

Knowledge Organiser

Summer Term

Year 8



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| YEAR 8 | ART Term 3

Keywords

1	Proportion	The size of one thing compared to the size of another
2	Centre Line	A line of symmetry can help you draw objects that are the same on both sides, such as a face.
3	Line drawing	Drawing made with lines only
4	Shading	Adding different tones to create 3D effect
5	Composition	The arrangement of different parts of an art piece
6	Pattern	A symbol or shape that is repeated
7	Line	A mark which can be used to make a drawing
8	Shape	A 2D area that is enclosed by a line
9	Tone	The lightness or darkness of something
10	Distortion	The act of twisting or altering something out of its true, natural, or original state.

Processes

1	Mono-print	An artwork created by transfer of media from one surface to another resulting in a single unique print.
2	Printing	Artwork created by the transfer of media from a matrix or printing block to another surface.
2	Collage	The technique and the resulting work of art in which pieces of paper, photographs, fabric and other ephemera are arranged and stuck down onto a supporting surface.
3	Drawing	The act of making picture with a pencil or pen and other dry media
4	Sculpture	3D artwork designed to be viewed from several angles. Sculpture can be made out of variety
5	Digital Art	Art created using software on a computer or other devices

Parts of Light

1	Highlight	The brightest part of the object
2	Mid-tone/half-tone	The tones between shadows and highlights
3	Core shadow	The darkest part of the shadow often on the boundary between half-tones and the shadow area
4	Reflected light	Light that is reflected of other objects into the shadow areas
5	Cast shadow	Is the dark area behind the object on the opposite side of the light source

Colour Theory and Colour Mixing

1	Colour Wheel	a diagram used in the visual arts to represent all colours and their relationships to one another. It can be used to help with colour selection when creating artwork
2	Complementary Colours	Colours on the opposite side of the colour wheel. This combination creates the greatest contrast
3	Analogous Colours	Colours close to each other on the colour wheel. These combinations create harmony in artwork.
4	Primary Colours	Colours that cannot be made by mixing other colours but can be used to mix all other colours of the spectrum. YELLOW, RED, BLUE
5	Process Primaries	YELLOW, MAGENTA, CYAN
5	Secondary Colours	Colours made by mixing two primary colours together
7	Orange Green Purple	Yellow + Red/Magenta Yellow and Blue/Cyan Red/Magenta + Blue/Cyan
8	Tertiary Colours	Colours made by mixing a primary colour with its close secondary colour, such as yellow-green.
9	Tints and Shades	Lighter or darker version of a colour by adding white to lighten or adding black to darken.
10	Mixing Brown	Red and Green or orange with a little bit of blue

Binary

Computers have switches on the motherboard called **transistors**. On = 1 and off = 0

Converting denary number 165 into binary:

Create a conversion table

128	64	32	16	8	4	2	1

Start on the right of the table. If the number is smaller than the one you are converting, put a 1 in the box and subtract it.

128	64	32	16	8	4	2	1
1							

165 - 128 = 37 so continue moving along the line with 37 and repeat the process.

128	64	32	16	8	4	2	1
1	0	1	0	0	1	0	1

Images

Images are split into individual coloured blocks called **pixels**. The total number of pixels is known as the **resolution**. It is calculated by **height X width**

Each pixel contains a binary number that is linked to a colour.

To include more colours, the image needs more bits of data (more 0s and 1s) in each pixel.

Example with 2 bits:

00 = White

01 = Black

10 = Pink

11 = Blue

0	0	0	0	0	0	0	0
0	1	1	0	0	1	1	0
0	1	1	0	0	1	1	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	1	0	0	0	0	1	0
0	0	1	1	1	1	0	0
0	0	0	0	0	0	0	0

The number of bits (0s and 1s) in each pixel is known as the **colour depth**.

RGB

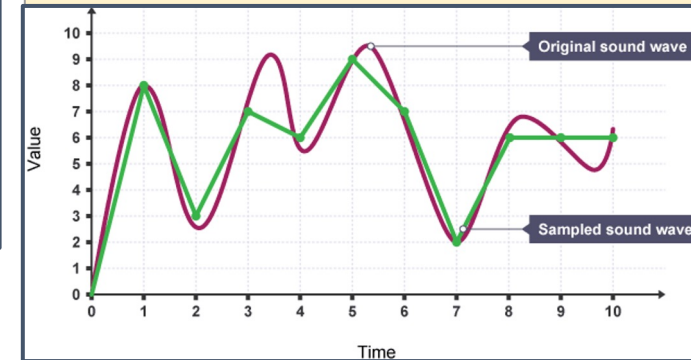
RGB uses a number between 0 and 255 for the amount of red, green and blue in a pixel.

By adjusting these three values, computers can show 16+ million different colours and shades

Sound

Microphones detect soundwaves (changes in air pressure) and use **analogue to digital converters** to turn it into a binary sequence.

The **amplitude** of the sound wave is measured at set intervals. How often it is measured is known as **sample rate**. The higher the sample rate, the closer the digital sound will be to the original sound.



Once the wave is measured, the samples can then be converted to binary. They will be recorded to the nearest whole number.

The range of numbers available to plot the sample against is known as the **bit depth**.

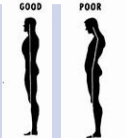

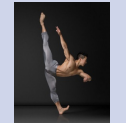






Again, a higher bit depth means that the digital version will be a closer match to the original.

Character Sets

Character sets are globally agreed lists that give each character on a keyboard a binary sequence. This means that a message typed on a phone in the UK can be read by a laptop in another country. Capital letters, lowercase letters, numbers and special characters like @ each have their own section and run in sequence (A is 65, B is 66...)

