

Year 9 Art and Design Autumn Term Knowledge Organiser

Key Vocabulary:

1	The Formal Elements of Art	The formal elements of art are used to make a piece of artwork. The art elements are line, tone, texture, shape, pattern and colour. They are often used together, and how they are organised in a piece of art determines what the finished piece will look like.
2	line	A line is a mark or link between two points.
3	mark	Mark making describes the different lines, dots, marks, patterns and textures used to produce a work of art. Artists use gesture to express their feeling and emotions in response to something seen or something felt .
4	tone	Tone refers to the light and dark values of an object when drawing. There are three different types of tone: shadows, mid tones and high lights. Value in art is essentially how light or dark something is on a scale and refers to tone.
5	texture	The texture stimulates two different senses: sight and touch.
6	shape	Shape is a flat, enclosed area such as a square or triangle.
7	form	A form can refer to a three-dimensional composition or object.
8	pattern	A repeated decorative design.
9	colour	Colour is the element of art that is produced when light, strikes an object, and is reflected back to the eye. A colour wheel is an illustrative organisation of colour hues around a circle, which shows the relationships between primary colours, secondary colours and tertiary colours.

10	scale	The scale of something is its size. To scale something is to enlarge it. To scale down is to do a smaller version or reduction.
11	balance	If a picture or piece of art work has balance then each part of it works well together in a whole piece.
12	space	A space is the gap between objects.
14	gesture drawing	Gesture drawing is a loose form of sketching that attempts to capture your subjects basic form and express movement.
15	complementary colours	Complementary colours are directly opposite to each other on the colour wheel. The colour pairs always consist of either a primary with a secondary colour (red and green; yellow and purple; blue and orange) or two tertiary colours (red-orange and blue-green; yellow-green and red-purple; yellow-orange and blue-purple).
16	tint	Tint is when a colour becomes lighter by adding white.
16	pose	For example, a seated or moving position.
17	composition	The arrangement of elements in a piece of art.
18	proportion	Proportion is the principle in art that refers to relative size.

Year 9 Computing Autumn Term Knowledge Organiser EduBlaocks - Block Based & Python Coding

Key Vocabulary:

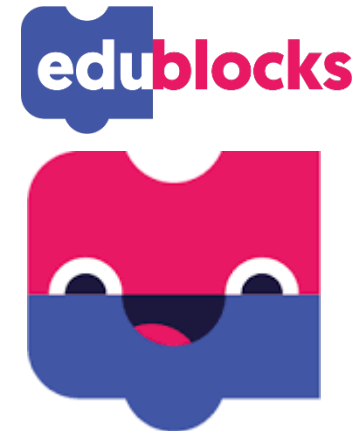
1	EduBlocks	A visual block based programming tool that helps to introduce text based programming languages.
2	Python	A text based programming language.
3	Programming Code	The process of writing computer programs. The instructions that you write to program a computer.
4	Algorithm	A set of rules / instructions.
5	Sequence	Parts of the code that run in order and the instructions for our code.
6	Selection	Using logical tests to change the flow of the sequence.
7	Iteration	Using loops to repeat sequences of code. Code is repeated (looped) while something is true or for a number of times.
9	Variable	A value that can be changed (speed, lives, score) Function Inbuilt code that performs a specific task.
10	Data Type: String	A sequence of characters that can include letters, numbers, symbols.
11	Data Type: Integer	Whole numbers, no decimal point.
12	Data Type: Float	Decimal Numbers. While Loop A "While" Loop is used

Key Vocabulary:

13	==	Equal to
14	!=	Not equal to
15	<	Less than
16	>=	Greater than or equal to
17	<=	Less than or equal to
18	>	Greater than
19	//	Integer division
20	%	Remainder
21	* *	Exponent

Drawing Patterns

Patterns are repeating sequences of code. Here we modify the triangle code to draw a repeating, rotating pattern. The while True loop will run forever, and the for loop will draw the triangle. Each time the loop iterates we move the Turtle 10 pixels.



Functions

Functions are powerful tools. They are subroutines, small sequences of code inside the main code.

We can call the function, and come out of the main code, do the function, then come back to the code.

They enable us to reuse sections of code. They keep our code tidy, and with fewer lines to write.

In our code we can draw any shape using one section of code.

Year 9 Computing Autumn Term Knowledge Organiser Business & Real World

Key Vocabulary:

1	Marketing	Marketing is finding the needs of customers and demonstrating how a business fulfils those needs to increase sales
2	Market Research	The collection of data to help business decisions
3	Primary Research	Primary research is research you complete yourself (Questionnaire, focus group, interview)
4	Secondary Research	Secondary research is research that has already been completed by another person (using the internet to read a report, reading a newspaper, books.
5	Market Segmentation	Splitting the market into different groups.



Primary	Pros	Cons
Questionnaire	Cheaper than interviews Easily target certain people	Difficult to predict how many will be completed People may not understand the questions
Interviews	Questions can be explained Customers can easily be targeted	Expensive Customers may feel uncomfortable
Trial	Save money before making products widely available.	Costly to set up
Focus Group	Data is accurate to the target market	Only small groups that take part so expensive
Secondary Research	Pros	Cons
	Cheap and already available to use	Not exactly what you need Could be out of date Could be unreliable

Key Calculations

Revenue	$\text{Selling Price} \times \text{Number Sold}$
Total Cost	$\text{Fixed Costs} + (\text{Variable Cost for 1} \times \text{Number Sold})$
Profit or Loss	$\text{Revenue} - \text{Total Cost}$ (It's a loss if the answer is negative)
Break Even	$\frac{\text{Fixed Costs}}{\text{Selling Price} - \text{Variable Cost per Unit}}$ (Answer in units not pounds)

Year 9 Drama Autumn Term Knowledge Organiser

Key Vocabulary:

1	Characterisation	Use of voice and movement to create a role.
2	Staging	Where actors and set are in the space.
3	Stimulus	Something that generates ideas e.g a photograph, clip from a film, poem
4	Moral	Message for the audience to think about and judge their own actions and behaviour.
5	Theme	The topic of the performance e.g. Supernatural.
6	Lighting	The way the actors and stage are lit to create a mood or atmosphere
7	Costume	What the actors wear to create a believable character

Devised Drama rehearsals and planning

8 What is Devising?

Devising is a group collaboration in response to a stimulus leading to the creation of an original performance. Devising in drama demands inventiveness, an understanding of the rules of structuring a piece of theatre and a readiness to collaborate with others.

9 Key knowledge

Creating devised work using a stimulus allows you to produce a piece of imaginative theatre that can relate to your age group and include your own thoughts and opinions. The intention can be to inform, educate and even shock!

10 Rehearsal Skills

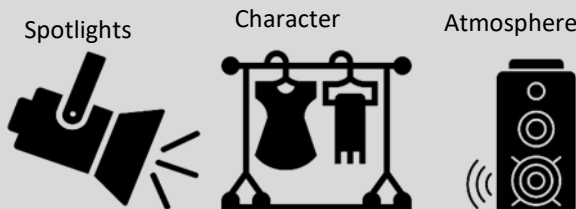
Devising: is a method of theatre -making in which the performance originates from collaborative, often improvisatory work by a performing ensemble.

