

Year 5 - Term 5

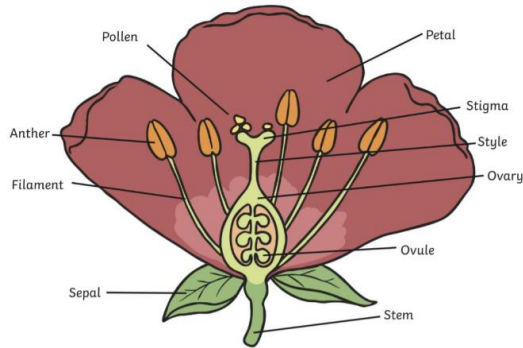
Plants and habitats
and climate change

How does it grow?

Science – Circle of life

Key questions:

What is pollination? What is fertilisation? Can you label parts of a plant? How do plants reproduce?



Pollen

- Male parts of flowers produce pollen.
- Female parts produce ova (eggs).
- To make a new plant, one pollen has to join up with one ova.
- The pollen has to get from one flower to another flower.
- Some flowers use insects to do this. Some use the wind to carry the pollen instead.

Glossary

asexual reproduction	to reproduce without a male
bulb	a part of a plant that stores food underground, can grow a new shoot
external fertilisation	when sperm and eggs join outside the body
fertilisation	when an egg and pollen (or sperm) join together
gestation	when a baby animal develops inside its mother
internal fertilisation	when sperm and egg join inside the body
larva	the young form of some animals, which looks very different from its parents. It undergoes a dramatic change to become an adult and loses its young features or gains new ones
metamorphosis	a dramatic change in the life cycle of an animal in which it ends up looking totally different
pollination	when pollen from one plant is transferred to the ovary of another
sexual reproduction	reproduce with both a male and female

Runners

Some plants, like strawberry plants or spider plants, grow runners which have new plants on the end.



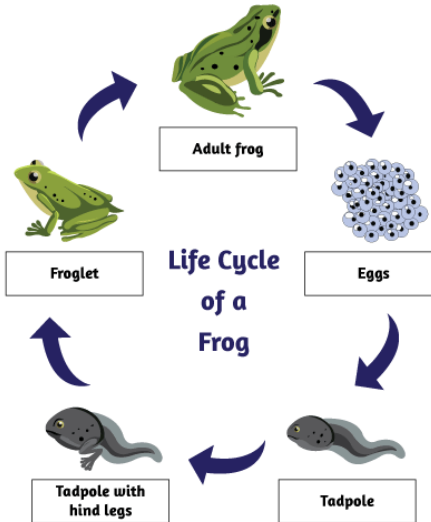
Bulbs

A bulb is underground storage formed from the plant stem and leaves. In the centre of the bulb is the bud for the next year's flower.



Tubers

A tuber is the thickened part of an underground stem of a plant, such as the potato, with buds from which new plant shoots (stems and young leaves of a new plant) grow.



How do animals reproduce?
 What is metamorphosis?
 What does endangered mean?
 Should animals be kept in zoos?

Jane Goodall is a British ethologist and conservationist, famous for her world expertise on chimpanzees, having studied them in the wild for over 60 years. Her ground-breaking research provided a unique insight into the life of these creatures - now known to be our nearest living relatives.



Geography – Climate Change

Key objective

Understand the difference between global warming and climate change, evaluate some impacts of climate change already apparent in the world and consider national and individual actions to reduce its long term effects

Important things I will know, understand and be able to do

The difference between weather and climate
The climate of polar, temperate and tropical regions

The greenhouse effect and global warming
How climate change is different from global warming

Some of the changes being caused by climate change in Gambia and their impact on people
Some of the changes being caused by climate change in the state of Victoria in Australia and their impact on people

Some of the changes being caused by climate change in coastal areas of the United Kingdom and their impact on people

Some of the changes being caused by climate change in Greenland and their impact on people

Countries around the world where weather patterns have been affected by climate change
How countries around the world are acting to reduce global warming

How individuals, families and communities like schools are taking action to reduce global warming

What the UK government is doing on a national level to reduce carbon emissions

Important geographical techniques I will use

Statistical representation	Drawing and interpreting: line graphs, multiple line graphs, bar graphs and climate graphs
Mapwork	Interpreting OS 1:50,000 Landranger maps using the key, eight points of the compass and four and six figure grid references Interpreting a range of atlas thematic maps e.g., changing weather patterns, ice sheet distribution and thickness, global temperature differences and countries most impacted by evidence of climate change
Imagery	Terrestrial, aerial and satellite photographs (orientating with OS maps and GIS Google Earth Pro)

