

English



Writing Mat Expected Year 5

Use a mixture of simple, compound and complex sentences. Use a thesaurus to up-level your vocabulary choices.

Check for tense, subject/verb agreement, person, paragraphs and genre features!

Marvellous Modals!

Include modal verbs to show possibility:

can could should
might must may
would will ought

(and their negative versions)

Could you pop in an adverb of possibility?

surely possibly
certainly perhaps

Super Suffixes!

-ation preparation sensation
-ous courageous curious serious
-ly gently angrily frantically

Super Subordination!

Use these conjunctions to create super complex sentences:

if because as
before after until
that since when

Front it Out!

Link your sentences and paragraphs:

Time

At that moment, On Saturday,
Finally,
Place

Over the bridge, Inside the chest,
Beyond the clouds,

Frequency

Every few weeks, Never before,
Occasionally, Often,

Manner/ Behaviour

Breathing heavily, Waiting anxiously, Without warning,

It's All Relative!

Use a 'which', 'who' or 'that' relative clause to add extra information:

The Queen, who has reigned for 60 years, has four children.

Hedgehogs eat garden snails, which is important within the food chain.

The stench was so putrid that it made her eyes water.

Spellings... I need to know most of these:

accommodate	correspond	hindrance	recognise
accompany	criticise	individual	recommend
according	curiosity	interfere	relevant
achieve	definite	interrupt	restaurant
aggressive	desperate	language	rhyme
amateur	determined	leisure	rhythm
ancient	develop	lightning	sacrifice
apparent	dictionary	marvellous	secretary
appreciate	embarrass	mischievous	shoulder
attached	environment	muscle	sincere
available	equip(-ped)	necessary	sincerely
average	equipment	neighbour	soldier
awful	especially	nuisance	stomach
bargain	exaggerate	occupy	sufficient
bruise	excellent	occur	suggest
category	existence	opportunity	symbol
committee	explanation	parliament	system
communicate	familiar	physical	temperature
community	foreign	prejudice	thorough
competition	forty	privilege	twelfth
conscience	frequently	profession	variety
conscious	government	programme	vegetable
controversy	guarantee	pronunciation	vehicle
convenience	harass	queue	yacht

Expanded Noun Phrases:

Get Descriptive!
the ferocious, snarling beast
inside the cage
the breath-taking, scenic
view beyond the valley

Punctuation Reminders:

A	Capital letters for sentences, initials and proper nouns.
.	Full stops.
!	Exclamation marks for exclamations or surprise.
?	Question marks.
'	Apostrophes for possession and missing letters and to mark missing letters in contracted words, e.g. didn't.
,	Commas in lists, and to mark parenthesis, fronted adverbials and clauses.
“ ”	Inverted commas for speech. (Don't forget the commas too!)
-	Hyphen to connect words together.
-	Dashes to show longer pauses or parenthesis.
()	Brackets for parenthesis.

Important Links!

Link your sentences and paragraphs using adverbials:

Time

Subsequently, Later that day,

Place

Deep inside the forest, Below the sea,

Frequency

Occasionally, Often,

Contrast/ Cause

On the other hand, In contrast,

As a result, Consequently,

Manner/ Behaviour

Breathing heavily, Waiting anxiously, Without warning,

Creating Cohesion Top Tip:

Not only can you use pronouns like he, she, it or they instead of repeating a name or names but how about other names or titles too? Here's some examples: the teacher, she, Mrs Smith, the lovely woman or the lady with the long hair.

Be a Punctuation Professional:

A	Capital letters for sentences, initials and proper nouns.
.	Full stops
!	Exclamation marks for exclamations or surprise.
?	Question marks
'	Apostrophes for possession and missing letters.
,	Commas in lists, and sentences.
“ ”	Inverted commas for speech (Don't forget the commas too!).

Active and Passive

Use active and passive sentences appropriately:

Active: In front of millions of screaming fans, the star striker missed a vital penalty.

Passive: In front of millions of screaming fans, a vital penalty was missed by the star striker.

Modal Verbs

Modal verbs describe how likely it is that something will happen.

You **should not** (shouldn't) go to school today.

I **could** have a coffee with you.

Writing Mat Expected Year 6



Perfect Parenthesis!

Use brackets, commas or dashes to punctuate extra information and asides:

The tomb of Tutankhamen (the Ancient Egyptian pharaoh) was discovered by Howard Carter.

The advancing alien, who was speaking a Martian language, looked dangerous.

The daffodils - my favourite sign of spring - swayed gently in the woodland breeze.

Use a thesaurus to look for more ambitious synonyms. Why use 'frightened' when you could use...

startled alarmed apprehensive

Or 'show' a character's feelings:

his breathing quickened

her heart raced

sweat trickled gasping for air

Check for:

- consistent tense and person
- subject/verb agreement
- paragraphs with cohesive links
- genre features
- layout devices

Spellings... I need to know many of these:

accommodate	correspond	hindrance	recognise
accompany	criticise	individual	recommend
according	curiosity	interfere	relevant
achieve	definite	interrupt	restaurant
aggressive	desperate	language	rhyme
amateur	determined	leisure	rhythm
ancient	develop	lightning	sacrifice
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attached	environment	muscle	sincere
available	equip(-ped)	necessary	sincerely
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bargain	exaggerate	occupy	sufficient
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conscience	frequently	profession	variety
conscious	government	programme	vegetable
controversy	guarantee	pronunciation	vehicle
convenience	harass	queue	yacht

Splendid Subordination!