ASCII was the first character set but didn't have enough bits available for all languages/symbols so **Unicode** was developed

Physical Skills

1		Posture The way the body is held.
2		Alignment Correct placement of body parts in relation to each other.
3		Balance A steady or held position achieved by an even distribution of weight.
4		Coordination Efficient combination of body parts.
5		Control The ability to start & stop movement, change direction & hold a shape efficiently.
6		Flexibility The range of movement in the joints.
7		Strength Muscular power.
8		Stamina Ability to maintain physical and mental energy over periods of time.
9		Extension Lengthening one or more muscles or limbs.

Relationships

1	Mirroring	Reflecting the movements of another.
2	Lead and follow	When one dancer manipulates the actions or pathways of other dancers.
3	Complement	Perform actions/shapes which are similar but not the same as others.
4	Contrast	Movements or shapes that have nothing in common.
5	Action and reaction	When one dancer moves and the other responds as if having a conversation in movement.
6	Accumulation	When a dancer performs a movement phrase and other dancers in the group gradually join in at different times so that all end in unison.
7	Counterpoint	When dancers perform different phrases simultaneously.
8	Contact	The state of physical touching e.g. holding, lifting, weight bearing, etc.
9	Formations	Shapes or patterns created in space by dancers.
10	Unison	When all dancers perform together at the same time.

DANCE ACTIONS

1	TRAVEL	When a dancer moves through the space on a pathway.
2	TURN	When a dancer rotates their body around in space.
3	ELEVATION	The act of rising up, as in a jump.
4	GESTURE	An independent movement of part of the body in the air.
5	STILLNESS ⁶	Remaining still in space in a held position.
6	FLOOR-WORK	Movements which take place sitting, lying or kneeling on the floor.
7	TRANSFERENCE OF WEIGHT	Shifting the weight of the body from one part to another, e.g. from the feet to the hands or hips.



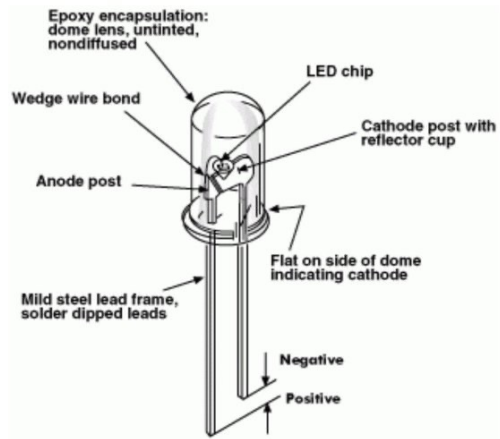
Devising | Drama Year 8 | April-July

Techniques		
1	Improvisation	Trying a performance idea and keeping it going by making it up.
2	Staging	How a performance is presented to an audience.
3	Research	The processes of finding information or ideas to support your performance.
4	Story	The selected and chronological sequence of what happens to characters.
5	Structure	The order in which things happen in a performance.
6	Stimulus	A starting point for a creative act.
7	Style	A set of guidelines and techniques for how to make a coherent performance.
8	Storm	Creative process of generating ideas.
9	Form	Creative process or selecting, framing, and ordering ideas.
10	Norm	Creative process of evaluating and improving a performance.

Context		
1	Devising	Making a performance from scratch
2	Collaboration	The skill of communicating to work creatively together
3	Ensemble	A group of people who share responsibility for creating and delivering a performance
4	Playwright	The person who writes a play
5	Director	The person who organises the actors
6	Producer	The person in charge of the money
7	Designers	Lights, Sound, Costume, Set and Props
8	Stage manager	Organises all off-stage activity
9	Technicians	Operates, lighting sound scenery
10	Actor	Performs on stage

Stage layouts		
1	End on	Audience on one side
2	Thrust	Audience on three sides
3	Traverse	Audience on two sides
4	In the round	Audience in a circle
5	Proscenium Arch	End on but with an arch over the stage
6	Promenade	Audience moved to different locations

Physical and Vocal Skills		
1	Pitch	How high or low your voice
2	Pace	How fast or slow you speak
3	Pause	A moment of silence
4	Tone/Emphasis	The emotion of speech and which words are stressed
5	Volume/Projection	How loud you are/Sending your voice to the audience
6	Body language	Using your body to express feeling or character
7	Facial expression	Using your face to express a feeling or thought
8	Posture	Having a balanced and solid physical position from which to perform
9	Gesture	Using hands and arms to communicate
10	Level/Proximity	Using height and space to communicate
11	Eye contact	Interacting with another character or the audience. (Could include avoiding eye contact)
12	Inflection	Change in pitch or loudness of the voice.
13	Accent	A way of speaking in a local area or country.
14	Gait	A person's manner of walking.
15	Interaction with other performers	Use of eye contact, focus, proxemics and physical contact with other performers.



Disadvantages	
High price	LEDs are currently more expensive, price per lumen, on an initial capital cost basis, than most conventional lighting technologies.
Blue pollution	Because cool-white LEDs (i.e. LEDs with high colour temperature) emit much more blue light than conventional outdoor light sources such as high-pressure sodium lamps, the strong wavelength dependence of Rayleigh scattering means that cool-white LEDs can cause more light pollution than other light sources.
Area light source	LEDs do not approximate a “point source” of light, but rather a lambertian distribution. So LEDs are difficult to use in applications requiring a spherical light field.