Researching: Collecting evidence for the content and moral of a performance; Includes facts, interviews and personal thought.

11 Key planning skills

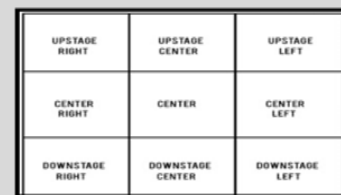
Fiction reading Script writing Creative thinking Responding to a stimulus. Performance skills/techniques.

12 Props, Costume, sound and lighting effects.



Devised Drama Performance

13 Staging Configurations



14

Mime: Movement/copying physical action
 Slow-motion: The slowing down of real-life speed to highlight a key moment.
 Improvisation: Create spontaneously or without preparation
 Atmosphere: The mood or feeling of a narrative.
 Climax (Peak of Tension): The highest point of suspense, where danger, uncertainty is at its greatest.
 Pace: The speed at which the story is delivered, or with which something happens or changes
 Tone: A quality in the voice which expresses the speaker's feelings or thoughts.
 Pause: A short period in which something such as a sound or activity is stopped before starting again.
 Facial Expressions – matches the character's feelings/emotions
 Body Language – over exaggerated to create identifiable characters to a young audience
 Gestures – Exaggerated hand movements
 Levels – Status, power, relationships
 Voice – clear use of voice using relevant vocabulary.

15 Key Language

Develop Ideas from any of the stimulus you have been given.
 Apply your own ideas about whether technology is negative or positive.
 Analyse the skills we have learnt; Physical theatre, narration, monologue etc.
 Evaluate the moral or message for the audience at the end.

Year 9 Salt To The Sea Half Term 1 Knowledge Organiser

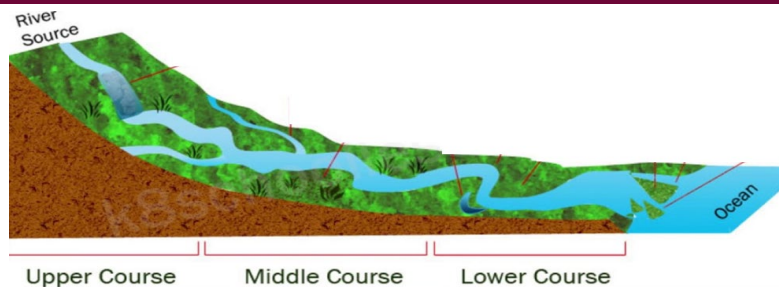
Key Vocabulary:			Themes:	Characters:
1	Shifting narrative voices	The different characters that tell the reader the story from their own point of view. We see the journey as they each describe it. The narrator changes from one character to the next each chapter.	9 Family/ Friendship The refugees at the centre of the novel have either been separated from their families by distance or by death. They form new bonds with each other out of love. Their new family unit helps them to survive, but it also brings them joy and comfort.	13 Joana Vilkas Joana is primarily motivated by guilt. She is a young Lithuanian woman, who repatriated to Germany from Lithuania in 1941, when Soviet forces threatened to overtake the country. She blames herself for the capture and imprisonment of her cousin, Lina, and so dedicates herself to helping others as a way of relieving the guilt she feels over allowing harm to come to someone she loved. Joana is a nurse and uses her skills to help others whenever possible.
2	Embodiment/ Embodies	To represent an idea/ thought/ feeling/ concept in a human form. Characters in the novel are embodiments of specific ideas.	10 Heroism In Salt to the Sea, Sepetys presents different ideas of heroism and prompts the reader to question what true heroism looks like.	14 Florian Beck Florian is driven forward by a sense of his own fate and destiny. He is a Prussian artist, who for many years worked with Erich Koch and Dr. Lange to restore European art that (unbeknownst to Florian) had been stolen by the Nazis. Consumed by his admiration of Dr. Lange and his love of art, Florian didn't realize he was working on unethically and illegally acquired artworks until many years into the war. He now seeks revenge.
3	Context	The background information that helped to inspire the author to craft the novel.	11 Secrecy Each of the four narrators and main characters has a secret. As the novel progresses, the characters gradually reveal their secrets. Sometimes, the characters reveal their secrets in a way that may be considered manipulative, because they need something from another character. However, at other times, the characters let their guards down and share their secrets because they feel a genuine emotional connection. Sometimes, revealing a secret is like a confession, meant to lighten the burden that a character carries	15 Emilia Stozek Emilia's driving emotion is shame. Emilia is Polish, but has spent the past several years in the German village of Nemmersdorf. Her mother, Halina, died during the birth of Emilia's younger brother, and Emilia's father was killed by Nazis during her time in Nemmersdorf. Emilia has experienced tremendous trauma during the war. She deals with this trauma by retreating into a fantasy she has constructed in her mind.
4	Authorial Intent	The person who writes a piece of text will always have an aim or something they want to achieve, this is their authorial intent.	12 Plot Summary: The story takes place in East Prussia in 1945. The book follows a group as they evacuate their home countries: Throughout the journey to the evacuation ships, the refugees get to know one another and grow closer as a group. It is revealed that Emilia is eight months pregnant from an assault by Russian soldiers; Florian, the restoration artist, is on the run for stealing a piece of art of the Amber Room; and Joana feels responsible for some of the deaths of her family. By the time the group reaches the evacuation ships, their relationships are solidified. It is clear that Joana and Florian have fallen in love, and Emilia sees Florian as a symbol for good men. At this point, the group comes into contact with Alfred who is their only hope for getting tickets to the boats. They board the Wilhelm Gustoff when Emilia gives birth. Russian torpedoes hit the Wilhelm Gustoff. Quickly, the ship sinks and thousands die. However, Joana, Florian, and Emilia's baby are able to escape on a lifeboat along with a boy named Klaus. Emilia, on the other hand, finds herself on a different lifeboat with Alfred, the Nazi who attempts to kill her. Ultimately, both Emilia and Alfred perish. The book concludes with a glimpse into the future. Joana and Florian live in the United States. They have Emilia's baby, the boy Klaus, and a child of their own. Through a letter sent by Clara Christensen, a Danish woman, it is told that Emilia's body was found washed up on a shore, and she was buried.	16 Alfred Frick From the first chapter Alfred's driving emotion is fear: fear of being inferior, fear of rejection. Alfred begins the book as a pompous, if misunderstood German soldier whose character deteriorates as we read on. He has no friends, and very little loyalty to anyone but himself, and Hitler. Every action he undertakes is to advance himself, and to somehow prove his worth as a "Good German." He is in love with Hannelore, his former next-door neighbour, to whom all his chapters are addressed.
5	Flaw	Where something (or someone) isn't perfect and has something wrong with it (or them). Each character in the novel has a flaw that helps to drive them forward.		17 Heinz, "The Shoe Poet" The Poet is an older German man who is fleeing East Prussia. A former shoemaker, he pays close attention to everyone's footwear, and believes that shoes hold secrets about the past and personality of the wearer.
6	Multifaceted	This means to have many different sides or parts, people can be multifaceted, which means that they aren't straightforward to understand, they can seem heroic, while also having parts of their character that are evil.		
7	Symbolism	Symbolism is the idea of a word or object in a story representing something more than what it literally is.		
8	Thematic development	All stories have big ideas in them, these are called themes, sometimes these themes can be quite complicated and can change and develop throughout the novel.		