Use these conjunctions in varied places in your multi-clause sentences:

if because as
before after until
unless since when

Maths

Number and Place Value

Number and Place Value	Knowledge Organiser						
Key Vocabulary	Compare and Order						
ten million	equals	greater than	less than				
millions	$26 + 38 = 8 \times 8$	$223\ 873 > 98\ 256$	$901\ 198 < 1\ 091\ 098$				
thousands	Both calculations have	The number on the left has 2 hundred	The number on the right has 1				
hundreds	the value 64.	thousands and the number on the right has	million and the number on the				
tens		0 hundred thousands.	left has 0 millions.				
ones	smallest	81 782	127 352				
zero		127 835	137 019				
place value		200 002	greatest				
greater than	Negative Numbers		Round Any Number				
less than	$3 - 8 = -5$ 		Rounding to the nearest 1000 <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">$2000 \leftarrow 2499$</td> <td style="width: 50%;">$2500 \rightarrow 3000$</td> </tr> <tr> <td>round down</td> <td>round up</td> </tr> </table>	$2000 \leftarrow 2499$	$2500 \rightarrow 3000$	round down	round up
$2000 \leftarrow 2499$	$2500 \rightarrow 3000$						
round down	round up						
order	$-6 + 11 = 5$ 		Rounding to the nearest 10 000 <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">$20000 \leftarrow 24999$</td> <td style="width: 50%;">$25000 \rightarrow 30000$</td> </tr> <tr> <td>round down</td> <td>round up</td> </tr> </table>	$20000 \leftarrow 24999$	$25000 \rightarrow 30000$	round down	round up
$20000 \leftarrow 24999$	$25000 \rightarrow 30000$						
round down	round up						
round	 The temperature drops by 2°C . The new temperature is -4°C		Rounding to the nearest 100 000 <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">$200\ 000 \leftarrow 24\ 9999$</td> <td style="width: 50%;">$250\ 000 \rightarrow 300\ 000$</td> </tr> <tr> <td>round down</td> <td>round up</td> </tr> </table>	$200\ 000 \leftarrow 24\ 9999$	$250\ 000 \rightarrow 300\ 000$	round down	round up
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rounded			Rounding to the nearest 1 000 000 <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">$2\ 000\ 000 \leftarrow 2\ 499\ 999$</td> <td style="width: 50%;">$2\ 500\ 000 \rightarrow 3\ 000\ 000$</td> </tr> <tr> <td>round down</td> <td>round up</td> </tr> </table>	$2\ 000\ 000 \leftarrow 2\ 499\ 999$	$2\ 500\ 000 \rightarrow 3\ 000\ 000$	round down	round up
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round down	round up						
negative number							
partition							
digit							
interval							
sequence							
linear sequence							

Number and Place Value	Knowledge Organiser																																																																							
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3 926 471																																																																								
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The Gattegno chart shows that 400,000 is one hundred times bigger than 4,000. One-thousandth of 4,000 is 4.	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>1,000,000</td><td>2,000,000</td><td>3,000,000</td><td>4,000,000</td><td>5,000,000</td><td>6,000,000</td><td>7,000,000</td><td>8,000,000</td><td>9,000,000</td> </tr> <tr> <td>100,000</td><td>200,000</td><td>300,000</td><td>400,000</td><td>500,000</td><td>600,000</td><td>700,000</td><td>800,000</td><td>900,000</td> </tr> <tr> <td>10,000</td><td>20,000</td><td>30,000</td><td>40,000</td><td>50,000</td><td>60,000</td><td>70,000</td><td>80,000</td><td>90,000</td> </tr> <tr> <td>1000</td><td>2000</td><td>3000</td><td style="background-color: #e0ffe0;">4000</td><td>5000</td><td>6000</td><td>7000</td><td>8000</td><td>9000</td> </tr> <tr> <td>100</td><td>200</td><td>300</td><td>400</td><td>500</td><td>600</td><td>700</td><td>700</td><td>900</td> </tr> <tr> <td>10</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td><td>70</td><td>80</td><td>90</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> </table>									1,000,000	2,000,000	3,000,000	4,000,000	5,000,000	6,000,000	7,000,000	8,000,000	9,000,000	100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	1000	2000	3000	4000	5000	6000	7000	8000	9000	100	200	300	400	500	600	700	700	900	10	20	30	40	50	60	70	80	90	1	2	3	4	5	6	7	8	9
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Maths

Addition and Subtraction

Addition and Subtraction		Knowledge Organiser
Key Vocabulary	Addition	Subtraction
Add	Place Value Grid: $3274 + 5601 = 8875$	Place Value Grid: $35\ 727 - 6313 = 29\ 414$
Total		
Make		
Plus		
Sum		
More		
Altogether		
Difference		
Subtract		
Less		
Minus		
Take away	Column Method	Column Method
Column addition	Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands and/or as required.	Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.
Column subtraction		
Estimate		
Inverse operation		
Number facts		
Place value		
Complex		

Addition and Subtraction		Knowledge Organiser												
Estimate and Approximate	Rounding to Estimate	Inverse Operations												
	$41\ 635 + 7386 = 49\ 021$ Round to ten: $41\ 630 + 7380 = 49\ 010$ $41\ 630 + 7390 = 49\ 020$ $41\ 640 + 7390 = 49\ 030$	Use the inverse to check: $53\ 476 - 32\ 732 = 20\ 744$ To check $53\ 476 - 32\ 732 = 20\ 744$ use $32\ 732 + 20\ 744 = 53\ 476$												
	Rounding is not as accurate when both numbers are rounded up. A better estimate comes from "rounding" one down and one up. Estimating on a Number Line 	Start with a number, subtract 409 and double. I end with 6264. To find the starting number use the inverse: halve, then add 409. Half of 6264 = 3132. $3132 + 409 = 3541$. The starting number was 3541.												
	Find Missing Numbers Mental Strategies Use known facts: $7 + 4 = 11$, so $7000 + 4000 = 11\ 000$ $99 = 100 - 1$, so $4\ 257 - 99 = 4\ 257 - 100 + 1 = 4\ 158$ Use bar models and number lines: $93 + 36 = (93 + 7) + (36 - 7) = 100 + 29 = 129$ $78 - 19 = (78 + 2) - (19 + 2) = 80 - 21 = 59$	Multistep Problems Using a Bar Model The sum of two numbers is 25 567. The difference is 1875. 												
		Subtract 1875 from 25 567 = 23 692. Halve 23 692 to find smaller number = 11 846. Add 1875 to find larger number = 13 721.												
		<table border="1"> <tr> <td colspan="3">£20</td> <td>£20 is used to buy 2 books costing</td> </tr> <tr> <td>£3.75</td> <td>£8.49</td> <td>?</td> <td>£3.75 and £8.49.</td> </tr> <tr> <td colspan="2">£12.24</td> <td>£7.76</td> <td>How much change is given?</td> </tr> </table>	£20			£20 is used to buy 2 books costing	£3.75	£8.49	?	£3.75 and £8.49.	£12.24		£7.76	How much change is given?
£20			£20 is used to buy 2 books costing											
£3.75	£8.49	?	£3.75 and £8.49.											
£12.24		£7.76	How much change is given?											
		$£3.75 + £8.49 = £12.24$ $£20.00 - £12.24 = £7.76$												