Using LEDs	
Advantage	
Efficiency	LEDs produce more light per watt than incandescent bulbs; this is useful in battery powered or energy-saving devices.
Colour	LEDs can emit light of an intended colour without the use of colour filters that traditional lighting methods require. This is more efficient and can lower initial costs.
Size	LEDs can be very small (smaller than 2 mm) and are easily populated onto printed circuit boards.
On/off time	LEDs light up very quickly. A typical red indicator LED will achieve full brightness in microseconds. LEDs used in communications devices can have even faster response times.
Cycling	LEDs are ideal for use in applications that are subject to frequent on-off cycling, unlike fluorescent lamps that burn out quickly when cycled frequently, or HID lamps that require a long pause before restarting.
Dimming	LEDs can very easily be dimmed either by pulse-width modulation or lowering the forward current.
Cool light	In contrast to most light sources, LEDs radiate very little heat in the form of IR that can cause damage to sensitive objects or fabrics. Wasted energy is dispersed as heat through the base of the LED.
Slow failure	LEDs mostly fail by dimming over time, rather than the abrupt burn-out of incandescent bulbs.
Lifetime	LEDs can have a relatively long useful life. One report estimates 35,000 to 50,000 hours of useful life, though time to complete failure may be longer. Fluorescent tubes typically are rated at about 10,000 to 15,000 hours, depending partly on the conditions of use, and incandescent light bulbs at 1,000–2,000 hours.
Shock resistance	LEDs, being solid state components, are difficult to damage with external shock, unlike fluorescent and incandescent bulbs which are fragile.
Toxicity	LEDs do not contain mercury, unlike fluorescent lamps

YEAR 8 | English | Identity: Poetry

Word	Definition	Possible Effect
Liquid sounds	Liquid sounds are consonant sounds where the tongue partially closes the mouth ones like 'l' and 'r'	Using liquid sounds can produce something which is pleasing to the ear and which often sounds fluid like water flowing. Depending on which sounds it is combined with it can sound slow as in the first example or quick and light as in the second example.
Sibilant sounds	Sibilant sounds are s, z, sh, zh (the s sound in pleasure,) and sometimes ch, f and th are also considered sibilant.	Often sibilant sounds create a hissing sound effect, like in this example where it is easy to hear the hissing of the snake who tempted Eve in the Garden of Eden. Sibilance can also create a sense of a hush, of a whisper or of waves or rain.
Plosive sounds	Plosive consonants are sounds made by closing the mouth and then releasing a burst of air, e.g. b, p, t and d.	Plosive sounds often create a sense of something harsh as in the first example when the Prince is shouting, almost spitting with rage at the Montagues and the Capulets to stop fighting. In the second example the plosive sounds give a sense of the horror of the men at war going to the battle field to find their dead comrades.

Word	Definition	Possible Effect
Alliteration	Alliteration is the repetition of consonant sounds (any letters which are not the vowels a,e,i,u,o) at the start of different words close to each other. You can look at some of the different types of consonant sounds which could be used in alliteration above.	<p>“The free bird thinks of another breeze/ and the trade winds soft through the sighing trees/ and the fat worms waiting on a dawn bright lawn” (Angelou, Caged Bird)</p> <p>In the example, the alliteration connects the words to emphasise the meaning– the word bird is connected with breeze and bright, whereas wind is connected with worms and waiting. In addition the sibilance (alliteration of the s sound) together with the soft alliteration of the w sound create a calm feeling of a gentle wind.</p>
Consonance	Consonance is the same as alliteration– the repetition of consonant sounds, but they do not have to be at the start of the words.	<p>“Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me; thy rod and thy staff, they comfort me.”(Psalm 23 King James Bible)</p> <p>In this example, the repetition of the th sound slows the reader down, and recreates the sense of care and caution with which you might walk through the valley of death.</p>
Assonance	Assonance is the repetition of vowel (a,e,i,o,u) sounds close to each other.	<p>“Then the inkling of crickets/ More eerie, more in./ Their click as of crystal,” (Swenson - On Handling Some Small Shells from the Windward Islands)</p> <p>In this example the repetition of the short i sound echoes the sound of the crickets themselves.</p>

YEAR 8 | English | Identity Poetry

Word	Definition	Example	Possible Effect
Metaphor	A comparison which describes an object or action which is not literally true.	<p>"The moon was a ghostly galleon, tossed on stormy seas' (Noyes, The Highwayman)</p> <p>"The sun in the west was a drop of burning gold that slid near and nearer the sill of the world." (Golding, Lord of the Flies)</p>	In the first example, the poet compares the moon to a ship on a stormy sea. This gives us the impression that the moon is large and impressive, but also gives a sense of movement and energy. In addition it has connotations of pirates– linking it to the theme of highwaymen.
Extended Metaphor	An extended metaphor is a version of metaphor that extends over the course of multiple lines, paragraphs, or stanzas of prose or poetry.	<p>"But, soft! what light through yonder window breaks? It is the east, and Juliet is the sun./ Arise, fair sun, and kill the envious moon,/ Who is already sick and pale with grief..." (Shakespeare, Romeo and Juliet)</p>	In this example, Shakespeare has Romeo compare Juliet to the sun, He then extends the metaphor by describing how the moon is jealous of Juliet's beauty.
Simile	A comparison using 'as' or 'like'.	<p>"You are beautiful and faded Like an old opera tune Played upon a harpsichord;" (Lowell, A Lady)</p> <p>"In the eastern sky there was a yellow patch like a rug laid for the feet of the coming sun." (Crane, The Red Badge of Courage)</p>	In the first example, the speaker is comparing a woman to an "opera tune" that's played on a "harpsichord." She reminds the speaker of the romance associated with this instrument. As well as with tradition, beauty and the pleasures of music in general. it is certainly a complimentary comparison.
Personification	Giving something non-human human qualities.	<p>"My heart danced when he walked in the room." "When all at once I saw a crowd,/A host, of golden daffodils;/Beside the lake, beneath the trees,/Fluttering and dancing in the breeze." (Wordsworth, I Wandered Lonely as a Cloud)</p>	In the example from Wordsworth, the daffodils are personified as dancing. This gives them a sense of joy and beauty.
Symbolism	Symbolism uses symbols, e.g. words, people, locations, or abstract ideas to represent something beyond the literal meaning.	<p>"Art thou pale for weariness Of climbing heaven and gazing on the earth, Wandering companionless Among the stars that have a different birth, —" (Shelley, To the Moon)</p>	In this example, Shelley uses the moon to symbolise loneliness.
Motif	A recurring idea in a literary work to form a pattern.	<p>(Lord of the Rings by J.R.R. Tolkien) Story: A fellowship must destroy an all-powerful ring and the Dark Lord exploiting it to conquer Middle-earth.</p>	Motifs: Light and dark (the battle of good versus evil), song and singing (friendship and unity)
Semantic Field	A group of words from the same field of meaning.	<p>Do not go gentle into that good night, Old age should burn and rave at close of day; Rage, rage against the dying of the light. (Thomas, Do Not Go Gentle Into That Good Night)</p>	In the example, the poet uses a semantic field of anger and fire to express how he feels we should approach death.