YEAR 9 HALF TERM 1 – EXPLORING RIVERS

Key vocab	Definition
Confluence	The meeting point of two or more rivers
Tributary	A small stream feeding into a larger stream or lake
Watershed	The edge of the drainage basin
Fluvial	Anything that is associated with rivers
Drainage basin	The area of land around a river where all water drains from
Course	A distinctive part of a river
Processes	Forces that change the physical feature of the earth
Impact	Something that happens because of a previous action. This can be positive or negative
Transportation	The movement of material from one place to another
Erosion	The breaking down of rocks
Deposition	The dropping of material when the river loses energy

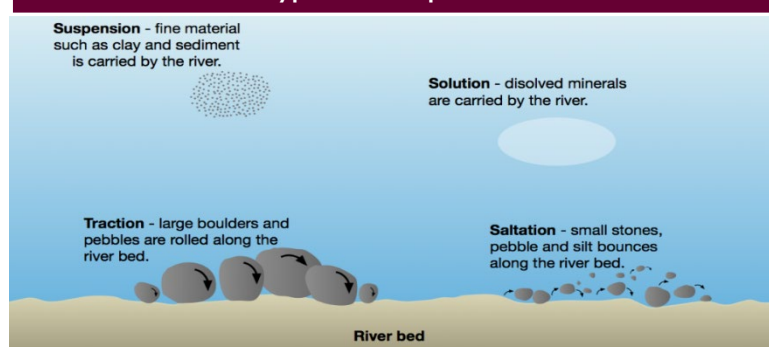
Landforms

Upper	Interlocking spurs – hills that are overlapping in the landscape. Created by erosion. Waterfall – Hard rock above the soft rock. Hydraulic action creates an undercut which becomes unstable and falls into the plunge pool below
Middle	Meander – a bend in the river created by something that is in its way. Fastest flow on the outside, slowest flow on the inside. Oxbow lake – a meander that has been cut off from the main channel after flooding happens
Lower	Floodplain – the low lying land next to the river that floods when a river bursts its banks Levee – natural build up of material by deposition on the river banks. Acts as a natural flood defence.



	Upper	Middle	Lower
Gradient	Steep	Slightly sloping	Flat
Channel width	Narrow	Slightly wider	Widest
Velocity	Fastest	slower	Slow
Sediment size	Large, Angular rocks	smaller, less angular rocks	Smaller, smoother rocks

Types of Transportation



Hard engineering	Soft engineering
<ul style="list-style-type: none"> Involves the use of technology to control rivers. It is more expensive as concrete is used. Immediate results but may create problems in the future 	<ul style="list-style-type: none"> More sustainable option Does not interfere with the flow of the river Less expensive – very little material is used. Works alongside natural processes.

Types of erosion	Definition
Hydraulic action	Sheer power of the water smashing against river banks. Air becomes trapped in cracks and widens them
Attrition	Rocks that the river is carrying knock against each other and become smaller and rounded
Abrasion	Pebbles grind along river banks and bed, causing rocks to break apart
Solution	Water dissolves certain types of rock such as limestone.

Impacts of flooding

- Loss of houses and businesses
- Floodwater can contaminate fresh water supplies
- Loss of life
- Difficult to get insurance on properties
- Destruction of wildlife habitats.
- Sewage can be brought up out of grids

Humans use of land around rivers

Upper	<ul style="list-style-type: none"> Walking/hiking Farming Reservoirs
Middle	<ul style="list-style-type: none"> Towns and cities Farming Transport
Lower	<ul style="list-style-type: none"> Towns and cities Factories built near ports Tourism – beaches/seaside towns

Year 9 History Autumn Term Knowledge Organiser Who won the fight for the vote?

Key Vocabulary:			Key information	
1	Suffrage	the right to vote in elections.	8	Tactics Cat and Mouse Act – The government released suffragettes who went on hunger strike temporarily to regain their health before completing their sentence. Force Feeding – the practice of feeding the suffragettes against their will when they went on hunger strikes
2	Suffragists	women who campaigned for the vote	9	Suffragists The suffragists used leaflets, marches, petitions and speeches to persuade MPs to give women the vote
3	Suffragettes	women who used militant methods to campaign for the vote	10	Suffragettes Suffragettes used a campaign of violence to increase pressure on MPs to give women the vote
4	Militancy	use of violence in the campaign for the vote.	11	World War One Women joined in with the war effort and took jobs in armaments factories and as nurses with FANY FANY – First Aid Nursing Yeomanry Armaments – military weapons and equipment Women’s Land Army a voluntary organisation women joined to help keep the country fed during
5	NSUWSS	National Women’s Suffrage Societies	12	Change in attitudes By the end of WW1 more people believe in expanding the suffrage and giving more people the vote.
6	WSPU	Women's Social and Political Union	13	Sophia Duleep Singh Princess <u>Sophia Duleep Singh</u> , daughter of Maharaja Duleep Singh, became a suffragette shortly after returning to Britain. Her contribution to the campaign was wide-ranging. Duleep Singh not only sold WSPU publications outside of her home at Hampton Court Palace, but also led a 400-strong demonstration to parliament on a day that later
7	Deeds not words	the motto of the Suffragettes	14	Annie Besant Besant supported a number of workers' demonstrations for better working conditions. In 1888 she helped organise a strike of the female workers at the Bryant and May match factory in east London. The women complained of starvation wages and the terrible effects on their health of phosphorus fumes in the factory. The strike eventually led to their bosses significantly improving their working situation

Key information	
15	Elizabeth Fry In 1817 Elizabeth Fry created the Association for the Improvement of Female Prisoners and along with a group of 12 other women lobbied authorities including Parliament. In the 1820s she inspected prison conditions, advocated reform and established more groups to campaign for reform. In 1823 prison reform legislation was finally introduced in Parliament.
16	Clementina Black. Clementina Black, Secretary of the Women’s Trade Union League, secures the first successful equal pay resolution at Trades Union Congress.
17	Timeline of Key events
1897	NUWSS formed. Millicent Fawcett is the leader
1903	WSPU formed. Emmeline Pankhurst is the leader
1908	The suffragettes start to use militancy
1909	The suffragette Marion Dunlop Wallace goes on hunger strike
1913	The Cat and Mouse Act is passed and the force feeding of suffragettes in prison starts
1914	World War One starts
1918	WW1 ends and women over 30 get the vote
1928	Women over 21 get the vote and get the same voting rights as men.



