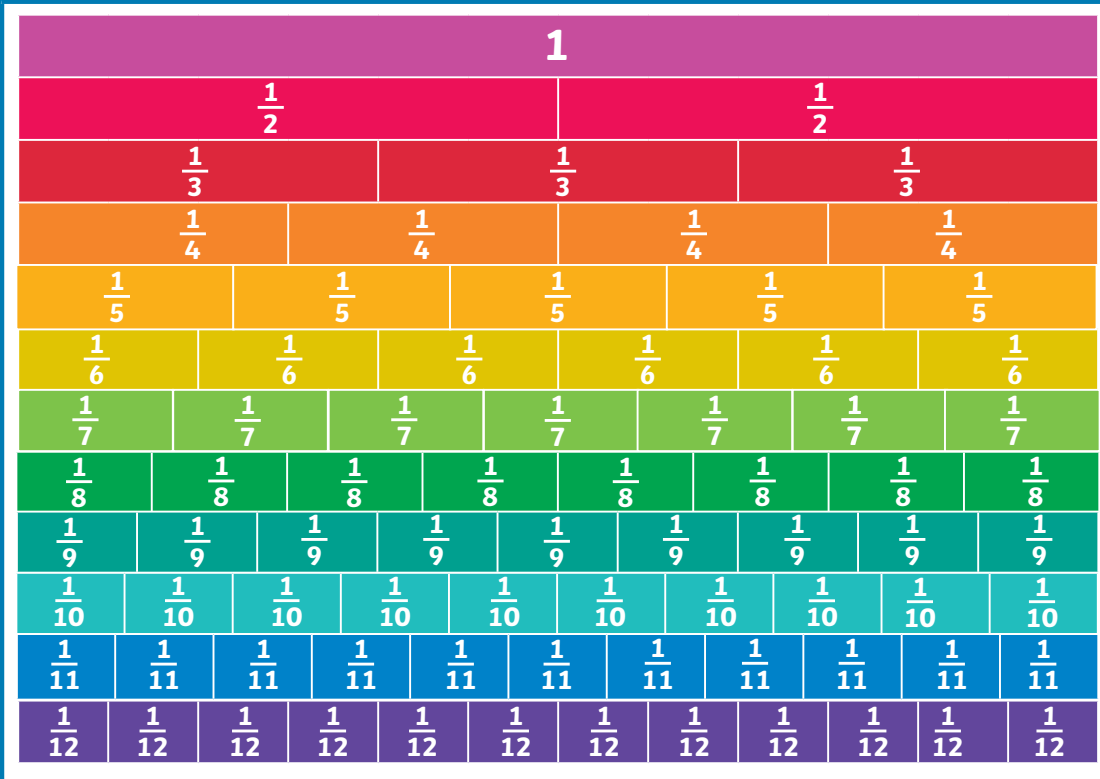
Knowledge Organiser

Key Vocabulary

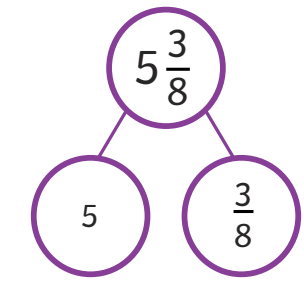
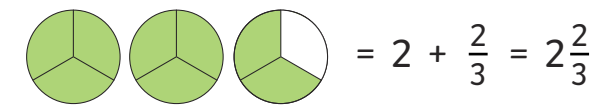
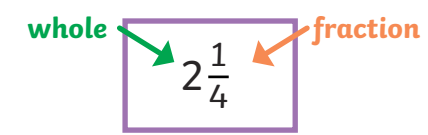
Fraction Families

Mixed Numbers

numerator
denominator
unit fraction
non-unit fraction
equivalent
quantities
whole
halves
thirds
quarters
fifths
sixths
sevenths
eighths
ninths
tenths
elevenths
twelfths
mixed number
improper fraction

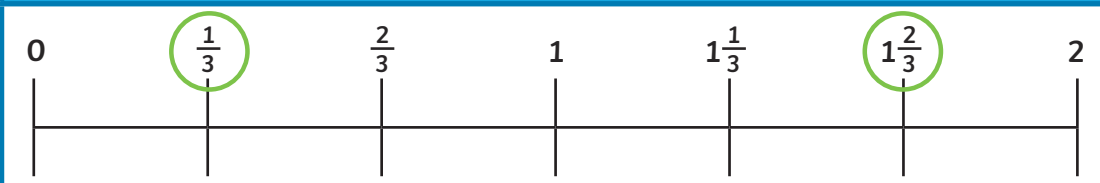


Mixed numbers contain a whole number and a fraction.