Sentence Builder 7	Français	English
L'été dernier je suis allé(e) en vacances au Portugal avec mon collègue		Last summer I went on holiday to Portugal with my school
J'ai voyagé en avión et c'était lent et assez inconfortable		I travelled by plane and it was slow and quite uncomfortable
Je suis resté(e) dans une auberge de jeunesse à la campagne		I stayed in a youth hostel in the countryside
Tous les jours j'ai fait des randonnées et c'était super		Every day I did hiking and it was super
Il y a deux ans nous avons fait du canoë-kayak au bord de la mer		Two years ago we did canoeing by the sea
À mon avis, c'était intéressant tous les soirs		In my opinion it was interesting every evening

Sentence Builder 8	Français	English
L'année prochaine je vais aller en vacances au Pays de Galles avec mes grand-parents		Next year I am going to go on holiday to Wales with my grandparents
Nous allons voyager en train et ce sera vraiment amusant		We are going to travel by train and it will be really fun
Je vais rester dans un camping loin de la plage		I am going to stay in a campsite far from the beach
Tous les jours je vais faire du vélo au centre-ville		Every day I am going to do cycling in the centre
Bientôt je vais aller en vacances avec mes amis		Soon I am going to go on holiday with my friends
Nous allons rester dans un appartement à Paris		We are going to stay in a flat in Paris

Sentence Builder 9	Français	English
Pour aller en vacances je mets mes vêtements dans ma valise		In order to go on holiday I put my clothes in my suitcase
L'année dernière j'ai mis mon passeport et un pantalon dans ma valise		Last year I put my passport and some trousers in my suitcase
L'année prochaine je vais mettre des bonbons dans ma valise		Next year I am going to put some sweets in my suitcase
D'habitude j'ai besoin d' argent et de mon portable		Usually I need some money and my phone
À l'aéroport il y a le parking		In the airport there is the carpark
Aussi il y a l'enregistrement et la porte		Also there is the check-in and the boarding gate

Processes of erosion, transportation and deposition

1	Arch	The curved outline left when the sea erodes the inside of a cave away.
2	Cave	A large hole in the cliff caused by waves forcing their way into cracks in the cliff face.
3	Drainage basin	Area of land drained by a river and its tributaries
4	Meander	A bend in the river
5	Ox-bow lake	A curved lake left behind when a meander becomes cut off.
6	Plunge Pool	A deep part of the river eroded by a waterfall.
7	Sand Dune	Coastal sand hill above the high water mark, shaped by wind action.
8	Spit	A strip of sand or shingle in the sea
9	Stack	A pillar of rock left standing in the sea when the top of an arch collapses.
10	Stump	The remains of a stack which the sea has eroded away.
11	V-shaped valley	A valley created by vertical erosion (when the river cuts down) near the source of a river
12	Waterfall	River which flows over a step in the rock.

Erosional Landforms

1	Abrasion	Materials carried away by the river hit rocks and wear them away.
2	Attrition	Materials carried by the river hit each other and wear each other away, becoming rounder and smaller.
3	Corrosion / Solution	Rock breaking down due to chemical reaction.
4	Hydraulic Action	Water flows against a rock surface, wearing it away.
5	Traction	Where material is rolled along a river bed or by waves.
6	Saltation	Hopping movement of pebbles along a river or sea bed.
7	Suspension	Small particles carried in river flow or sea water, i.e. sands, silts and clays.

Coastal Protection

1	Beach Nurishment	Adding new material to a beach artificially, through the dumping of large amounts of sand or shingle.
2	Groynes	A wooden barrier built out into the sea to stop longshore drift of sand and shingle.
3	Managed Retreat	Controlled retreat of the coastline, often allowing flooding to occur over low-lying land.
4	Rock Armour	Large boulders deliberately dumped on a beach as part of coastal defences.
5	Sea Wall	Concrete wall aiming to prevent the erosion of the coast by reflecting wave energy.