Year 9 Design and Technology Autumn Term Knowledge Organiser

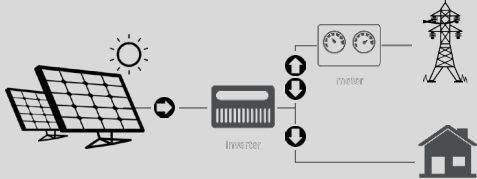
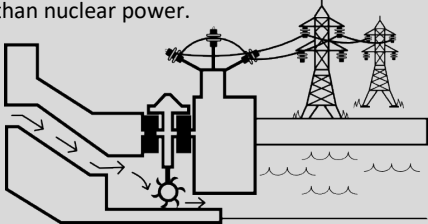
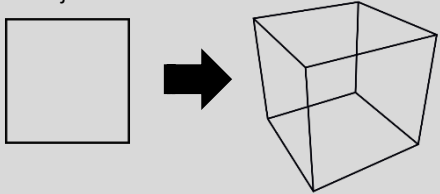
Key Vocabulary:

1	CAD	Computer-aided design is the use of computers to aid in the creation, modification, analysis, or optimization of a design. This software is used to increase the productivity of the designer, improve the quality of design, improve communications through documentation, and to create a database for manufacturing.
2	CAM	Computer Aided Manufacturing is the use of software and computer-controlled machinery to automate a manufacturing process.
3	Automation	Automation describes a wide range of technologies that reduce human intervention in processes.
4	Crowd Funding	A scale model is a physical model which is geometrically similar to an object (known as the prototype). Scale models are generally smaller than large prototypes such as vehicles, buildings. Models built to the same scale as the prototype are called mock-ups.
5	Virtual Marketing	Viral marketing or viral advertising is a business strategy that uses existing social networks to promote a product mainly on various social media platforms.
6	Planned Obsolescence	In economics and industrial design, planned obsolescence is a policy of planning or designing a product with an artificially limited useful life or a purposely frail design, so that it becomes obsolete after a certain pre-determined period of time .

Bottle Balance

7	Natural	Existing in or derived from nature; not made or caused by humankind. For example, gold is naturally occurring but a gold bar or gold ring is man-made.
8	Environment	The natural environment or natural world encompasses all living and non-living things occurring naturally, meaning in this case not artificial. The term is most often applied to the Earth or some parts of Earth.
9	Sustainability	A societal goal with three dimensions: the environmental, economic and social dimension. Environmental sustainability occurs when natural resources are preserved.
10	Renewable Energy	Renewable energy is energy that is collected from renewable resources that are naturally replenished on a human timescale. It includes sources such as sunlight, wind, rain, tides, waves, and geothermal heat.
11	Fossil Fuels	A fossil fuel is a hydrocarbon-containing material formed naturally in the earth's crust from the remains of dead plants and animals that is extracted and burned as a fuel. The main fossil fuels are coal, crude oil and natural gas.
12	Nuclear Power	the use of nuclear reactions to produce electricity. Nuclear power can be obtained from nuclear fission, nuclear decay and nuclear fusion reactions. Presently, the vast majority of electricity from nuclear power is produced by nuclear fission of uranium and plutonium in nuclear power plants.

3D Design

13	Solar Panel - What is it?
A solar cell panel, solar electric panel, photo-voltaic module or solar panel is an assembly of photo-voltaic cells mounted in a framework for installation. Solar panels use sunlight as a source of energy to generate direct current electricity.	
	
14	Hydroelectric - What is it?
Hydroelectricity, or hydroelectric power, is electricity produced from hydropower. In 2020 hydropower generated one sixth of the world's electricity, almost 4500 TWh, which was more than all other renewables combined and also more than nuclear power.	
	
15	Oblique Projection
It is a simple type of technical drawing of graphical projection used for producing three-dimensional (3D) images of objects.	
	
16	Evaluation
Designers evaluate their finished products to test whether they work well and if design can be corrected or improved. It is important to evaluate your work constantly during the project to see if it is on track and so that improvements can be built-in throughout the design process, not just at the end.	

Year 9 Music Autumn Term Knowledge Organiser

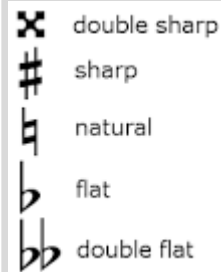
Key Vocabulary:

1	Performing	Learning to play a piece to perform to an audience
2	Accompaniment	The music that is in the background complementing the melody
3	Structure	Using sections of music to develop your compositions – Introduction, A (verse), B (chorus), ending
4	Rhythmic Diminution	Halving the note values of the main theme doubling the tempo
5	Rhythmic Augmentation	Doubling the note values of the original theme making them twice as long
6	Polyrhythm	Layers of different rhythms played at once – normally in African/world music
7	Harmony	Using notes of the chords to add a second line of melody – to blend in with the original melody
8	Retrograde	Composing a melody and using it backwards
9	The staff	The bass and treble clef music – different instruments play at different pitches – which are “high” or “low”

Music Theory

Accidentals – using all the keyboard

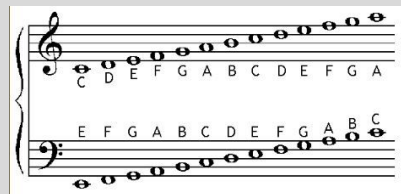
The music often has accidentals on them – meaning to change the note from a white to black or vice versa



C major		A minor	
	G major		F major
	E minor		D minor
	D major		Bb major
	B minor		G minor
	F# major		Eb major
	F minor		C minor
	E major		Ab major
	C# minor		F minor
	B major		Db major
	G minor		Bb minor
	F# major		Gb major
	D minor		Eb minor
	C# major		Cb major
	A# minor		Ab minor

The key the music is written in will determine the notes Played – C major – no black Notes – G major – F# etc

Music of the Stave

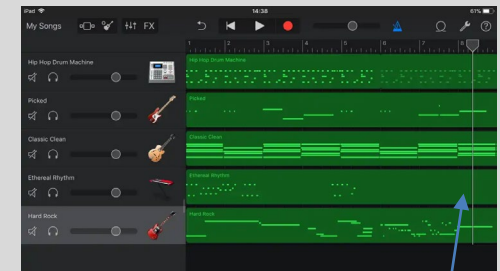


Tempo markings

Common Tempo Markings			
Tempo Text	Meaning	bpm	
Slow			
Grave	very slow	25 – 45	
Largo	slow and broad	40 – 60	
Lento	slow	45 – 60	
Adagio	slow (with expression)	66 – 76	
Medium			
Andante	“walking” speed	76 – 108	
Moderato	moderately	108 – 120	
Allegretto	moderately fast	112 – 120	
Allegro Moderato	slightly slower than allegro	116 – 120	
Fast			
Allegro	fast, quickly, brightly	120 – 156	
Vivace	fast and lightly	156 – 176	
Allegro Vivace	very fast	172 – 176	
Presto	exceptionally fast	168 – 200	

Music Theory

Cropping, copying and pasting

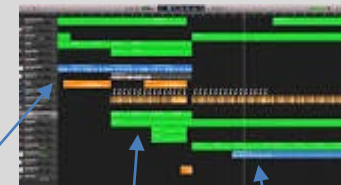


To crop your piece you move the white moving arrow line and go to edit – split - you will cut the music where the line is

To copy your layer – you click on it right click copy – move the white moving arrow to where you want the music and right click paste

Structuring your pieces

To make your music longer you need to extend them by adding different sections of music – an introduction, first section then a contrasting second section. For the contrasting second section you could use minor chords, make the music sound faster or slower (use long notes or short ones)



Intro

Section A
(Verse)

Section B
(Chorus)

What about an ending?
Repeating A then ending?

Year 8 Religion and Worldviews –Does living biblically mean obeying the whole Bible?