Important vocabulary I will learn

Landscape	everything that can be seen when looking at a particular place
Renewable	energy from a source such as wind that is never used up
Conservation	the protection of environments to prevent their loss or destruction
Estuary	the place where a river widens as it enters the sea and fresh and salty water mix
Hazard	something natural or human that is a risk or a danger
Drought	a very long period of time without rainfall
Desertification	the process by which fertile land becomes desert, typically as a result of drought, deforestation, or poor farming
Country	a nation with its own government and territory
Ice sheet	a thick layer of ice covering a large area of land or sea
Raw material	things found in nature that are used to make things for people
Heatwave	a long period of unusually hot weather
Mitigation	reducing the serious effects of something
Atmosphere	the layer of gas that surrounds the Earth, often called air
Coast	the area where the land meets the sea or ocean
Emission	the release of something such as a gas

Important hazards I will analyse



Wildfires



Tidal surges



Desertification

Important Ordnance Survey maps I will interpret



Starcross,
Exe
Estuary

Key questions:

What is global warming? What is a greenhouse gas? How does climate change impact people in different places in the world?



Knowledge
Organiser

Key questions

Rights and Responsibilities

Are rights and responsibilities the same?

Do rights and responsibilities change as someone gets older? How?

What rights and responsibilities do we have to the community and the environment?

Rights and Responsibilities Relating to My Health

How is someone responsible for their own health?

Why do some people find it hard to stick to their responsibilities for keeping healthy?

What might help someone restart being responsible for keeping healthy?

Decisions About Lending, Borrowing and Spending

What things are needed by people in in the community?

What services do local councils provide?

Do councils choose how much money they give to the services they provide?

How might a council's spending choices affect different groups in the community?

Key vocabulary

councillors environment interest
rights responsibility debit
costs borrow credit
health community group
public services loan council
exercise vote duties
sustainable elections

I can ...

I can give examples of some of the rights and related responsibilities I have as I grow older, at home and school. I can also give real examples of each that relate to me.

I can give a few different examples of things that I am responsible for to keep myself healthy.

I can explain that local councils have to make decisions about how money is spent on things we need in the community. I can also give an examples of some of the things they have to allocate money for.

DT – Textiles: Stuffed Toys

Accurate	Neat, correct shape, size and pattern with no mistakes.
Annotate	To add notes to explain your plan or design.
Appendage	Something attached to a larger or more important thing.
Blanket-stitch	A sewing technique that joins two pieces of fabric together.
Design criteria	To help designers focus their ideas and test the success of them.
Detail	The small features of an object.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Fabric	A natural or man-made woven or knitted material, that is made from plant fibres, animal fur or synthetic material.
Sew	To join or fasten by stitches made using a needle and thread.
Shape	The form of an object.
Stuffed toy	A shape of outer fabric sewn together and filled with flexible material. They are also known as plush toys or stuffed animals.
Stuffing	Soft material used to fill cushions and stuffed toys.
Template	A stencil made of metal, plastic, or paper, used for making many copies of a shape or to help cut material accurately (e.g. biscuit cutter).

Did you know?

The teddy bear was invented in honour of Theodore Roosevelt, the 26th US President, in November, 1902.



! Be very careful when threading the needle through the fabric, watch your fingers and ask an adult if you're unsure.

There are different **techniques** to use in a design such as **cross-stitch**, **running-stitch**, **blanket-stitch** and **appliqué**.



Appliqué a type of textiles work where small pieces of cloth are sewn or stuck in a pattern onto a larger piece.



The **blanket-stitch** is used to reinforce the edge of a **fabric** material or to securely join two pieces of **fabric** together.



How do you tie a knot?

How do you sew a running stitch?

How do you sew a blanket stitch?

What is applique?

How can you attach fabric together?

Does your toy fit the criteria?

What are your sewing skills?

Criteria, shape, template, sew, knot, thread, stitch, running stitch, blanket stitch, cross-stitch, stuffing, applique, appendages, detail, evaluate.