Maths

Multiplication and Division

Multiplication and Division		Knowledge Organiser
Key Vocabulary	Factors	Prime Numbers
multiply	A factor is a number that divides into another number exactly, without leaving a remainder.	
groups of	<p>A common factor is a factor of 2 or more numbers.</p>	
lots of		
times		
divide		
share	The factors of 20 are 1, 2, 4, 5, 10 and 20.	
remainder	The factor pairs are: 1 and 20 2 and 10 4 and 5	
factor	Squared² and Cubed³ Numbers	
multiple		$8 \times 9 = 72$ $80 \times 9 = 720$ $72 \div 9 = 8$ $720 \div 9 = 80$ $724 \times 10 = 7240$ $724 \times 100 = 72400$ $724 \times 1000 = 724000$
product		$9 \times 8 = 72$ $90 \times 8 = 720$ $72 \div 8 = 9$ $720 \div 8 = 90$ $486000 \div 10 = 48600$ $486000 \div 100 = 4860$ $486000 \div 1000 = 486$
		$3600 + 400 = 9$ 3600 36 9

Multiplication and Division		Knowledge Organiser
Short Multiplication	Long Multiplication	
$2543 \times 7 = 17801$	$2543 \times 67 = 170381$	
		<p>Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer.</p> <p>Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).</p>

Short Division		Division
		$136 \div 4 = 34$
<p>$15 \div 4 = 3$ remainder 3</p> <p>Remember to regroup any remainders and move them into the next column.</p>	<p>$28 \div 5 = 5$ remainder 3</p> <p>If your calculation has a remainder, remember to record it in the answer using the letter <i>r</i>.</p>	

Art and design

Drawing: Depth, Emotion and Movement

Main subject*

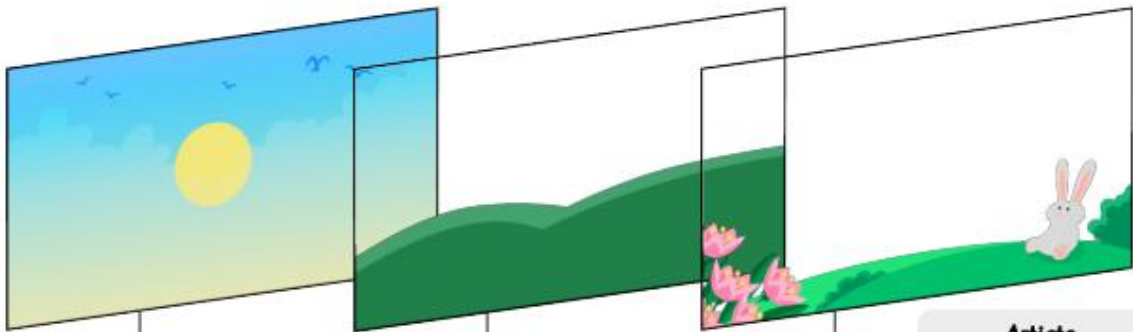
The central theme or object of an artwork.



Focal point*

Part of a composition that catches the eye first.

Depth:* The feeling in a picture that some things are closer and others are farther away.



Background*

The area of a picture that looks farthest away, often behind the main subject.

Middle ground*

Part of an artwork positioned between the foreground and background.

Foreground*

The part of a picture that looks closest to the viewer, usually where the main subject is.

Artists

- Jean-Michel.
- Charlie Mackesy.
- Elizabeth Catlett.
- John Muafangejo.

Lino printing

1



Draw a simple design and transfer the design onto the lino with tracing paper or pencil.

2



Use lino cutters to carve away at the parts to stay white.

3



Roll the ink out evenly using a brayer and apply it to the lino block.

4



Press a paper onto the lino and rub the back evenly, then carefully peel off the paper and let the print dry completely.

Design Technology

Electrical Systems – Steady Hand Game

Electrical Systems - Steady hand game

Backboard	A background designed for the steady hand game.
Battery	A cell or connected group of cells which store electrical energy.
Bulb	A component which gives light when electricity passes through it.
Buzzer	A component which makes a loud noise as electricity passes through.
Circuit	A collection of components which make an electrical system.
Conductor	A material that allows electricity to flow through it. e.g. metal.
Copper	A metal material that is one of the best conductors of heat and electricity. It is often used to make wires and pipes.
Function	How an object or product operates or works.
Insulator	A material that does not allow electricity to flow through it. e.g. plastic.
LED	A light emitting diode which lights up as electricity passes through.
Magnetic field	The area around a magnet where there is magnetic force.
Net	A 2D flat shape, that can become a 3D shape once assembled.
Pliers	A metal tool used for holding, twisting or cutting wire.
Prototype	A simple model that lets you test out your idea, how it will look and work.
Series circuit	A closed circuit where the current only follows one path.
Side view drawing	An engineering diagram which shows the dimensions (width, depth, length) of the side (left or right) of a product.
Switch	A component which opens and closes to turn the circuit on or off.
Side view drawing	An engineering diagram which shows the dimensions (width, depth, length) of the side (left or right) of a product.
Test	To find out whether something works as it should.
Top view drawing	An engineering diagram which shows the dimensions (width, depth, length) of the top of a product.