Key Vocabulary:		
1	Cosmological argument	An argument for the existence of God which claims that all things in nature depend on something else for their existence
2	Design argument	It points to evidence that suggests our world works well - ie that it was designed in a specific way. The argument follows that if it was designed like this, then someone or something must have designed it.
3	Miracle	An extraordinary and welcome event that is not explicable by natural or scientific laws and is therefore attributed to a divine agency.
4	Omnibenevolent	The Christian faith teaches that God loves everyone unconditionally.
5	Omnipotent	The Christian faith teaches that that God is all-powerful.
6	Omnipresence	The Christian faith teaches that that God is everywhere.
1	Miracles	
If a miracle has really happened, it means that God has acted on the earth and that people witnessing it have had direct contact with God, so he must exist. If a miracle has happened, God must have performed the miracle and to perform it, he must exist. If an atheist or agnostic witnesses a miracle, their first reaction will be to look for a natural explanation. However, if they cannot find one, they will be led to believe in God.		

2	Evil and Suffering
Evil in the form of suffering, whether intentional or not, is seen in the world all around us. Many consider the existence of evil to be at odds with the existence of God. The Problem of Evil is an argument often used by atheists in an attempt to prove that the Christian God doesn't exist. David Hume, a notable atheist philosopher, described it as 'the rock of atheism'. It presents the following argument: If God is omnipotent (all-powerful) then he would be able to remove evil from the world, if God is benevolent (all-loving) then he would want to remove evil from the world. Yet, evil exists in the form of natural and moral evil. Therefore, the Christian God does not exist. Atheists also point to the EXTENT of evil that is found in the world and also evidence of PURPOSELESS evil and suffering where nothing is learnt or gained. Christians have responded to the problem in a number of ways; 1. Evil is the result of human FREE WILL. It is important for humans to have free will so that their actions can be judged and good actions can be rewarded after death. 2. Evil and suffering can have GOOD EFFECTS on people e.g. can allow them to develop good qualities like compassion, bravery and loyalty. 3. The DEVIL is responsible for evil as he tempts humans into wrong actions, as seen in the story of Adam and Eve in Genesis.	

3	The Design Argument
The Design Argument Some Christians believe that it is possible to prove the existence of God by observing the nature of the world we live in. The world shows signs of ORDER and things working to achieve a PURPOSE. This, they believe, is evidence of DESIGN. In other words, God is the DESIGNER of an ordered and purposeful world. William Paley supported this argument by way of ANALOGY. He drew a similarity between the world and an old-fashioned pocket watch. He argued that if you went for a walk and stumbled across a pocket watch in a field you would know that; a) The watch could not have appeared by itself b) It has been made for the purpose of telling the time c) A skilful watchmaker must have designed it Similarly he believed that: d) The world shows evidence of order and purpose e.g. gravity, reproduction of plants, rotation of the planets d) Therefore the world must be designed e) God must have designed the world Paley believed that lots of nature demonstrates ORDER and PURPOSE and that this is EVIDENCE of design in the world. Problem: If the world is designed by an omnipotent God, then why is there so much evil and suffering in the world?	
4	Religious Experience
Some Christians claim to have experienced God directly. To those who have had a religious experience, this is the greatest proof that God exists. This may be a persuasive argument for those who have had a religious experience, but such a personal experience is unlikely to convince an atheist. Many atheists argue these experiences have alternative explanations	

Year 9 Science Autumn Term Knowledge Organiser Growth and Differentiation

Key Vocabulary:

1	Eukaryotic cells	have membrane-bound organelles and have genetic material contained in the nucleus
2	Aseptic techniques	must be used to prepare cultures to prevent contamination of the culture and the growth of harmful bacteria
3	Microscopy	is the field of using microscopes to view samples that cannot be seen with the naked eye
4	Diffusion	is the spreading out of particles, of a gas or liquid, resulting in net movement from an area of high concentration to low concentration
5	Osmosis	is the diffusion of water from a dilute solution to a concentrated solution through a partially permeable membrane
6	Cancer	is caused by uncontrolled cell division
7	Stem cells	1. are cells that are capable of differentiating into other types of cell

Cells

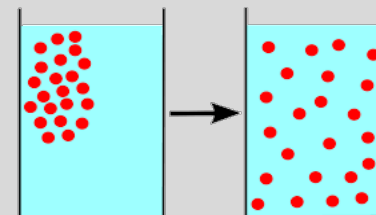
8	All eukaryotic cells have a nucleus, mitochondria, ribosomes, cytoplasm and a cell membrane. Plant cells also have a cell wall, vacuole and chloroplasts Prokaryotic cells do not contain membrane-bound organelles Prokaryotic cells are approximately 10 orders of magnitude smaller than eukaryotic cells
9	Microscopy The parts of a light microscope include the eyepiece lens, objective lenses, stage, coarse focusing wheel, fine focusing wheel, light/mirror A sample used with a light microscope must be very thin to allow light to pass through Magnification is the number of times larger an image is than the object Resolution is the ability to distinguish between two points
10	Aseptic Technique Petri dishes are used to produce cultures of bacteria and other micro-organisms Cultured bacteria are grown on a nutrient medium in controlled conditions Aseptic techniques must be used to prepare cultures to prevent contamination of the culture and the growth of harmful bacteria
11	Cancer Cancer is caused by uncontrolled cell division A tumour is a mass of cells caused by uncontrolled cell division Benign tumours are a mass of cells contained in one area Malignant tumours are formed of cancer cells that invade other tissues and spread around the body where they form secondary tumours
12	Stem Cells Embryonic stem cells can differentiate into all human cell types Adult bone marrow contains stem cells that can differentiate into different types of blood cell

Aseptic Technique

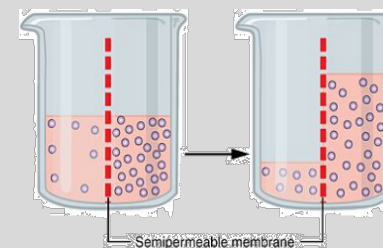
Petri dishes are used to produce cultures of bacteria and other micro-organisms
Cultured bacteria are grown on a nutrient medium in controlled conditions
Aseptic techniques must be used to prepare cultures to prevent contamination of the culture and the growth of harmful bacteria

Movement of Particles

Diffusion is the spreading out of particles, of a gas or liquid, resulting in net movement from an area of high concentration to low concentration



Osmosis is the diffusion of water from a dilute solution to a concentrated solution through a partially permeable membrane



Active transport moves substances from a more dilute solution to a more concentrated solution, requiring energy from respiration

Year 9 Science Autumn Term Knowledge Organiser Periodic Table

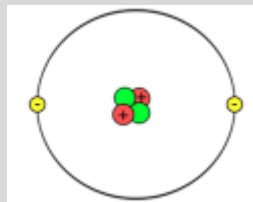
Key Vocabulary:

1	Atom	The smallest part of an element that can exist independently. The centre of an atom is called the nucleus
2	Electronic structure	The number of electrons in each energy level (shell) of an atom. A sodium atom has an electronic structure of 2, 8, 1.
3	Isotopes	Atoms of the same element with mass numbers due to different numbers of neutrons in the nucleus. Carbon-12, carbon-13, and carbon-14 are three isotopes of the element carbon with mass numbers 12, 13, and 14, respectively.
4	Atomic model	A model that represents the structure of the atom. The atomic model has been revised over time as new evidence has become available.
5	Periodic table	A table of all the known elements arranged in order of atomic number so that elements with similar properties are in columns, known as groups. All of the elements we know are represented in the periodic table.
6	Noble gas	An inert gas found in group 0 of the periodic table. Argon is a noble gas.
7	Alkali metal	An element in group 1 of the periodic table. Lithium is an example of an alkali metal.