Key words and terms

1	Coastline	Strip of land that forms the boundary between the land and the sea.
2	Deposition	This takes place when a river slows down and no longer has the energy to carry the material it is transporting, so drops some of the material.
3	Economic Impact	Effect of an even on the wealth of an area or community.
4	Environmental impact	Effect of an event on the landscape and ecology of a surrounding area.
5	Erosion	The process by which rocks and soils and materials are worn down and moved elsewhere due to mechanical and chemical action (such as wave power, or salts in water) or weathering processes (such as wind, rain, plant roots etc.).
6	Flood	Where a river discharge exceeds river channel capacity and water spills onto the floodplain.
7	Floodplain	Relatively flat area forming the valley floor either side of the river channel that is sometimes flooded.
8	Impermeable rock	Rock that cannot let liquids through it.
9	River	Water flowing downhill in a channel.
10	Transportation	The movement of eroded material.

Geography | Tourism | Year 8

Vocabulary

Advantages and Disadvantages

1	Tourism is important in increasing country's GDP. In the UK for example it is responsible for 2.5% of our GDP. This is an economic advantage.	Tourism can create conflicts with the local population such as increased traffic, noise pollution, house prices increase, footpath erosion
2	Local people will get jobs and will therefore be able to improve their lives both socially and economically	The issue about who owns the land in National parks can cause conflicts because if tourists walk on farmers land without permission they could damage it
3	The government will get more taxes with more people working and they can use this money to improve life for the poor in their country. This is known as the multiplier effect.	If a country is too reliant on tourism for example Kenya/Palau this can lead to a loss of earnings if something goes wrong and people stop visiting
4	In LICs, more tourists lead to better understanding about protecting their tourist areas. Kenya has formed 3 National Parks to protect their valuable wildlife.	The environment will get damaged with more tourists visiting including more soil erosion, noise pollution, air pollution, damage to vegetation, animal breeding patterns are disturbed
5	Sustainable tourism is very advantageous for the host country because it ensures that tourism continues in the country as being sustainable means considering the present and the future	Many tourist jobs are seasonal which means people don't have work all year round. Local cultures can be ruined or treated like a spectacle when too many tourists visit

Growth in tourism since 1950

1	The launch of the internet in 1991	it is more convenient to book a holiday and there is more choice on offer at the click of a button.
2	Improved transport such as the A380 Airbus	It is quicker and easier to get to destinations that might have been too far previously with larger and faster planes
3	People have more disposable income (money that people have left over after paying bills) due to salary rises and cheaper food	they can spend that extra money on a holiday for their family
4	People are living longer and have a pension	they have more time to holiday as they no longer work and have money to do so.
5	Annual leave (paid holiday) has increased from 15 – 20 days a year	people have more time to go on holiday and still earn money
6	The range and type of holiday you can go on has increased	people have more choice of holiday they can purchase

Sustainable Tourism Lodges - Kenya

1	The lodges are plastic-free	
2	The lodges are a tented camp with 4 tents accommodating up to 8 guests	
3	The majority of the people who work in the lodge come from local communities for example the baker, and a camp manager are all Maasai.	
4	The lodge encourages walking safaris	
5	Each guest gives a US\$10 per night donation, which is then put towards local community and conservation projects	

1	Tourist	a person who is travelling or visiting a place for pleasure.
2	International Tourism	Travelling to another country
3	National Tourism	Travelling within your own country
4	National Park	a protected area of natural beauty
5	Conflict	disagreement between people over the way a place is used
6	Stakeholder	is someone who has an interest in something
7	Honey-pot Sites	places that attract very large numbers of tourists.
8	GDP per capita	gross domestic product which is the goods and services that the world produces divided among the population
9	Sustainable Tourism	visiting somewhere as a tourist and trying to make a positive impact on the environment, society, and economy.
10	Mass Tourism	is the act of visiting a destination with large amounts of people at one time.

World War One Causes & Conflict | Year 8 | Summer 1 May-June

The reasons for increased tension pre 1914			General information			Key Vocabulary		
1	German Nationalism	Kaiser Wilhelm II wanted to turn Germany into a great power to rival Britain	1	The Triple Alliance	An agreement between Germany, Austria-Hungary and Italy to defend each other from attack	1	Nationalism	<i>Passionate belief that your country is better than all others</i>
2	British Nationalism	Britain was a very proud nation with its nationalism based on 200 years of imperial and naval dominance thanks to their Empire.	2	The Triple Entente	An agreement between France, Britain and Russia to protect each other from attack	2	Imperialism	<i>The policy of colonising other parts of the world</i>
3	Imperial Rivalry	During the 19 th Century, European countries developed empires to increase their level of power and wealth. The competition between Empires created tension.	3	Impact of assassination	Austria-Hungary blamed Serbia for the assassination of their heir	3	Imperial Rivalry	<i>Rivalry between empires trying to colonise the same part of the world</i>
			4	German alliance with Austria	Germany agreed to support Austria-Hungary no matter what	4		Long Term cause Short Term cause Trigger cause
4	Flashpoints	France and Germany competed for control of Morocco in 1905 and 1911 Russia and Austria-Hungary competed for control of the Balkans and Bosnia in 1908.	5	Germany attacks France	Germany attacked France, Britain declared war on 3 rd August 1914 to protect her allies.	5	Flashpoints	An event where tension turns to conflict
			7	First World War	The conflict began in August 1914 and lasted until 11 th November 1918	6	Militarism	The belief in having a strong army/navy
5	The Schlieffen Plan	Germany's secret plan for war. They would defeat France within six weeks before Russia could mobilise.	8	New weapons	The conflict saw new weapons such as machine guns, artillery guns, fighter planes, battle ships, submarines and poison gas change how war was fought	7	Alliance	An agreement between nations to protect each other
6	Miliarism/The Arms race	Countries began to rapidly expand their armed forces and the likelihood of war increased.	9	Trench warfare	These new weapons resulted in all sides wanting to hold positions before advancing so trenches were dug to protect themselves	8	The Schlieffen Plan	The German plan to secure victory in European war
7	The Alliance System	Two great alliances, the Triple Entente and the Triple Alliance created tension	10	Impact of War	10 million died in battle with 20 million wounded physically or mentally. The damage the conflict caused was extensive	9	Dreadnought	A large naval battleship
8	The Assassination of the Archduke Franz Ferdinand	The heir to the throne of the Austro-Hungarian Empire was assassinated in June 1914 by a gang of Bosnian nationalists led by Gavrilo Princip				10	To mobilise	To get an army ready to fight
						11	Western Front	Area of fighting between Germany and Britain/France