Check it out!

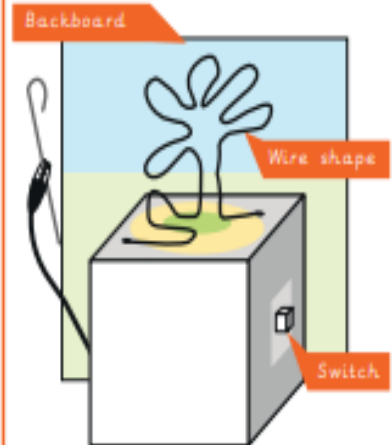
Check out continuous line drawings, such as Picasso's single-line animals for inspiration!









Key facts

Kapow
Primary

The more complex your wire shape, the harder your steady hand game will be, especially if the bends are close together.



Circuit symbols:

wire	
switch open	
switch closed	
battery	
buzzer	
bulb	

Design Technology

Cooking and Nutrition – Come Dine With Me

Food - Come dine with me

Accompaniment	Something which goes well together with other foods and drinks.
Cookbook	A book which contains recipes to make various dishes or foods.
Cross-contamination	Cross-contamination is how bacteria can spread. It happens when liquid from raw meats or germs from unclean objects touch cooked or ready-to-eat foods.
Equipment	Items and objects which are needed to complete a task.
Farm	Land or water used to produce crops or raise animals for food.
Flavour	How food or drink tastes. (e.g. sour, sweet, bitter, salty)
Imperative verb	Also known as 'bossy verbs' because they tell you what to do. You put them at the beginning of a command or action. (e.g. bake, grill, add, heat).
Ingredients	Items that make up a mixture e.g. foods that make a recipe.
Method	A way of carrying out a certain process, following a list of instructions.
Nationality	Belonging to a certain group of people in a particular country.
Preparation	The process of getting ready to make something.
Processed	When foods are passed through multiple processes in a factory to change or preserve it so it keeps for longer.
Reared	To breed and raise livestock. e.g. cows.
Recipe	A set of instructions for making or preparing a food item or dish.
Target audience	A particular group or person who a product is aimed at.
Unit of measurement	The unit which you use to measure a quantity. (e.g. litres)

Did you know?

Hawaii produces about 1/3 of all pineapples in the world.



! You cannot mix raw meat with other ingredients, it is not safe. Remember to also wash your hands after handling raw meat.

Key facts

Kapow
Primary

The five different food groups are:

1. Carbohydrates
2. Fruits and vegetables
3. Protein
4. Dairy
5. Foods high in fat and sugar

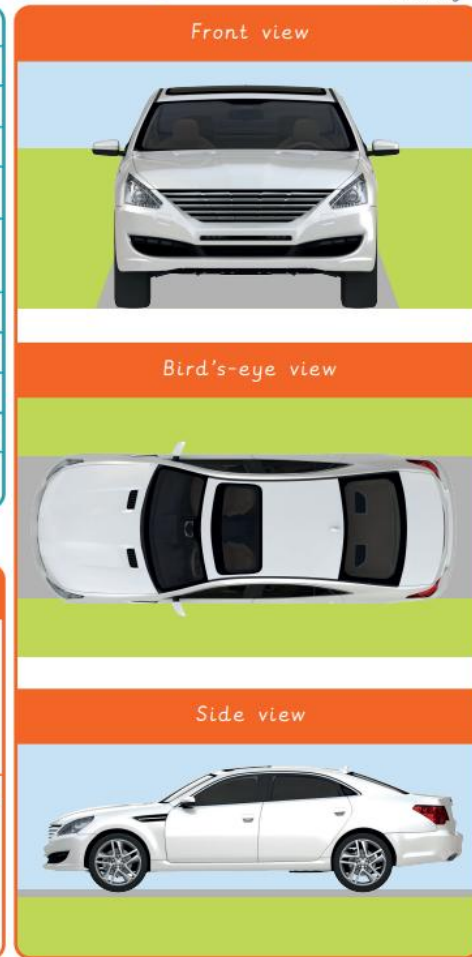


Many countries have traditional dishes. For example: India is known for hot curries, whilst England is known for the fish'n'chips which were historically served in newspaper.

Design Technology

Santa Sleigh

Aesthetic	How an object or product looks.
Air resistance	The level of drag on an object as it is forced through the air.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
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).
Graphics	Images which are designed to explain or advertise something.
Kinetic energy	The energy that causes an object to move.
Mechanism	The parts of an object that move together as part of a machine.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Structure	Something that has been made and put together and can usually stand on its own (eg a building, a bridge, a chair).



Did you know?



Some of the first toy cars were made in 1901, that's over 100 years ago!

Which vehicle has the least air resistance?



Science

Evolution, Inheritance, Adaptation and Variation

Variation: differences between individuals of a species.

There is variation in all living things.



Variation happens because of the environment, inheritance or both.

Environmental variation is caused by our lifestyles and surroundings, such as scars.



Inherited variation is caused by the genes inherited from parents, such as eye colour.



Some characteristics are affected by both the environment and inheritance, such as height and hair colour.

Living things produce offspring of the same kind but often appear different to the parents due to **variation**.



Adaptation: a characteristic that helps an organism to survive in its habitat.

Sometimes the inherited variation may help an individual to survive in its habitat.



Penguins have a thick fat layer and waterproof feathers to survive the snow and icy ocean.