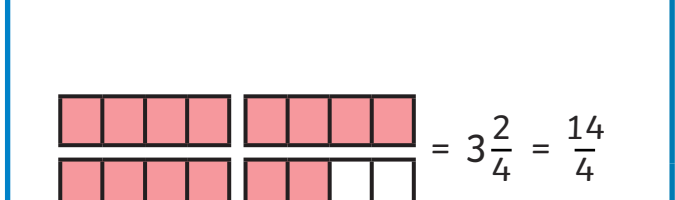
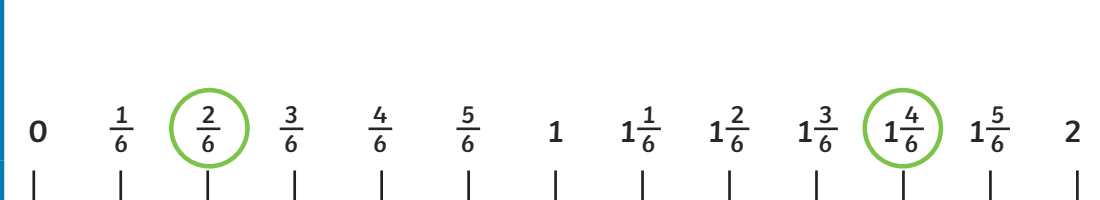


Equivalent Fractions

Improper Fractions



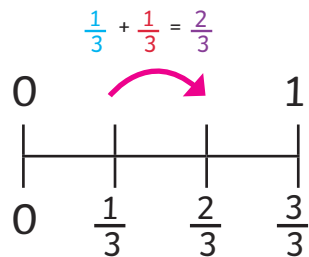
An improper fraction has a numerator which is greater than or equal to the denominator. **5/3**



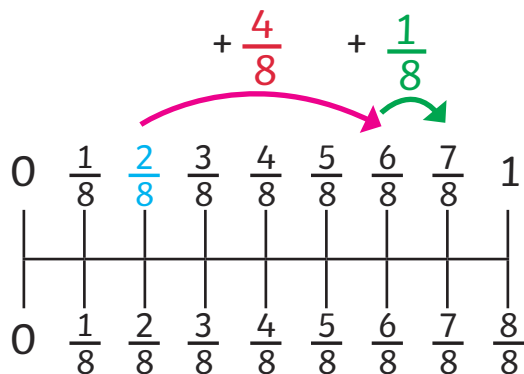
Adding Fractions

Fractions can be added when the denominators are the same.

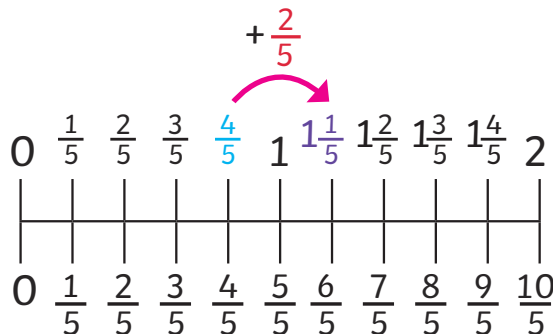
$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$



$$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$



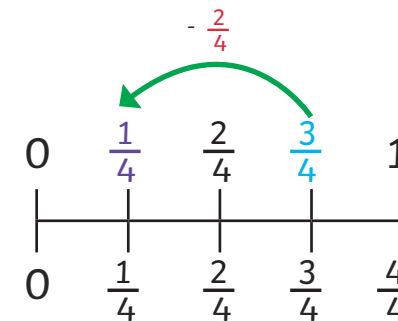
$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$