Atomic Structure

8

Atoms consist of a positively charged nucleus, containing protons and neutrons, surrounded by negatively charged electrons



9

Atomic and Mass Number

The atomic number is the number of protons in an atom of the element 7. All atoms of a particular element have the same number of protons in their nuclei 8. Atoms of different elements have different numbers of protons

The mass number of an element is the total number of protons and neutrons 10. The relative charges of the subatomic particles are: protons (+), electrons (-) and neutrons (0)

10

Electronic Configuration

Electrons in an atom occupy the lowest available energy level 13. The electronic structure of an atom can be represented by numbers or a diagram 14. Atoms have no overall electrical charge because the number of electrons is equal to the number of protons in the nucleus
Elements in the periodic table are arranged in order of increasing atomic number and elements with similar properties

11

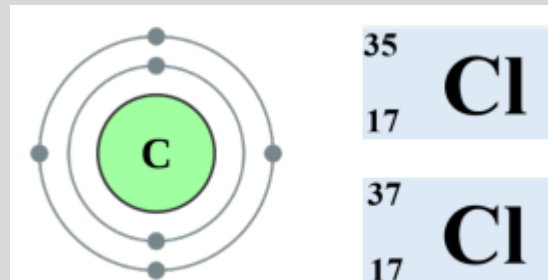
The Periodic Table

The Groups

12

Isotopes

Isotopes are atoms of the same element that have different numbers of neutrons 20. An element's relative atomic mass is an average value that takes account of the abundance of different isotopes



13

The Halogens

Elements in Group 7 are known as the Halogens 46. They have similar reactions because they all have 7 electrons in their outer shell 47.

The Halogens are non-metals and consist of molecules made up of pairs of atoms 48. Melting and boiling points increase with increasing relative molecular mass (as you go down the group) 49.

Reactivity decreases as you do down the group 50. A more reactive halogen can displace a less reactive halogen from an aqueous solution of its salt

14

The Transition Metals

Metals including Cr, Mn, Fe, Co, Ni and Cu are transition metals with similar properties, which are different from the properties of Group 1 52.

Many transition elements form ions with different charges, form coloured compounds and can be useful as catalysts

15

The Noble Gases

Elements in Group 0 are called the Noble Gases 35. They are unreactive and do not easily form molecules because they have a stable arrangement of electrons 36. They have 8 electrons in their outer shell, except Helium which has 2 37. Boiling point increases with increasing atomic mass (as you go down the group)

Year 9 -Oriéntate

Key vocabulary / grammar		
1	¿En qué trabajas? <i>What's your job?</i> Soy... <i>I am...</i> camarero/a <i>a waiter</i> cocinero/a <i>a cook</i> dependiente/a <i>a shop assistant</i> jardinero/a <i>a gardener</i> limpiador(a) <i>a cleaner</i> peluquero/a <i>a hairdresser</i> recepcionista <i>a receptionist</i>	
	¿Qué tipo de persona eres? <i>What type of person are you?</i> En mi opinión, soy... <i>In my opinion, I am...</i> Creo que soy... <i>I believe I am...</i> muy / bastante... <i>very / quite...</i> ambicioso/a <i>ambitious</i> hablador(a) <i>talkative</i> independiente <i>independent</i> inteligente <i>intelligent</i> organizado/a <i>organised</i> paciente <i>patient</i> práctico/a <i>practical</i> responsable <i>responsible</i> sociable <i>sociable</i> trabajador(a) <i>hard-working</i>	
	¿Cómo es un día típico? <i>What is a typical day like?</i> Escribo correos (electrónicos). <i>I write emails.</i> Hago reservas. <i>I make reservations.</i> Hago entrevistas. <i>I do interviews.</i> Organizo excursiones. <i>I organise excursions.</i> Preparo el programa. <i>I prepare the programme.</i> Salgo con los grupos. <i>I go out with the groups.</i> Trabajo con mi equipo. <i>I work with my team.</i> Viajo mucho. <i>I travel a lot.</i> Voy a la oficina. <i>I go to the office.</i> ¿Qué idiomas hablas? <i>What languages do you speak?</i> Hablo español, inglés y alemán. <i>I speak Spanish, English and German.</i> Los idiomas son importantes. <i>Languages are important.</i> ¿Qué tienes que hacer? <i>What do you have to do?</i> Tengo que... <i>I have to...</i> ayudar a los clientes <i>help customers</i> cortar el pelo a los clientes <i>cut customers' hair</i> hablar por teléfono <i>speak on the phone</i> limpiar habitaciones <i>clean rooms</i> preparar comida <i>prepare food</i> servir en el restaurant <i>serve in the restaurant</i>	

Past activities		
2	¿Te gusta tu trabajo? <i>Do you like your job?</i> (No) Me gusta (nada) mi trabajo porque es... <i>I (don't) like my job (at all) because it is...</i> creativo <i>creative</i> estresante <i>stressful</i> fácil <i>easy</i> interesante <i>interesting</i> monótono <i>monotonous</i> repetitivo <i>repetitive</i> Mi jefe/a es severo/a. <i>My boss is strict.</i> Los clientes (no) son simpáticos. <i>The customers are (not) nice.</i> Los clientes son horribles. <i>The customers are awful</i>	
	Opinions 3 ¿Te gusta tu trabajo? <i>Do you like your job?</i> (No) Me gusta (nada) mi trabajo porque es... <i>I (don't) like my job (at all) because it is...</i> creativo <i>creative</i> estresante <i>stressful</i> fácil <i>easy</i> interesante <i>interesting</i> monótono <i>monotonous</i> repetitivo <i>repetitive</i> Mi jefe/a es severo/a. <i>My boss is strict.</i> Los clientes (no) son simpáticos. <i>The customers are (not) nice.</i> Los clientes son horribles. <i>The customers are awful</i>	
Conditional tense – future plans		
4	¿Qué te gustaría hacer? <i>What would you like to do?</i> Me gustaría... <i>I would like...</i> No me gustaría (nada)... <i>I wouldn't like... (at all)</i> trabajar al aire libre <i>to work in the open air</i> trabajar con animales <i>to work with animals</i> trabajar con niños <i>to work with children</i> trabajar en equipo <i>to work in a team</i> trabajar en una oficina <i>to work in an office</i> trabajar solo/a <i>to work alone</i> hacer un trabajo creativo <i>to do a creative job</i> hacer un trabajo manual <i>to do a manual job</i> Por eso me gustaría ser... <i>Therefore I would like to be...</i> cantante <i>a singer</i> diseñador(a) <i>a designer</i> enfermero/a <i>a nurse</i> mecánico/a <i>a mechanic</i> periodista <i>a journalist</i> policía <i>a police officer</i>	