Some flowers produce sweet nectar to attract insects that help pollinate for plant reproduction.

If it survives and reproduces, the useful characteristic can be passed onto the offspring.

Natural selection (survival of the fittest): the process where living things that are better adapted to their habitat survive and produce more offspring with those characteristics.



1. Variation.
2. Struggle to survive: competition for resources and adaptations to the environment.
3. Survival of the fittest: the best adapted survive and reproduce.
4. Advantages inherited by offspring.
5. Gradual change.

If these characteristics continue to be useful for survival, the species may change over time. If a new species is significantly different from its **ancestors**, it is said to have **evolved**.

Evidence for evolution



Fossils: the remains or traces of an animal or plant that lived long ago.

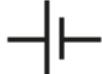







Fossils provide information about living things that inhabited the Earth millions of years ago. They can show how a species has changed over time.

ancestor	A relative of a living thing that lived a long time ago.
extinct	A living thing that no longer exists.
offspring	The young born to a living organism.
scientific theory	An explanation for something in the natural world backed by evidence.

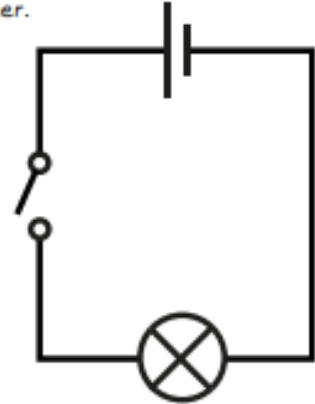
Science

Electricity

A **component** is a device in an electrical circuit. Symbols are often used to represent the components so they are easier to draw and easily recognised.

			
Cell - a single unit of power.	Battery - more than one cell.	Wire - connects components in a circuit.	Open switch - breaks a circuit.
			
Closed switch - completes a circuit.	Bulb - gives out light.	Buzzer - makes sound.	Motor - moves.

A **circuit diagram** is a simple line drawing that represents how the components in an appliance join together.



A complete circuit must have a **power supply**, a **complete loop** and at least one **component**.



Electrical safety

Do not use wet hands when using electrical appliances or switches.

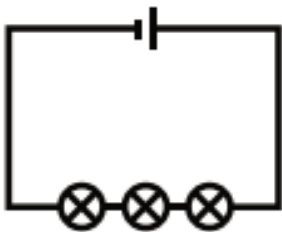
Do not put anything other than a plug in an electrical socket.

Let an adult know if electrical appliances or wires appear damaged.

Do not leave electrical wires across the floor or hot surfaces.

Investigating bulb brightness and resistance

The more bulbs, the dimmer their brightness.

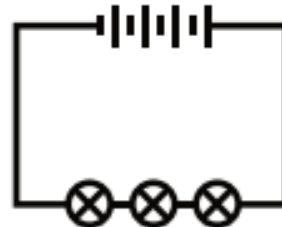


Or the more buzzers, the quieter the sound.

- The more components added to a circuit, the greater the resistance.
- This makes it harder for the current (charge) to flow.
- Less energy is transferred so the bulbs are dimmer.

Investigating bulb brightness and voltage

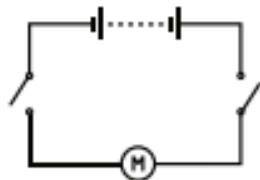
The more cells, the higher the voltage and the brighter the bulbs.



Or the more cells, the louder the buzzer.

- The more cells added, the higher the voltage.
- The higher the voltage, the more 'push' there is of the current.
- More energy is transferred so the bulbs are brighter.

If more than one switch is used in a circuit, both need to be closed for it to work. These are often used to keep people safe with dangerous appliances.



Switches need materials that are **electrical conductors** to complete the circuit.

current

A measure of how much electrical charge flows through a circuit.

resistance

Something that slows the flow of current/electrical charge in a circuit.

voltage

The measure of how much energy is carried by electrical charge; the 'push' from the power source.


Creation and Science: Conflicting or Complementary?



Golden Threads
Making sense of beliefs
Understanding the Impact
Making Connections

Key Vocabulary	
Christian	Someone who follows the teachings of Jesus
Bible	The Holy Book of Christians
Old Testament	The part of the Bible that tells about the Jews, their history, and God's words to them in the time before Jesus Christ was born
Genesis	The first book of the Bible (literally the beginning)
Creation	Causing something to exist.
Creator	The maker; God.
Conflicting	When two ideas do not work well together
Complementary	When two ideas work well together.
Compatible	When two things are able to exist together without problems or conflict
Evolution	The change in characteristics of a species over several generations relying on the process of natural selection
Cosmology	Learning about how the universe created - most scientists believe that this was due to the 'Big Bang'
Big Bang Theory	A 'wow' feeling about how amazing something is
Psalms	A book, song or poem found in the Bible (written by David).

The book of Genesis in the Bible (Old Testament) tells the story of the creation of the world by God.



1. On the first day God created light and the sun, moon and stars.
2. On the second day God created the earth and the sky.
3. On the third day God created the land and the sea.
4. On the fourth day God created day and night.
5. On the fifth day God created the plants and animals.
6. On the sixth day God created the animals and humans.

Big Bang Theory



The big bang is how astronomers and cosmologists explain the way the universe began. It is the idea that the universe began as just a single point, then expanded and stretched to grow as large as it is right now—and it is still stretching!

Evolution

Evolution is the theory (developed by Charles Darwin) that all the kinds of living things that exist today developed from earlier types. The differences between them resulted from changes that happened over many years. The simplest forms of life arose at least 3.5 billion years ago. Over time they evolved into the millions of species, or types, of living things alive today. Nearly all scientists accept evolution. This theory is central to the modern science of biology. As a scientific theory, evolution is testable. Scientists have performed many experiments and examined huge amounts of evidence from a variety of scientific fields. The evidence very strongly supports evolution.