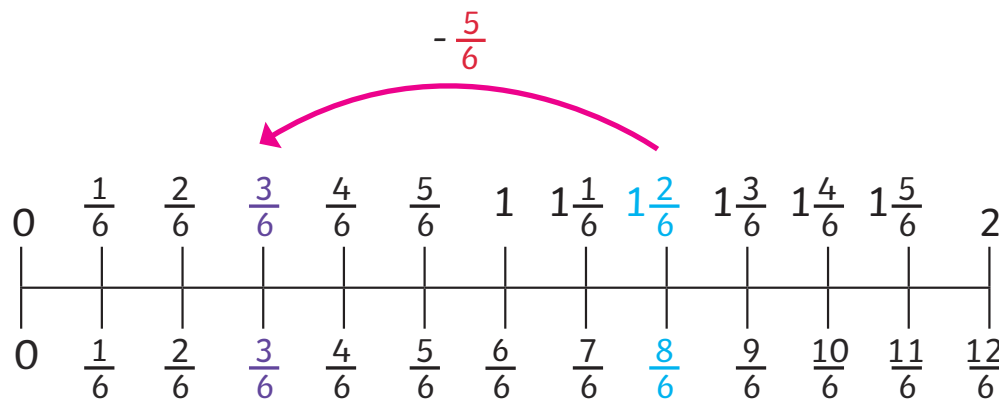
Subtracting fractions

Fractions can be subtracted when the denominators are the same.

$$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$$



$$1\frac{2}{6} - \frac{5}{6} = \frac{3}{6}$$





Unit Name – Lent

Key Vocabulary

Temptation, prayer, fasting, almsgiving, Pharisee, Parable, forgiveness, Sacrament, Reconciliation, Yom Kippur, disciples, Beatitudes.

Learning Outcomes

- Children will know some reasons associated with the Church's practice of prayer, fasting and almsgiving during the season of Lent.
- Children will know some of Jesus' teaching about forgiveness and will understand that this is a gift God freely gives.
- Children will know that the Sacrament of Reconciliation is a celebration of this gift.
- Children will know that Christians are called to follow Christ by the way they live their lives.
- Children will understand that the Beatitudes of Jesus provide a guide for this.

Unit overview – In this unit the children will explore some of the customs and practices associated with the celebration of the Season of Lent. Through the life and teaching of Christ they will learn about prayer, fasting and almsgiving and the forgiveness that God offers to those who believe in him.

Lent is part of the Liturgical Year when people unite themselves with Christ in order to grow in selfdiscipline through the practices of prayer, fasting and almsgiving. We celebrate growth of new life in Christ, in preparation for the feast of Easter

Almsgiving: the practice of giving money or food to poor people.

Fasting:

Fasting: abstain from all or some kinds of food or drink, especially as a religious observance.

Prayer: A communication with God.



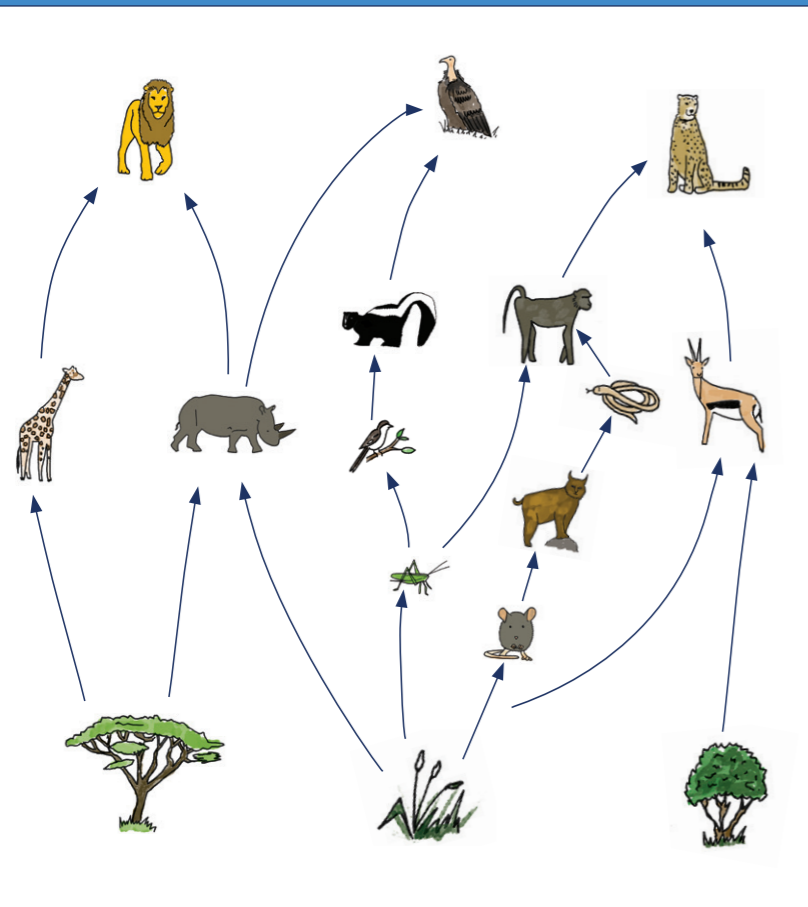
Where do organisms live?