Computing – Vector Drawing

COMPUTING: CREATING MEDIA- Vector Drawing

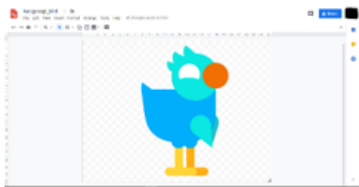
V5

KNOWLEDGE ORGANISER

Overview

Vector Drawing

- Vector drawings are computer graphic images that are made using 2-D shapes.
- The drawings are connected by lines and curves to form polygons and other shapes, forming a complete picture.
- There are lots of different apps and programs that can help us to complete vector drawings, including Google Drawings and Adobe Illustrator.
- Many techniques, e.g. zooming, rotating, resizing & duplicating, can help to create accurate images.

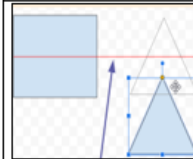


More Complex Vector Drawings

Google Drawings has been used in these examples, but lots of other vector drawing software uses the same tools and functions.



When dealing with small and intricate objects, it is important to use the zoom tool. Zooming in allows you to work with more precision. Zooming out allows a wider view.



The Alignment guides pop up as you move objects around, and help you to align and size objects.



The line tools can be used to help you change the colour and weight (thickness) of the line, and to make dotted lines.

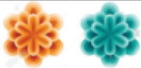


Coloured lines can be drawn, and colours can be used to fill shapes.



Gradient colours can be used to colour the same object in different colours.

Remember to that vector drawing is all about layering. By gradually adding layers of basic shapes, you build up something far more complex.

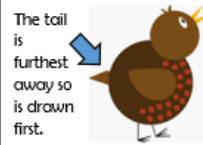


Creating Simple Vector Drawings

Vector drawings use lines and shapes to create bigger and more detailed images.



Plan your drawing by thinking about what shapes it is made up of. Each shape is called an object.



When vector drawing, the shapes overlap, so start with the objects that are the furthest away.



Copy and paste has been used to make the red spots the same size. You can save a lot of time and effort doing the same thing over and over by duplicating shapes. This is done most easily by copying the object that you want to duplicate (hold ctrl + c) and pasting (hold ctrl + v) a new one.



You can enlarge/reduce an object by clicking on it and dragging the handles to the desired size.

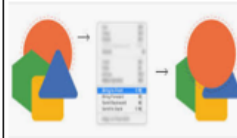


You can rotate an object by dragging the circular handle at the top.

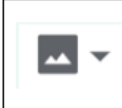
Advanced Tips



Grouping: 1. Select all images. 2. Right-click 3. Choose 'group.' All of the objects can now be moved and changed at the same time.



Advanced Layering: Right-click on objects and use the 'send to back' and 'bring to front' tools (in 'order') to ensure that your layering is in the correct order.



Backgrounds: You can create backgrounds by uploading images (using this icon). Remember to 'send to back' after it has been inserted.

Selecting Multiple Objects

This allows you to perform tasks with the whole drawing, rather than individual objects:
-Click, drag and drop a box around all of the objects in an image. This allows you to select all of the objects.

-When you perform an action (e.g. copy and paste) it will now apply to all.

Spanish - Instruments

Los instrumentos

rr

sound in:

• guitarra

&



phonics

stress
placement

Words that end in a vowel, 'n' or 's' are normally stressed on the second to last syllable like trom-pe-ta, and gui-ta-rra.

accents

Accents indicate the vowel is stressed. As seen in vio-lín, cím-balos, tri-án-gulo and bat-er-ja

10 instruments in Spanish.



Simple sentences like:



Toco el violín.

I play the violin.

vocabulary

The difference between the 3 determiners for 'the' that we see in this unit:

el

la

los

How and when to use the high-frequency regular verb 'I play' in Spanish when saying 'I play an instrument':

toco

I play

grammar

What I will learn:

- Objective 1: I will learn 5 instruments in Spanish with their correct determiner.
- Objective 2: I will learn 5 more instruments in Spanish with their correct determiner.
- Objective 3: I will revise all 10 instrument nouns with their determiners in Spanish and start to attempt the spellings.
- Objective 4: I will explore and understand better the role of the definite article/determiner in Spanish.
- Objective 5: I will learn how to use the 1st person conjugated verb 'toco' (I play) in Spanish.

RE - Sikhism



Enquiry: What is the best way for a Sikh to show commitment to God?

Theme: Prayer and Worship.