Jim Crow (Racial America)|Year 8| Summer 2 June-July

Why were African Americans not free after Slavery was abolished in America?			Key individuals and events		Key Vocabulary			
1	Slavery abolished in 1865	After the North won the American Civil War vs the South slavery was abolished	1	The Ku Klux Klan	This white racist terrorist organisation had over 2 million members by the 1920s	1	Segregation	<i>The separation of black and white people</i>
2	The Southern States	The south regained control of regional governments in the South in 1877 and introduced a system of racism known as Jim Crow	2	President Woodrow Wilson	The president from 1912-1920 introduced segregation in the White House	2	Congress	<i>The American Parliament</i>
3	Segregation Laws	The Jim Crow laws introduced mean African Americans were forced to use separate Railway carriages, Schools, Restaurants and Toilets	3	The Thibodaux Sugar Massacre	In 1887 35 sharecroppers were killed by plantation owners after the sharecroppers had gone on strike	3	Supreme Court	<i>The most powerful court in the USA</i>
4	Plessy vs Ferguson (1896)	Homer Plessy sued a railway company for removing him from a white carriage. The US Supreme court ruled that segregation was legal, as long as facilities were equal.	4	Resistance	African Americans resisted Jim Crow laws but often disagreed about the best way to fight back and faced violence if they did.	4	Disenfranchisement	<i>Not being allowed to vote</i>
5	Education	Black schools were underfunded which led to illiteracy and limited opportunities	5	Ida B. Wells	She was a teacher who was sacked for complaining about pay. When her friend was lynched in 1889 she became a journalist and campaigned to Congress for lynching to be made illegal	5	Ideology	<i>Set of ideas of beliefs that people follow</i>
6	Scientific Racism	Racism had merged with Science to claim that African Americans were less evolved (not true humans share 99.9% of DNA).	6	The National Association of Coloured Women (NACW)	An organisation created in 1896 by middle class African American women. They believed African Americans could win equality by 'living cleanly'	6	Lynching	<i>A public, unpunished murder</i>
7	White supremacy in Popular Culture	Films, music and news reports repeatedly presented black men as attacking white women, with white men as the heroes	7	Jack Johnson	Heavyweight Boxing Champion of the world in 1909. His success challenged the ideology of white supremacy. However, his flamboyant lifestyle did not reflect well on African Americans and didn't fit with the NACW's idea of 'living cleanly.'	7	Jim Crow	<i>The system of racial oppression in the Southern states of America between 1877 and 1960s</i>
8	White southerners prevented African Americans from voting	They used intimidation (violence), literacy tests and a poll tax (have to pay to vote) to limit the opportunities for African Americans to vote in elections.	7	Jack Johnson	Heavyweight Boxing Champion of the world in 1909. His success challenged the ideology of white supremacy. However, his flamboyant lifestyle did not reflect well on African Americans and didn't fit with the NACW's idea of 'living cleanly.'	6	White Supremacy	<i>An ideology that white people are naturally superior to black people</i>
						7	Literacy tests	<i>A test of your ability to read and write</i>
						8	Sharecropper	<i>A sharecropper is someone who works on a farm for a share of the profits at the end of year, rather than wages</i>

Construction

1	Protractor	Piece of equipment used to measure and draw angles
2	Compass	Piece of equipment used to draw circles and arcs
3	Locus	Set of points with a common property
4	Equidistant	The same distance
5	Perpendicular	Lines that meet at 90°
6	Arc	Part of a curve
7	Bisector	A line that divides something into two equal parts
8	Congruent	Exactly the same shape and size
9	Discorectangle	A rectangle with semi circles at either end

Ratio

1	Ratio	A statement of how two numbers compare
2	Equal parts	All parts in the same proportion
3	Proportion	A statement that links two ratios
4	Part	A section of a whole
5	Equivalent	Of equal value
6	Scale	The comparison of something drawn to its actual size
7	Order	To place a number in a determined sequence

Averages

1	Mean	Add up the values and divide by the number of values
2	Median	The middle value, when data is in order
3	Mode	The value or item that occurs the most
4	Range	The difference between the largest and smallest values

Percentages

1	Percent	Parts per 100 – written using the % symbol
2	Decimal	Numbers to the right of the decimal point are called decimals
3	Fraction	Represents how many parts of a whole value you have
4	Multiplier	The number you are multiplying by
5	Integer	A whole number – can be positive, negative or zero
6	Increase	To make the value bigger
7	Decrease	To make the value smaller
8	Invest	Use money with the goal of it increasing in value over time
9	Profit	The income take away any expenses or costs
10	Equivalent	Of equal value

Congruency & Similarity		
1	Enlarge	To make a shape bigger or smaller by a given multiplier (scale factor)
2	Scale Factor	The multiplier of enlargement
3	Centre of enlargement	The point the shape is enlarged from
4	Similar	One shape is an enlargement of the other. All angles are the same.
5	Congruent	Exactly the same – all angles and sides are the same
6	Corresponding	Items appear in the same place in two similar situations
7	Parallel	Straight lines that never meet – gradient is the same