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.

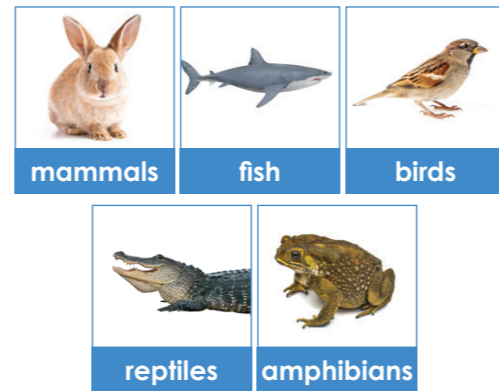
An animal which only eats plants is called a herbivore, an animal which only eats other animals is called a carnivore and an animal which eats both is known as an omnivore.

Food Web



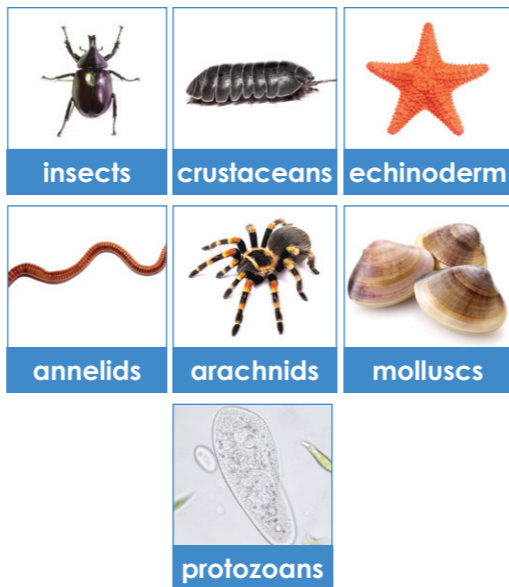
What is a vertebrate?

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.



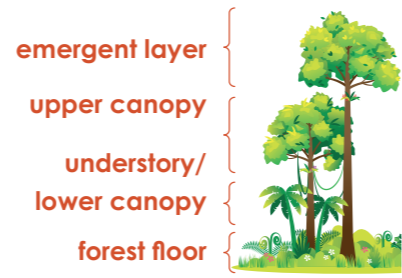
Where is the Amazon?

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.

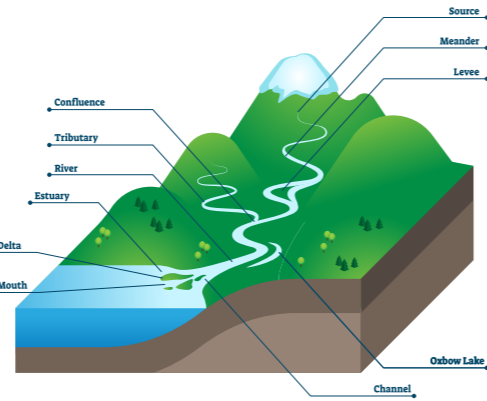


What are the features of a river?

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.

The lower course of the river flows much more slowly as it reaches the sea. It widens out into a broad estuary or delta and where it meets the sea is known as the mouth.



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



Andes	Amazon Rainforest	Amazon River	Brazil
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



Manaus	Peru	Madidi National Park	Manu National Park
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.