Volleyball

Knowledge Organiser Volleyball Year 6

About this Unit

Volleyball is a net and wall game played in teams of six. The aim of the game is to hit the ball over the net landing into the court area on your opponent's side.

Volleyball originated in America in 1895 and took inspiration from other sports such as badminton and tennis. Volleyball first appeared in the Olympics in 1964 and today is a popular sport which has various versions such as beach volleyball and sitting volleyball.

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

- abide:** act in accordance with the rules
- appropriate:** suitable/approach
- communicate:** share information
- create:** to make space
- cushion:** take the power out of an object
- dig:** defensive shot used when the ball is low
- direct:** aim
- extend:** to make longer
- non dominant:** weaker hand
- placement:** intentionally playing the ball to a specific place on court
- recover:** move back to a ready position after playing the ball
- serve:** used to start a game
- set:** used to place the ball high
- sportsmanship:** play fairly, respect others and be gracious in victory and defeat
- tactics:** a plan that helps you to attack or defend
- technique:** the action used correctly
- thrust:** upward motion

Ladder Knowledge

Shots: Year 6: use the appropriate shot for the situation e.g. playing a dig first to keep the ball up, then a set then play the ball over the net.

Serving: Year 6: begin to apply tactics when serving e.g. aiming to serve short on the first point and then long on the second point.

Rallying: Year 6: use different shots and consider placement depending on if the rally is co-operative or competitive.

Footwork: Year 6: know that using the appropriate footwork will help me to react to a ball quickly and give me time to prepare to play a shot.

Movement Skills: set, dig, throw, catch, jump, serve, rally

Rules:

- The ball is not returned over the net within three hits.
- The receiving team lets the ball hit the ground.
- A player makes contact with the net.
- The returned ball lands outside the court area.

Tactics:

- Look at where your opponents are and try to place the ball away from them.
- Use a set to give your teammates time to see where to place the ball on the next hit.

Healthy Participation: Make sure unused equipment is stored in a safe place.

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

Volleyball, Serving Up Skills

What you need: 1 ball, a low play-court

How to play: Start behind a line. Serve underarm over the line. If successful, make a step back.

How far back can you go and still successfully serve?

Make the teacher to adding an obstacle that the ball must go over e.g. a walking line or cone.

How to serve: Hold the ball forward, bring arm back. Low throw up, swing and hit the middle of the ball with the middle of your hand. Finish with your hand pointing where you want the ball to go.

agility, balance, co-ordination, speed

Head to our youtube channel to watch the skills videos for this unit. @getset4education136

Cricket

Knowledge Organiser Cricket Year 6

About this Unit

Cricket is a striking and fielding game. A full cricket match is played between two teams of 11 players each. Runs are scored by hitting a ball and running between the stumps, called wickets.

The game started in England in the 16th century. The earliest reference to the sport is in a court case of 1598. Later, the game spread to countries of the British Empire in the 19th and 20th centuries.

Today, it is a popular sport in England, Australia, India, Pakistan, Sri Lanka, Bangladesh, South Africa, New Zealand and the West Indies to name a few!

Striking and Fielding Games Key Principles

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

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

Key Vocabulary

- abide:** act in accordance with the rules
- assess:** make a judgement of the situation
- collaborate:** work together
- close catch:** having both hands relatively close to the body to catch, little fingers together
- consistently:** do the same again
- deep catch:** catch a ball from height, thumbs together in front of head
- long barrier:** a fielding action used to stop a ball coming at speed
- momentum:** the direction created by weight and power
- 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
- tournament:** a competition of more than two teams
- track:** to move your body to get in line with a ball that is coming towards you

Ladder Knowledge

Striking: Momentum and power for striking a ball comes from legs as well as arms.

Fielding: There are lots of different fielding techniques. Assess the situation to help you decide on the best one.

Throwing and catching: Decide who to throw to and when to throw in order to get batters out. Accuracy, speed and consistency of throwing and catching will help to limit a batter's score.

Movement Skills: deep and close catching, underarm and overarm throwing, overarm bowling, long and short barrier, batting

Rules:

- Each fielding player is required to bowl 5 balls per set.
- 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.

Tactics:

- Look at where the fielders are and try to place the ball away from them.
- Finish with the ball pointing in the direction you want the ball to go.

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.

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

Cricket Runs

What you need: 2 or more players, two mallets, one ball, one tent (optional)

How to play: Place tent between 10m apart. One player is the bowler, one the batter. Bowler overarm bowls to the batter, batter attempts to hit their scores runs by running between the stumps.

Batter stops the batter by standing at a cone with the ball, or get a batter out by throwing the ball to hit the mallets they are running towards.

5 balls then change over.

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

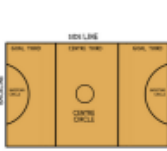
Head to our youtube channel to watch the skills videos for this unit. @getset4education136



Knowledge Organiser Netball Year 6

About this Unit

Netball is an invasion game. An invasion game is a game where two teams play against each other. You invade (enter) the other team's space to try to score goals.



GS and GA: Anywhere in their own shooting goal third and the centre third, but not the other goal third.



C: Everywhere except in the semi circles.



GD and GK: Anywhere in their opponents shooting goal third, the centre third, but not the other goal third. GD and GK try to stop the GS and GA from scoring.

Invasion Games Key Principles

attacking	defending
score goals	stop goals
create space	deny space
maintain possession	gain possession
move the ball towards goal	

A netball court is split into thirds and different positions have different roles and are allowed in different areas of the court. In official netball, there are seven players in each team. In this unit, games will be played with five players per team.

- GS: Goal Shooter
- GA: Goal Attack
- C: Centre
- GD: Goal Defence
- GK: Goal Keeper

Can you think of any other invasion games that share these principles?