Volume & Surface Area		
1	Volume	The amount of size within a 3D shape
2	Volume	Units - m^3, cm^3, mm^3 etc
3	Surface Area	The total areas of each face of a 3D shape
4	Prism	A 3D shape that has the same cross-section all the way along it
5	Cube/ cuboid	$length \times width \times height$
6	Prism	$area\ of\ cross\ section \times length$
7	Cylinder	$\pi r^2 h$
8	Cone	$\frac{1}{3} \pi r^2 h$
9	Pyramid	$\frac{1}{3} \times area\ of\ base \times height$
10	Sphere	$\frac{4}{3} \pi r^3$

Probability		
1	Probability	The chance that something will happen
2	Relative frequency	How often something happens divide by the outcomes
3	Independent	An event that is not affected by any other events
4	Chance	The likelihood of a particular outcome
5	Event	The outcome of a probability – a set of possible outcomes
6	Biased	A built in error that makes all values wrong by a certain amount – weighted dice
7	Fair	There is zero bias and all outcomes have an equal likelihood
8	Random	Something happens by chance and is unable to predict
9	Mutually exclusive	Events that do not occur at the same time
10	Set	A collection of things











Elements of Music

1	Pitch	Music is high or low in sound
2	Dynamics	Where the music is loud and Quiet
3	Duration	How long or short the values of the note
4	Tempo	How fast or slow the music is being played.
5	Timbre	The different sounds of the instruments: Wood, metal, string & skin.
6	Texture	How many instruments are playing at one time, lots or not many: Thick or Thin
7	Silence	Allow sounds to die away and give effect to the music
8	Structure	The order of the music Verse, chorus, Bridge and Instrumental

Theory

1	Time signature 4 or 3 4 4	This tells us how many beats in a bar, that you need to count. The top number tells how many beats; Eg. 4 or 3
2		This is a repeat mark. It means you go bar to the beginning and play the music again.
3	Rhythm	Is a pattern of sound which can be repeated to a regular beat.
4	Rests	A rest is a musical sign that indicates a beat of silence. It still counts in the value of the bar .
5	Pulse	A pulse is a steady, regular beat that continues throughout a song.

Rhythm note Values

1		4 beats	Semibreve
2		3 beats	Dotted Minim
3		2 beats	Minim
4		1 beat	Crotchet
5		1/2 beat	Quaver
6		1 beat	2 Quavers
7		1/4 beat	Semiquaver
8		1 beat	4 Semiquavers
9		1 beat	1 beat crotchet rest
10		2 beats	2 beat minim rest

Traditional Notation

Music is written on five lines called staves

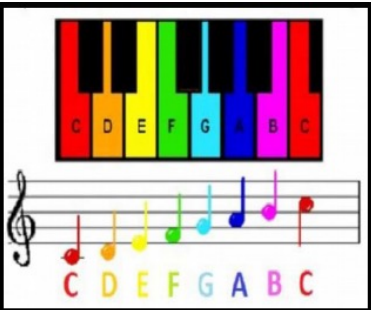
Treble Clef (found at the start of the music)

Time Signature (tells you how many beats in a bar)

Bar

Bar Line (splits the music up into little bits called bars)

Double Bar Line (found at the end of the music)

Keyboard layout

Keyboard layout

Chords

1	Chord/Triad	3 notes played at the same time
2	C Chord	CEG notes
3	F Chord	FAC notes
4	G Chord	GBD notes
5	Middle C	This is the middle of the Piano

A musical staff in treble clef showing the C major scale from middle C (C4) to the next A (A5). Below the staff, the notes are labeled C, D, E, F, G, A, B, C, D, E, F, G, A. Below the staff is a piano keyboard with the corresponding keys labeled C through A.

A musical staff in treble clef showing the C major triad. The notes C, E, and G are shown as a chord and then as individual notes. The notes are labeled C, E, G.

A piano keyboard with the keys C, E, and G highlighted in red. The keys are labeled C, E, G.

A musical staff in treble clef showing the F major triad. The notes F, A, and C are shown as a chord and then as individual notes. The notes are labeled F, A, C, E. Below the staff, the notes E, G, B, D, F are labeled in blue.

A piano keyboard with the keys F, A, and C highlighted in brown. The keys are labeled F, A, C.

A musical staff in treble clef showing the F major triad. The notes F, A, and C are shown as a chord and then as individual notes. The notes are labeled F, A, C.

A piano keyboard with the keys G, B, and D highlighted in brown. The keys are labeled G, B, D.

A musical staff in treble clef showing the G major triad. The notes G, B, and D are shown as a chord and then as individual notes. The notes are labeled G, B, D.

PHSE – Year 8– Mental Health

KPI 1 - Key terms:

- Body image: The perception that a person has of their physical self and the thoughts and feelings that result from that perception.
- Social Media: Websites and applications that enable users to create and share content or to participate in social networking.
- Mental wellbeing: Mental wellbeing describes your mental state - how you are feeling and how well you can cope with day-to-day life. Our mental wellbeing is dynamic. It can change from moment to moment, day to day, month to month or year to year.
- Emotional literacy: The ability to understand and express feelings. It involves having self-awareness and recognition of one's own feelings and knowing how to manage them.
- Digital resilience: Involves having the ability to understand when you are at risk online, knowing what to do if anything goes wrong, learning from your experiences of being online, and being able to recover from any difficulties or upsets.

KPI 2- Things that can affect our mental wellbeing:

Everyone is different and what affects someone's mental wellbeing won't necessarily affect others in the same way. Everyone will have times when they have low mental wellbeing, where they feel stressed, upset or find it difficult to cope.