Core Knowledge	Link to other aspects of belief		Personal connection / resonance
<p>Sikhs are proud to visibly show commitment to their faith – this can be done in many ways including</p> <ul style="list-style-type: none"> • Joining the Khalsa through the Amrit Ceremony • Wearing the 5 K's • Worshipping in the Gurdwara • Reading and respecting the Guru Granth Sahib • Serving the community through the Langar meal and other areas of Sewa (service) 	<ul style="list-style-type: none"> • Treatment of the Guru Granth Sahib in the Gurdwara • Worship in the Gurdwara • Langar • Sewa (selfless service) / <u>Vand Chakna</u> (sharing with others) 		<ul style="list-style-type: none"> • How do I show commitment to people I care about? • How do I show commitment to things that are important to me?
Key Terms and definitions	History/Context	Impact on believer/daily life	Spiral curriculum link
<p>Waheguru: God <u>Mool Mantar</u>: This is the opening text of the Guru Granth Sahib – ‘<u>ik onkar</u>’ – There is only one God The Guru Granth Sahib: Holy book Chauri: fan used to show respect to the Guru Granth Sahib Granthi: person who reads the Guru Granth Sahib</p>	<p>The tenth Guru, Guru Gobind Singh said that there would be no other living Gurus after him so Sikhs should look to their holy scriptures for guidance instead. The Guru Granth Sahib is this scripture, and is treated as the living Guru of the Sikhs.</p> <p><u>Mool Mantar</u> Sikhs believe that Waheguru's (God) nature is expressed in the <u>Mool</u> Mantar. The first line of the <u>Mool</u> Mantar is “<u>Ik Onkar</u>”, which means “There is only one God”.</p>	<ul style="list-style-type: none"> • The symbol meaning “<u>Ik Onkar</u>” is seen in Gurdwaras and Sikh homes. • This symbolises the oneness of God and the oneness of humanity (the belief that everyone is equal). Treating people equally is vital to Sikhs 	<p>This links to the Khalsa and Sikh beliefs around sharing which show the importance of commitment.</p>
<p>Home learning ideas/questions: How do we show commitment to people we care about? What can we share? How does sharing make us feel?</p>			

PE – OAA



Get Set 4
Education

Knowledge Organiser OAA Year 5

About this Unit

OAA stands for Outdoor Adventurous Activities. These activities can be land based e.g. rock climbing, abseiling, orienteering, they can be water based e.g. kayaking, surfing, sailing or air based e.g. parachuting or paragliding. All of these activities require problem solving, collaboration, decision making and teamwork skills. In this unit, you will learn these skills then put them into practise in orienteering activities.

To be able to successfully take part in orienteering activities, you will need to have good navigation skills. Being able to read a map and use a compass are important navigation skills which will help you to go on amazing adventures.

When you know how to navigate, you're less likely to get lost, it will give you freedom to visit new places and learn about the world.

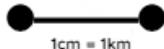
Compass:

A compass is a small device with a needle that always points to magnetic north and helps you to figure out the direction wherever you are!

Compasses work because the Earth has a magnetic field, like a big invisible magnet that pulls one end of the compass needle toward the north. This means the other end of the needle points south!

The four main directions are north, south, east, and west. There are also directions in between the main ones. For example, northeast is between north and east, and southwest is between south and west.

To use a compass, hold it flat in your hand or on a surface. Make sure the needle can move freely. Then, slowly turn yourself until the needle lines up with the "N" for north on the compass. Once you've found north, you'll know all the other directions as well!



Key Vocabulary

cardinal points: the four main compass directions: north, south, east, and west

compromise: come to an agreement

concise: give information clearly

critical thinking: evaluate to improve

landmark: a location on a map

navigation: plan and / or follow a route

negotiate: to agree on shared terms

orientate: to turn a map so that it always faces the same way as the ground it represents

solve: to find an answer

strategy: a plan of action to complete a set task or challenge

verbal: communication with voice

visual: communication with eyes



Ladder Knowledge



Problem solving:

There may be more than one way to solve a challenge. Using trial and error may help to guide you to the best solution.

Navigational skills:

Using a key helps you to identify objects and locations on a map.

Communication:

Being descriptive but concise when giving instructions e.g. 'two steps to the left' will help you to communicate clearly.

Reflection:

Reflecting on when you are successful at solving challenges will help you to alter your methods to help you improve.