1

un
one

2

deux
two

3

trois
three

4

quatre
four

5

cinq
five

6

six
six

7

sept
seven

8

huit
eight

9

neuf
nine

10

dix
ten

11

onze
eleven

12

douze
twelve

13

treize
thirteen

14

quatorze
fourteen

15

quinze
fifteen

16

seize
sixteen

17

dix-sept
seventeen

18

dix-huit
eighteen

19

dix-neuf
nineteen

20

vingt
twenty

21

vingt-et-un
twenty-one

22

vingt-deux
twenty-two

30

trente
thirty

31

trente-et-un
thirty-one

Sentence structure and phrases



lundi
Monday

mardi
Tuesday

mercredi
Wednesday

jeudi
Thursday

vendredi
Friday

samedi
Saturday

dimanche
Sunday

Jan

janvier

Feb

février

Mar

mars

Apr

avril

May

mai

Jun

juin

Jul

juillet

Aug

août

Sep

septembre

Oct

octobre

Nov

novembre

Dec

décembre

Days of the week and months of the year do not start with a capital letter

Other phrases

C'est quand, ton anniversaire ?	When is your birthday?
Mon anniversaire	My birthday is ...
Pour mon anniversaire ...	For my birthday ...
Je voudrais ...	I would like ...

C'est quand, ton anniversaire ?

When is your birthday?

Mon anniversaire, c'est le 15 mars

My birthday is on 15th March

Pour mon anniversaire je voudrais un gâteau d'anniversaire

For my birthday I would like a birthday cake

Ceramics	Things made from clay which are hardened using heat
Form	Three dimensional shapes in art
Found objects	Objects not considered art materials being used to make art
Organic shape	Irregular natural shapes
Scale	The size of an artwork
Sculpture	Three dimensional art made by carving, modelling, casting or constructing
Typography	The art of designing and arranging letters to make them look appealing

Constructing

Using techniques like folding, stitching, tying, weaving and balancing to join materials together and make art.

Carving



Hard materials such as wood or stone can be carved to change their shape. Cut or scrape away pieces of the material to make a sculpture

Modelling



Soft materials such as clay or wire can be shaped by hand to make sculptures.

Found objects



Materials not usually thought of as art materials can be used to make sculptures, e.g. scrap metal, old toys, pieces of furniture.

Artists

Magdelene Odundo

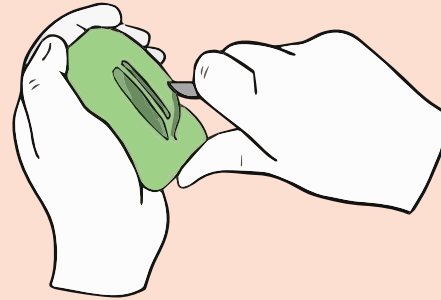
Barbara Hepworth

Jaume Plensa

Sokari Douglas Camp

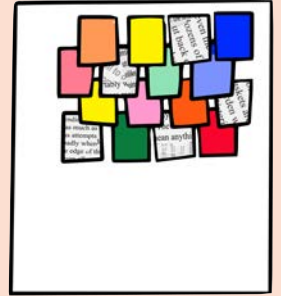
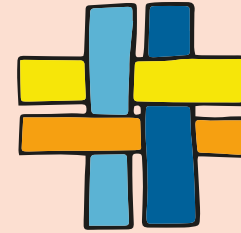
El Anatsui

Carving soap



- Draw the outline
- Remove large unwanted areas of soap
- Use a smaller tool to get close to the outline
- Add detail like surface texture

Constructing



- Layering recycled materials to look like a weaving
- Cutting, tearing and overlapping shapes
- Creating pattern and contrast

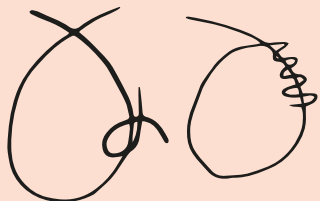
Modelling with wire



Bend to form shapes



Twist or fold over to join



Make loops to add details

Planning sculpture



- Sculptors sometimes draw to help them visualise the finished sculpture.
- Use your whole arm to draw on a big scale.

Structure - Pavilions

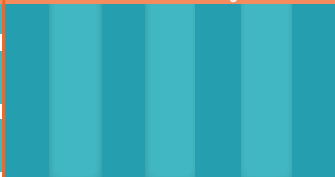
Aesthetic	How an object or product looks.
Cladding	A material put on top of another material or on a structure as protection or to improve appearance.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about 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.