Key Vocabulary

- abide:** act in accordance with the rules
- angle:** formed when two lines come together at a shared point e.g. arm to floor
- assess:** make a judgement of the situation
- ball carrier:** person in possession
- ball side:** the space between the ball carrier and the person you are marking
- close down:** to reduce the amount of space for an opponent
- contest:** an event in which people compete
- definite:** clear
- dominant:** preferred side
- drive:** encourage movement of an opponent
- drive:** a fast movement that helps to tell the ball carrier that you want the ball
- extend:** to make longer
- maintain:** to keep
- possession:** to have
- rebound:** when a player attempts to shoot a goal but the ball hits the ring and bounces back into play
- umpire:** a person who makes sure the rules are followed

Ladder Knowledge



Sending & receiving:
Making quick decisions about when, how and who to pass to will help you to maintain possession.

Space:
Transitioning quickly between attack and defence will help your team to maintain or gain possession.

Movement Skills

- throw
- catch
- run
- jump
- change direction
- change speed
- shoot

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

- Social:** communication, collaboration, respect
- Emotional:** honesty and fair play, pride, empathise, persevere
- Thinking:** select and apply, decision making, comprehension

Rules

- Footwork:** first foot to touch the ground when receiving a ball is the landing foot. The landing foot cannot be lifted and put back down. You may pivot on the landing foot.
- Hold ball:** a player has 4 seconds to pass or shoot.
- Replaying:** a player cannot regain possession of the ball, having dropped or thrown it, before it has been touched by another player or the goal.
- Offside:** a player is offside if they enter an area of the court they are not allowed in.
- Over a third:** the ball must be touched in each third of the court. If the ball is not touched in each area it is called 'over a third'.
- Contact:** if a player contacts another player.
- Obstruction:** defenders are allowed one jump to mark the ball and must be 1m from the ball carrier.

Free pass is awarded to the non-offending team if the footwork, hold ball, replay, offside or over a third rules are broken. The offending player is out of play.

A penalty pass or shot (if these rules are broken within the shooting circle) is awarded to the non-offending team if the obstruction or contact rules are broken. The offending player is out of play and stands by the side of the player taking the pass/shot.

Tactics

Using tactics will help your team to maintain possession and score goals or deny space, gain possession and stop goals. There are attacking and defending tactics and these will change depending on the situation, the opposition and the desired outcome.

Healthy Participation



- Make sure any unused equipment is stored in a safe place.



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

How will this unit help your body?

agility, 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

Dodge the Defender

What you need: A chair and a ball or pair of socks, one or two players.

How to play:

- Imagine the chair is a defender that you need to move around. Keep facing forward as you move your feet around the chair. Work for 20 seconds in one direction and then 20 seconds in the other direction. Repeat x 3.
- Move around the chair for 30 seconds, change direction when your partner calls 'change'.
- Add in a ball. Either throw the ball around the chair by yourself and move your feet to collect it or have someone throw the ball to space around the chair for you to collect.
- Work for ten fibres then rest and repeat x 4

www.getset4education.co.uk

Head to our youtube channel to watch the skills videos for this unit @getset4education136

Dance



Knowledge Organiser Dance Year 6

About this Unit

This unit is inspired by lots of different themes. Here are some that you may explore...



STAMP, CLAP

Choreographers (people who make up dances) sometimes don't perform to music.

Dance groups all over the world use everyday items such as brooms, bin lids and basketballs, as well as their own bodies as their stimulus to choreograph dance.

In this theme, you will be choreographing a dance and creating the music yourselves using your bodies.



Bhangra Dance

Bhangra is the traditional dance of Punjab in India. It originated with farmers as a folk dance celebrating the time of the harvest. Bhangra is traditionally danced to the dhol drum and has a very energetic and lively tone. It is often danced in circles and uses a lot of arm and shoulder movement.



1970s Disco

Developed during the mid-twentieth century and has since grown to become one of the most popular genres for formally trained dancers throughout the world.

Contemporary dance is all about self-expression, storytelling, and interpretation. Contemporary dancers have freedom of movement, allowing their bodies to freely express feelings, characters and events.

Key Vocabulary

- action:** the movement a performer uses e.g. travel, jump, kick
- aesthetic:** how a performance or skill looks
- choreography:** the sequence of actions or movements
- dynamics:** how an action is performed e.g. quickly, slowly, gently
- express:** make suggestions
- formation:** where performers are in the space in relation to others
- freeze frame:** when performers create an image without movement
- inspiration:** to take ideas from
- mood:** a state of feeling
- motif:** a movement phrase that relates to the stimulus that is repeated and developed throughout the dance
- phrase:** a short sequence of linked movements
- pose:** a position, usually still
- refine:** to improve the quality
- rehearse:** to practice
- stimulus:** something that creates ideas
- structure:** the way in which a dance is ordered or organised
- style:** the type of dance
- transition:** moving from one action or position to another

Ladder Knowledge



Actions:
Actions can be improved with consideration to extension, shape and recognition of intent. Remember what you are trying to tell the audience when choosing your actions.

Dynamics:

Selecting a variety of dynamics in your performance can help to take the audience on a journey through your dance idea.

Space and relationships:

Combining space and relationships with a prop can help you to express your dance idea.

Movement Skills

- actions
- dynamics
- space
- relationships

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

- Social:** share ideas, collaboration, support, communication, inclusion, respect, leadership
- Emotional:** confidence, self-regulation, perseverance, determination, integrity, empathy
- Thinking:** creativity, observation, provide feedback, comprehension, use feedback to improve, select and apply skill

Strategies

A leader can ensure your dance group performs together. Keep in character throughout your performance. It will help you to express an atmosphere or mood that can be interpreted by the audience.

Healthy Participation



You should be bare foot for dance.

Ensure you always work in your own safe space when working independently.

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

How will this unit help your body?

Balance, co-ordination, flexibility.