5. Parallel Text:		
1	Soy peluquero y	I am a hairdresser and
2	Tengo que cortar el pelo a los clientes	I have to cut the hair of customers
3	Mis clientes son simpáticos	My customers are nice
4	Soy muy práctico y paciente	I am very practical and patient
5	Pienso que soy ambicioso	I think I am ambitious
6	Me gustaría ser enfermo	I would like to be a nurse
7	Me gustaría trabajar en equipo	I would like to work in a team
8	Ayer escuché mis mensajes y	Yesterday I listened to my messages and
9	hablé con los clientes	chatted with customers
10	Por la tarde escribí muchos correos	In the afternoon I wrote lots of emails
11	Normalmente voy a la oficina	Normally I go to the office
12	Y preparo mis cosas	And prepare my things
13	En el futuro me gustaría	In the future I would like
14	hacer un trabajo interesante	To do an interesting job

Year 9 Mathematics Autumn Term Knowledge Organiser – Angles

Key Vocabulary

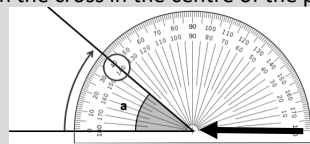
1	Protractor	An instrument for measuring angles.
2	Transversal	A line that intersects (passes through) a set of lines.
3	Vertically Opposite	Angles that are opposite each other when two lines cross. They are always equal.
4	Equal	Being the same in quantity, size, degree or value.
5	Degrees	A unit of measurement of angles.
6	Angle	The space (usually measured in degrees) between two in intersecting lines (lines that cross) or surfaces.
7	Alternate	Two angles, formed when a line crosses two other lines that line on opposite sides of the transversal line. Alternate angles are equal:
8	Corresponding	The angles which occupy the same position at each intersection where a straight line crosses two others. Corresponding angles are equal.
9	Co-interior	Co-interior angles lie between two lines on the same side of the transversal.
10	Parallel	A set of two or more lines that remain an equal distance apart.
11	Supplementary	Two angles are supplementary when they add up to 180°
12	Polygon	A shape with more than one side, for example: square, octagon.

13 Measuring and drawing angles

A protractor is what we use to measure an angle.



When measuring an angle, you must line the protractor on one of the intersecting lines and the apex of the angle must be on the cross in the centre of the protractor.



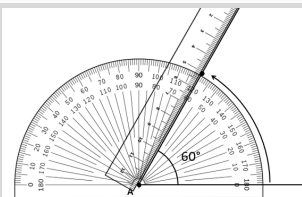
Apex of angle

14 Drawing angles

To draw an angle, you will need a ruler, pencil and protractor.

You will first need to draw a line, then match it up with the line at the base of the protractor.

You will then need to use the ruler to line up the apex of the angle with the number of degrees for your angle and mark it on the edge of the protractor. Remove the protractor and connect the marking to the end of your line that was on the middle +/- of the protractor.



15 Shape properties:

Interior angles in triangles sum 180°.

Interior angles in all quadrilaterals sum 360°



Isosceles triangle

3 sides
2 equal sides
Base angles are equal.



Equilateral triangle

3 sides
All sides and angles are equal.



Right-angled triangle

3 sides
One angle of 90°.



Square

4 sides and angles all of equal size.
2 pairs of parallel lines.



Rectangle

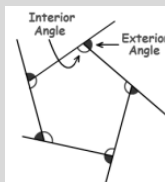
All angles are equal.
Sides in parallel are equal.



Parallelogram

Opposite angles are equal.
Sides in parallel are equal.

16 Interior and exterior angles in polygons



To find the sum of the **interior** angles in any polygon:

$$(\text{number of sides} - 2) \times 180$$

The sum of the **exterior** angles in any polygon is **360°**

$$\text{Interior} + \text{Exterior angle} = 180^\circ$$

17 Basic angle facts

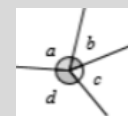
Angles on straight line equal 180°

$$a + b = 180^\circ$$

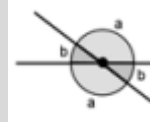


Angles around a point equal 360°

$$a + b + c + d = 360^\circ$$

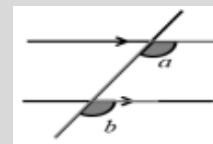


Vertically opposite angles are equal

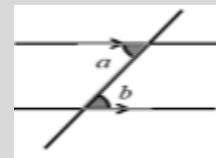


18 Angles in parallel lines

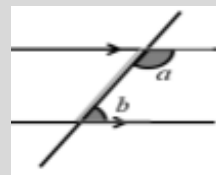
Corresponding angles are equal.



Alternate angles are equal.



Co-interior angles sum 180°
(Sometimes called **supplementary** angles).



Year 9 Maths Autumn Term Knowledge Organiser – Proportional Reasoning

Key Vocabulary

1	Proportion	A mathematical comparison between two numbers whereby the numbers are increasing or decreasing at the same rate.
2	Unitary	To find the value of one.
3	Scale Factor	A measure of similar shapes, which look the same but have different scales of measurement.
4	Exchange Rate	The number of units of a foreign currency that are bought with a unit of home currency.
5	Best Value	The method of finding out which item gives the most for the money spent.
6	Recipe	An instruction or method that gives measurements of ingredients in the correct proportion for the product to be made
7	Similar	Shapes that are the same in number of sides and size of angles but have been enlarged by a scale factor.
8	Congruent	The same shape and size, but has been rotated, reflected/flipped or turned.
9	Constant	A fixed value, often referred to as k in a proportion equation.
10	Directly	To increase or decrease in the same ratio (rate).
11	Inversely	Whereby one value increases and the other linked value decreases by the same rate.

12 Ratio Tables

Multiplication

1	10
15	150

There are 12 eggs in a carton
How many eggs are there in 8 cartons?

Cartons	1	4	8
Eggs	12	48	96

Halving:

Halving Strategy

Teams	8	4	2	1
Baseballs	120	60	30	15

Addition and Subtraction:

Baskets	1	10	2	12	8
Cherries	15	150	30	180	120

13 Unitary method

If 3 m of ribbon costs £4.80, how much would 7 m cost?

Length	3 m	1 m	7 m
Cost	£4.80	£1.60	£11.20

Find how much 1 unit costs

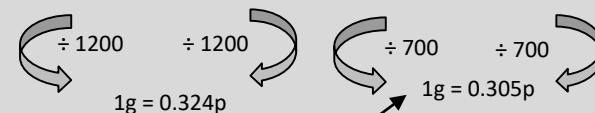
13 Best Value

When comparing two quantities to find the best value, both quantities must be calculated to their unit value to compare their price

1.2kg for £3.89



700g for £2.14



This is less money per gram, so it is the best value

14 Currency conversions

These ideas can be used to convert currencies or units of measure.

Example: If £1 is worth 9 French francs, convert...

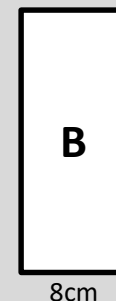
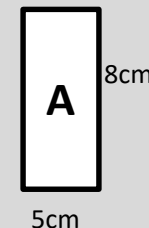
i) £14 to Ff

ii) 49.50Ff to £

£1	9Ff
£14	126Ff

£1	9Ff
£5.50	49.50Ff

15 Similar shapes



Step 1:
Find the scale factor.