Weave



Concertina fold



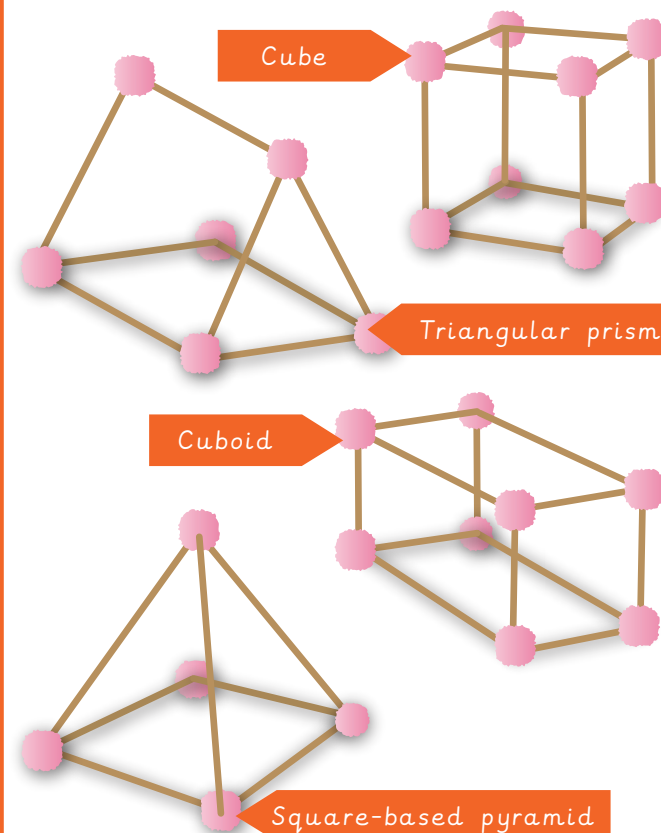
Cut-outs



Key facts



There are variety of ways to assemble a frame structure.



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



Get Set 4
Education

Knowledge Organiser

Tennis Year 4

About this Unit

Tennis is a net and wall game. It is played over a net with a racket and ball and can be played as a 'singles' (1v1) competition or 'doubles' (2v2) competition.

Tennis or 'Jeu de paume' (palm game) was first played without rackets and used the palm of the hand to hit the ball. The game was invented in the 12th century by monks in Northern France.

It wasn't until the 16th century that rackets were added and it became known as tennis. It was a very popular sport and King Henry VIII was a keen tennis player.

Net and Wall Games Key Principles

attacking	defending
score points	limit points
create space	deny space
placement of an object	consistently return an object



Can you think of any other net and wall games that share these principles?



Key Vocabulary

- alternate:** one then the other
- co-operative:** working together
- compete:** take part in a contest
- contact:** the point where you hit the ball
- continuous:** keep a rally going
- control:** being able to perform a skill with good technique
- court:** the space used for a tennis game
- deny:** to prevent an action happening
- extend:** to make longer
- rally:** when a point is played back and forth
- receiver:** the person who the ball is being hit to
- reflect:** to think back on the experience
- swing:** smooth semi circular action
- tactic:** a plan that helps you to attack or defend



Ladder Knowledge



Shots:

Play a forehand when the ball comes to your dominant side.
Play a backhand when the ball comes to your non-dominant side.

Rallying:

Move your feet to the ball to help you to hit in a more balanced position and increase the accuracy of your shot.

Footwork:

Get your feet in the right position to help you to balance before playing a shot.

Movement Skills

- throw
- catch
- forehand
- backhand
- rallying

Social

This unit will also help you to develop other important skills.
co-operation, support and encourage others, collaboration, respect

Emotional

perseverance, honesty, determination

Thinking

identifying strengths and areas for improvement, reflection, select and apply, comprehension, use tactics

Rules

Win a point if:

- Opponent hits the ball in the net
- Opponent hits the ball out of the court area
- Opponent misses the ball or it bounces twice



Tactics

Attacking:

- Look at where your opponent is and try to place the ball away from them.

Defending:

- Move quickly to a ready position in the centre of the space.
- Cover the space between you when playing with someone else.

Healthy Participation



- Make sure any unused equipment is stored in a safe place.
- Stay a safe distance from one another when using the racket.

If you enjoy this unit why not see if there is a tennis club in your local area.



How will this unit help your body?

agility, balance, co-ordination, speed, stamina, strength

Home Learning

Find more games that develop these skills in the Home Learning Active Families tab on www.getset4education.co.uk

Jeu de Paume (Palm Game)

What you need: a ball and a wall

How to play:

Using the palm of your hand, can you...