Home Learning

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

Word Dance

What you need: a book or magazine

How to play:

- Open a random page and find 10 action and describing words.
- Create an action or movement for each word.
- Sequence the movements together to create a dance.
- Share your dance with somebody, add music if you would like.

Use a variety of space and levels to make your dance look interesting.

www.getset4education.co.uk

Head to our youtube channel to watch the skills videos for this unit @getset4education136

History

Ancient Greek achievements are overrated and the Greeks were no different to other people.






Agree or Disagree?



Vocabulary

Acropolis	A fortress within a large city, usually on top of a hill. The Acropolis in Athens is the most famous one.
Agora	A meeting place in the centre of Ancient Greek cities.
Athens	A powerful Greek city-state and where Democracy was born.
City state	A city along with surrounding areas that rules independently (Athens and Sparta are two examples).
Civilisation	The stage of human social and cultural development and organisation that is considered most advanced.
Culture	The ideas, customs/habits, and public behaviour of a particular people or society.
Oligarchy	A type of government where power is held by a few people.
Olympics	A sporting event held by the Ancient Greeks every four years.
Sparta	A powerful Greek city-state and rival to Athens, Sparta's culture was based around warfare and battle.
Stadion	The original Olympic event, the stadion was a running race the length of the stadium.
Titans	The Titans were the first Greek gods. They were overthrown by their children, the Olympians.
Trade	This is the buying and selling of goods.
Tyrant	The ruler of a Greek city-state, a tyrant was like a king. Today the word tyrant is used to describe a ruler who rules unfairly or unjustly.

Impact on our lives today

	Knowledge Item 1 Democracy began in Ancient Greece. demos= people kratos= rule
	Knowledge Item 2 Ancient Greek myths are still read today. Monsters include Medusa and the minotaur. Heroes include Odysseus and Perseus.
	Knowledge Item 3 Greek architecture has influenced the design of buildings all over the world. The British Museum (London) is an example of this.
	Knowledge Item 4 The Greek alphabet and language influenced us too. Our alphabet was developed using some of the alphabet that the Ancient Greeks used. In fact, the first two letters in the Greek alphabet were 'alpha' and 'beta', which is where we get the word 'alphabet' from!
	Knowledge Item 5 The Olympics started in Ancient Greece.



Zeus Poseidon Athena

Who were the Ancient Greeks?

The Ancient Greeks lived in Greece and the countries we now call Bulgaria and Turkey over 4000 years ago. The two most important cities in Ancient Greece were Athens and Sparta.



Olympics

The acropolis



A Spartan soldier

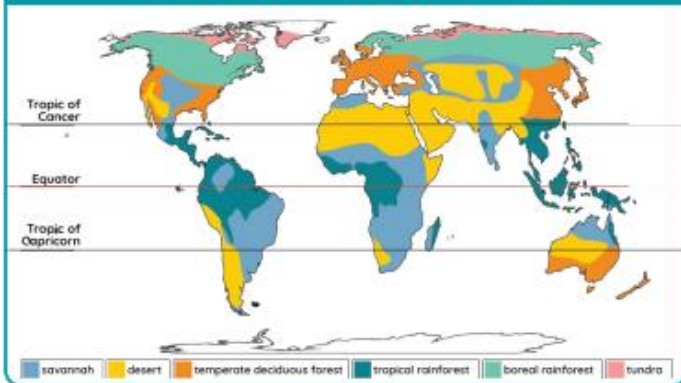
coin

Mount Olympus

Geography

Would you like to live in the Desert?

Where are hot desert biomes located?



A hot desert biome is hot, dry and arid, although temperatures can drop at night and occasional heavy downpours can occur.

Threats and dangers:



How do people use the Mojave Desert?

- Protecting areas of natural beauty in national parks.
- Recreational purposes like hiking or quad biking.
- Ranching and farming.
- Military bases and training.
- Mining precious minerals.
- Generating renewable energy.
- Living in settlements.



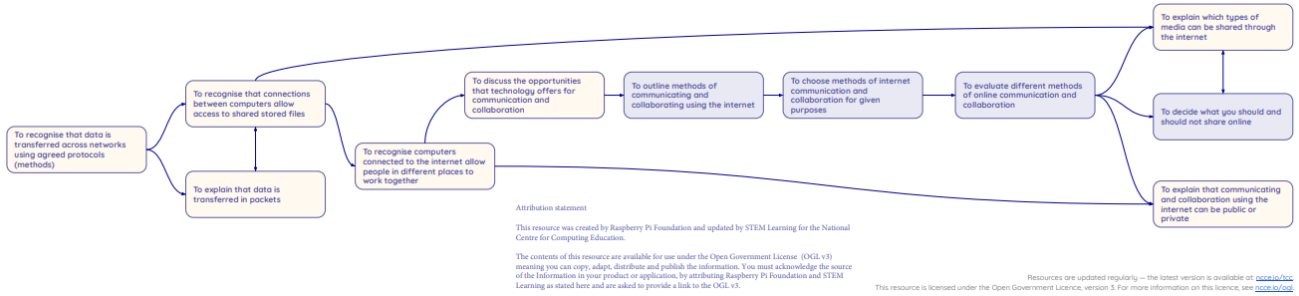
arid	Too little rain to support lots of vegetation.
barren	Land that cannot grow vegetation.
biome	An area of the world with a similar climate and landscape, where similar plants and animals live.
climate	Long-term weather conditions in a specific region.
desert	Any stretch of land with little to no rainfall and extremely sparse vegetation and wildlife.
mining	The process of digging up valuable minerals from the Earth's crust.
rainfall	The amount of rain falling in a place over a particular time.
ranching	Keeping animals on a large farm, particularly in the Americas.
renewable energy	Energy generated from a continuous source, such as wind or water.

Physical features in the Mojave Desert:



Computing

Computing systems and networks – Communication and Collaboration



Creating Media – Web Page Creation