Movement Skills

- balance
- co-ordination
- run at speed
- run over distance

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

Social negotiation, communication, leadership, work safely

Emotional empathy, confidence, resilience

Thinking problem solving, reflect, critical thinking, select and apply, comprehension

Rules

Abiding by rules will help everyone to play fairly and solve challenges.

Healthy Participation



- Listen carefully to safety rules for each challenge considering the space, equipment and other people.
- Work safely around others.

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



How will this unit help your body?

balance, co-ordination, speed, stamina

Home Learning

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



Blindfold Obstacle Course

What you need: A blindfold which could be a tea towel or jumper. Two or more people.

How to play:

- Create an obstacle course using whatever you can find e.g. cushions, chairs, clothes horse etc.
- One person begins blindfolded and the other person guides them around the obstacle course.



PE - Cricket



Get Set 4
Education

Knowledge Organiser Cricket Year 5

About this Unit

Cricket is a popular team sport played on a large oval field with a bat and ball. It involves two teams, one batting and one fielding, taking turns to play. The batting team aims to score runs by hitting the ball and running between two sets of wickets, while the fielding team tries to get the batsmen out by various means.

A match can last several hours or even days, depending on the format being played. Cricket is known for its use of tactics, thrilling moments, and passionate fans around the world.

Striking and Fielding Games Key Principles

attacking	defending
score points	limit points
placement of an object	deny space
avoid getting out	get opponents out



wickets

Can you think of any other striking and fielding games that share these principles?



Key Vocabulary



backing up: fielder moves to support another fielder in case they misfield
close catch: having both hands relatively close to the body to catch, little fingers together

compete: play against someone else

decide: make a choice

deep catch: catch a ball from height, thumbs together in front of head

grip: how you hold the ball or bat

long barrier: a fielding action used to stop a ball coming at speed

momentum: the direction created by weight and power

run out: fielder hits the wickets with the ball when the batter isn't there

short barrier: creating a barrier with hands in front of feet to stop a ball travelling at slow speed

situation: circumstances that create the environment

stance: the body position taken

tactic: a plan

Ladder Knowledge



Striking:

Stance is important to allow you to be balanced as you hit.

Fielding:

Backing up a fielder as a ball is being thrown will help to increase the chances of fielding successfully.

Throwing and catching:

Look at where the batter is before deciding where to throw. Use a close catch if the ball is coming straight and a deep catch if the ball is coming in from high.

Movement Skills

- deep and close catching
- underarm and overarm throwing
- overarm bowling
- long and short barrier
- batting

Social

This unit will also help you to develop other important skills. collaboration, communication, respect

Emotional

honesty, perseverance, determination

Thinking

observation, provide feedback, select and apply skills, tactics, assessing

BOWLING

- Balls can be bowled using underarm (only one bounce allowed or deemed a no-ball), or overarm bowling action (two bounces allowed).
- Overarm bowling with a straight arm is preferred.

OUT

- Bowled out: bowler bowls a ball that hits the wicket
- Caught out: fielder catches a batted ball
- Run out: fielder hits the wickets with the ball when the batter isn't there
- Stumped out: fielder stumps the wicket when the batter isn't there

Rules

RUNS

- 1 run for each changeover.
- 4 runs if they hit it past the boundary after a bounce.
- 6 runs if they hit it past the boundary - no bounce.

Tactics

Batters

- Look to play in free space.
- Run when it is agreed by both batters (batter 'on strike' is usually best to decide)
- Choose to play boundary shots (4 and 6), when appropriate.
- Stay at the wicket if the ball is too close to a fielder.

Fielders

- Organise yourselves in fielding positions e.g. spread out and stand inside the semi circle to stop 4's and 6's. All stand on the batter's side and go for 'outs'
- Look to backup throws towards wickets.
- Throw between your fielding team to send the ball to the wickets.



Healthy Participation

Always keep a safe distance between yourself and a batter. Ensure you handle the bat in the way suggested by the teacher at all times.

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

How will this unit help your body?

Balance, speed, strength, co-ordination, agility.

Home Learning

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



Roll and Run



What you need: 2 or more players, two markers, one ball or rolled up pair of socks.

How to play:

Place two markers 10m apart. Practice rolling to each other. Stop the ball with a long or short barrier.



Time 1 minute. How many can you stop in that time? Repeat. Can you beat your score?

After each roll, run to the opposite marker and back.



Time 1 minute. How many changeovers can you make in that time? Repeat. Can you beat your score?