- Hit ball up continuously?
- Bounce the ball down continuously?
- Hit the ball up, let it bounce once then hit it up again? How many can you do in a row?

Playing against a wall, can you...

- Hit the ball against the wall, let it bounce then hit it again keeping a rally going? How many can you do in a row?



Head to our youtube channel to watch the skills videos for this unit.

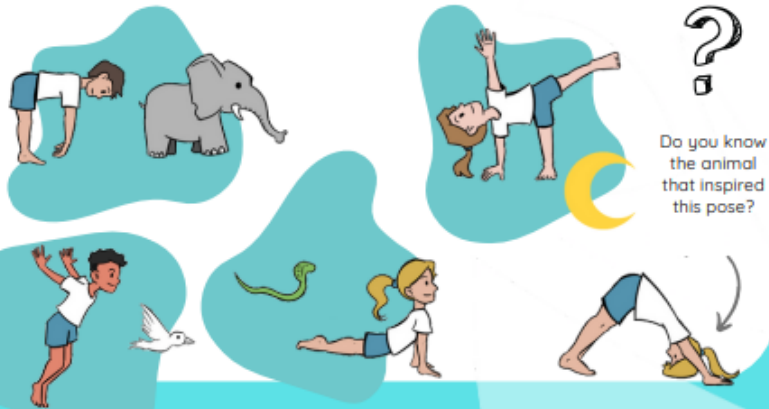


@getset4education136

About this Unit

Yoga is the name for a type of exercise that helps our mind and body. In yoga, we put our body into different positions these are called poses. We can link these poses together to create sequences of movement called a flow. In this unit you will learn yoga poses and techniques that will help you to connect your mind (what you are thinking and feeling) with your body.

Often yoga poses take inspiration from animals and nature like these poses...



Do you know the animal that inspired this pose?

Key Vocabulary

- breath:** moving air in and out of your body
- control:** being able to perform a skill with good technique
- extend:** to make longer
- flexibility:** the ability of muscles and joints to move through a range of motion
- flow:** a yoga sequence
- gratitude:** being thankful
- lengthen:** to make longer
- link:** to join together
- mindfulness:** to bring attention to experiences occurring in the present moment
- notice:** to pay attention to
- pose:** a position, usually still
- relax:** to become calm
- stable:** to be balanced
- strength:** the amount of force your body can use
- wellbeing:** the emotional state of someone



Ladder Knowledge



Balance:

Move with your breath, it will help you to balance.

Flexibility:

Different poses will need you to extend different body parts.

Strength:

People have different levels of strength.

Movement Skills

- balance
- flexibility
- strength
- co-ordination

This unit will also help you to develop other important skills.

Social working safely, supporting others, sharing ideas, collaboration, respect

Emotional confidence, determination, integrity, focus

Thinking recall, creativity, selecting actions, providing feedback, reflection

Strategies

Use your breath to help you to focus.

When you experience a stressful event (like an unexpected dinosaur in your classroom), your heart rate increases and your breathing becomes lighter.

Deep breathing helps to get more oxygen into your body and helps you calm down, lower stress, and focus. Counting your breath is a great way to focus your attention. Breathe in for four counts and out for four counts.

Mindfulness is a personal journey.

Mindfulness is a technique which involves noticing what's happening around you in the moment. It can help you to feel happier and calmer.

How you notice the world around you might be different to a friend and that's ok.

Healthy Participation



- No shoes or socks to make sure you do not slip.
- Listen to your body, be mindful not to over extend and stop if a pose is uncomfortable.
- Stretch slowly and breathe deeply, never force a pose.

If you enjoy this unit why not see if there is a yoga club in your local area.



How will this unit help your body?

balance, co-ordination, flexibility, strength

Home Learning

Find more games that develop these skills in the Home Learning Active Families tab on www.getset4education.co.uk



Your Flow

What you need: a flat space
Yoga poses often take inspiration from animals and nature. Like the ones here:



- How to play:**
- Look around in nature or think of animals that could inspire your poses.
 - Create a yoga flow (sequence) by linking 5-6 of poses together.
 - You could also use the poses shown above.

Remember to move slowly and breathe deeply.

www.getset4education.co.uk

Head to our youtube channel to watch the skills videos for this unit.



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