? $8 \div 5 = 1.6$
Scale factor

Multiply the length corresponding to the unknown length by the scale factor

A and B are mathematically similar

$8 \times 1.6 = 12.8 \text{ cm} = ?$

Year 9 Food Technology Autumn Term Knowledge Organiser

Key Vocabulary: The Eatwell Guide			8	Food Miles and Carbon Footprint	Food miles and where our food comes from. Carbon footprint and environmental impact.
1	The Eatwell Guide	5 main food groups and is suitable for most people over 2 years of age. Shows the proportions in which different groups of foods are needed in order to have a well-balanced and healthy diet. Shows proportions representative of food eaten over a day or more.	9	Food Waste and Packaging	<ul style="list-style-type: none"> • Uses of packaging • Packaging and the environment • Reducing the environmental impact
2	Hydration	Aim to drink 6-8 glasses of fluid every day. Water, lower fat milk and sugar-free drinks including tea and coffee all count. Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.	10	Food Provenance	Grown food <ul style="list-style-type: none"> • Intensive farming • Organic farming • GM crops Reared Food <ul style="list-style-type: none"> • Factory farm • Free-range Caught food <ul style="list-style-type: none"> • Fishing methods • Sustainable fishing
3	Fibre	Dietary fibre is a type of carbohydrate found in plant foods. Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds. Dietary fibre helps to: reduce the risk of heart disease, diabetes and some cancers; help weight control; bulk up stools; prevent constipation; improve gut health. The recommended average intake for dietary fibre is 30g per day for adults.	11	<ul style="list-style-type: none"> • Cross Contamination and Food Safety • Bacteria and Food Poisoning 	Bacteria are single-celled micro-organisms. They can be divided into 3 groups Harmless bacteria, pathogenic bacteria and food spoilage bacteria. Pathogenic means food poisoning. Bacteria does not like acids or alkaline foods and prefer pH neutral foods. Foods high in moisture and protein are perfect for bacteria.
4	Energy		12	Cooking Processes	Cooking processes are the different ways that we heat food before it is eaten. <ul style="list-style-type: none"> • Baking: to cook food in a heated oven. Make sure that you select the right temperature • Grilling: to cook food by putting it under a hot grill (like a radiator in a cooker)
5	A balanced diet	A balanced diet is based on the Eatwell Guide. An unbalanced diet can lead to dietary related diseases.			
6	Dietary fibre	A type of carbohydrate found in plant foods.			
7	Composite or combination food	Much of the food people eat is in the form of dishes or meals with more than one kind of food component in them. For example, pizzas, casseroles and sandwiches are all made with ingredients from more than one food group. These are often called 'combination' or 'composite' foods.			

Year 9 – Somos Así

Key Vocabulary / grammar

1

En mi tiempo libre = In my Free Time	¿Cómo organizas tu semana?
Hago judo = I do judo	Bailo Zumba = I dance Zumba
Hago natación = I go swimming	Cocino para mi familia = I cook for my family
Voy al parque = I go to the park	Escribo canciones = I write songs
Voy al polideportivo = I go to the sports centre	Juego en mi consola =I play on my games console
Voy de pesca = I go fishing	Leo revistas / libros = I read magazines / books
Soy miembro de un club = I'm a member of a club	Monto en bici = I ride my bike
Soy miembro de un equipo = I'm a member of a team	Navego por internet = I surf the internet
	Preparo la cena =I prepare dinner
	Saco fotos = I take photos
	Toco el teclado =I play the keyboard
	Veo un partido de fútbol = I watch a football match

Opinions

2

¿Qué cosas te gustan? = What things do you like?
¿Qué cosas te encantan / te chiflan/ te flipan/ te molan? = What things do you love?
Me gusta(n) = I like
Me encanta(n) = I love
Me chifla(n) = I love
Me flipa(n) = I love
Me mola(n) = I love
No me gusta(n) nada = I really don't like
el baile = dance
el cine = cinema
el deporte = sport
el dibujo = drawing/art
el racismo = racism
el teatro =theatre/drama
la moda = fashion
la música = music
la naturaleza = nature
la pesca = fishing
la violencia = violence
los comics = comics
los insectos = insects
los lunes = mondays
las artesmarciales = martialarts
las injusticias = injustice
las tareas domésticas = household chores

El cine / cinema

3

Voy a ver... = I'm going to see...
Una comedia = a comedy
Una película de acción = an action film
Una película de animación =an animation
Una película de aventuras = an adventure film
Una película de ciencia-ficción = a science-fiction film
Una película de fantasía = a fantasy film
Una película de superheroes = a super-hero film
Una película de terror = a horror film
¿Vas a venir? = Are you going to come?
¿Vamos a ver? = Are we going to see?
¿Qué tipo de películas te gustan? What type of films do you like?
Me encantan las comedias = I love comedies
No me gustan las películas de terror = I don't like horror films
Mi película favorita es... = My favourite film is...
¿Qué tipo de película es? = What type of film is it?
Es una comedia =It is a comedy
En mi opinión... = In my opinion...
Creo/Pienso que = I think that
Claro que sí = Of course
De acuerdo =ok
Voy a ir = I'm going to go
No voy a ir =I'm not going to go
No, gracias =No thank you
¿Estás loco/a? = Are you crazy?
¡Ni en sueños! = Not in your dreams
¡Que rollo! = How boring!

Expressions of frequency

5

a veces = sometimes
de vez en cuando =from time to time
dos veces a la semana = twice a week
A menudo =often
Muy a menudo =very often
Todos los días = everyday
Casi todos los días = almost every day
Todo el tiempo =all the time
siempre = always

¿Cuándo? When?

6

Después del insti = after school
Este fin de semana = this weekend
los fines de semana = at the weekends
los lunes/martes =on Mondays/Tuesdays
los jueves por la tarde = on Thursday afternoons
Mañana por la mañana = tomorrow morning
Mañana por la tarde = tomorrow afternoon

High frequency words

7

Así que = so	por supuesto = of course
Más tarde = later	Luego = then
Casi = nearly/almost	Quizás = maybe
o = or	después = afterwards
primero =first of all	también = also

8. Parallel Text:

1

Me encantan los insectos.	I love insects.
Mi colección es extensa.	My collection is extensive.
Tengo casi tres mil insectos en total	I have almost 3 thousand in total
Son muy interesantes	They are very interesting
Me chifla el arte y	I love art and
¡también dibujo mis insectos!	I also draw my insects!
Bailo salsa una vez a la semana.	I dance salsa once a week.
me encanta la fotografía	I love photography
y siempre saco fotos de los insectos	and I always take photos of insects
pero prefiero cocinar con mi familia.	but i prefer cooking with my family.
Voy al cine dos veces al mes	I go to the cinema twice a month
los sábados por la tarde.	on Saturday afternoons.
Mi película favorita es Harry Potter.	my favourite film is Harry Potter.
porque me interesa	because it interests me
Voy a celebrar mi cumpleaños con mis amigos.	I am going to celebrate my birthday with friends.
Voy a invitar a mis amigos	I am going to invite my friends
a pasar la noche en mi casa.	to spend the night in my house.
Vamos a ver una comedia y más tarde	We are going to watch a comedy and later
Vamos a cantar canciones. ¡Qué guay!	We are going to sing songs. How cool!