Common life events that can affect your mental wellbeing include:

- loss or bereavement
- loneliness
- relationship problems
- issues at work
- worry about money

However, there are times when there is no discernable reason for the way a person feels which can be extremely frustrating.

There are some factors that may make people more vulnerable to experiencing a period of poor mental wellbeing. These may have happened in the past or might still be happening now:

- Childhood abuse, trauma, violence or neglect
- Social isolation or discrimination
- Homelessness or poor housing
- A long-term physical health condition
- Social disadvantage, poverty or debt
- Unemployment
- Caring for a family member or friend
- Significant trauma as an adult, such as military combat, being involved in a serious accident or violent crime

KPI 3 – Digital Resilience

How does going online affect young people?

Like all aspects of our lives, going online conjures up a huge range of emotions and responses that can impact our mood and well-being. Someone could be pleased to see photos of their friend having a great time on holiday but at the same time they may feel envious because they are not there or have never been to such a place.

Why is digital resilience important?

Digital resilience gives everyone the ability to recognise when going online is having a negative impact and the strategies to bounce back and recover. If a someone realises that the balance has shifted and going online is not making them feel supported, empowered and happy we want them to have a variety of people and techniques that they can turn to.

Digital Resilience Tips

- Build a support network – reach out to someone and support others too. A problems shared is a problem halved.
- Find useful sites/organisations who can help give yourself a break.
- Give yourself a break – you are not perfect and will make mistakes. Be kind and fair to yourself. Take some time offline if you want to.
- Sort out disagreements quickly.
- Lifestyle changes – make time for things and people that make you happy.
- Look out for new challenges – life can be hectic. Find ways to help you relax
- Physical health – get some exercise, be active.
- Put your devices away at night to get a good night's sleep.
- Eat regularly and healthily.
- Protect your online reputation - Use the services provided to manage your digital footprints and 'think before you post.' Content posted online can last forever and could be shared publicly by anyone.
- Know where to find help - Understand how to report to service providers and use blocking and deleting tools. If something happens that upsets you online, it's never too late to tell someone.
- Don't give in to pressure - Keep calm and keep in control; once you've pressed send you can't take it back.

For further support...

Home/school support:

A friend; A teacher; Your tutor;
Parents/carers; Mr Ogden Mrs Jones;
Mrs Loveridge; Mr Hayward

Self-help apps

- Calm Harm – Managing Self-Harm
- MindShift – to manage anxiety and urges to self-harm
- Cove – express your mood with music
- Stress and Anxiety Companion – helps you to manage stress and anxiety
- Chill Panda – relaxation and breathing exercises.

Reputable organisations:

- [Child Bereavement UK](#) – call [0800 028 8840](tel:0800 028 8840) Monday to Friday, 9am to 5pm, or email support@childbereavement.org
[Cruse Bereavement Care](#) – call [0808 808 1677](tel:0808 808 1677) Monday and Friday, 9.30am to 5pm, and Tuesday, Wednesday and Thursday 9.30am to 8pm, or email info@cruse.org.uk
[Grief Encounter](#) – call [0808 802 0111](tel:0808 802 0111) Monday to Friday, 9am to 9pm, or email contact@griefencounter.org.uk
[Hope Again](#) – call [0808 808 1677](tel:0808 808 1677) Monday to Friday, 9.30am to 5pm, or email hopeagain@cruse.org.uk
[Winston's Wish](#) – call [0808 802 0021](tel:0808 802 0021) Monday to Friday, 9am to 5pm, or email info@winstonswish.org
 Young Minds – www.youngminds.org.uk
 Young Minds Crisis Messenger: Text YM to 85258
 Childline – www.childline.org.uk Phone: 0800 1111
 Samaritans – www.Samaritans.org Phone: 116 123
 Young Minds Matters – Text 07480635723
 Kooth – Kooth.com
 TIC+ - online text chat – 07977334433
 Self-harm Helpline Rethink Gloucestershire – webchat: www.gloucestershireselfharm.org Text: 07537410022 Phone: 0808 801060
 Safeguarding Team- Mr Coley, Mr Ferguson, Mrs Lovell
 Pastoral Team –Head of Year

YEAR 8 | Science | Earth and Climate

What are the four main layers that make up the Earth?	Crust, mantle, outer core, inner core	Which is the newest crust: crust close to a constructive plate boundary or far away from it?	Newest crust is close to the constructive plate boundary
What are the states of matter of each layer making up the Earth?	All solid except outer core, which is liquid	Give an example of a constructive plate boundary.	Mid-Atlantic Ridge (Iceland)
Which is the thinnest layer of the Earth's structure: mantle, crust, core?	Crust	Why does Iceland have a lot of volcanoes?	Because it lies on the Mid-Atlantic Ridge, which is a constructive plate boundary.
Which theory suggests that the Earth's crust is made up of plates, which move because of changes happening in the mantle?	Tectonic plate theory	Why is the Atlantic Ocean getting wider every year?	Mid-Atlantic Ridge is a constructive plate boundary; plates are moving apart.
What name is given to the movement of continents away from each other over the Earth's surface?	Continental drift	How do igneous rocks form?	Magma rises from the mantle, cools and solidifies to form igneous rock.
Write down one or more pieces of evidence for continental drift.	Interlocking shapes of continents, similar rock types and fossils in different continents, crust in middle of ocean newer than crust at edges.	Give one or more examples of igneous rocks.	Basalt and granite.
		Which cools faster: basalt or granite?	Basalt.
Which scientist put forward the theory of continental drift: Darwin, Newton, Wegener?	Alfred Wegener	Which cools below the Earth's surface: basalt or granite?	Granite.
What was the supercontinent called that existed many millions of years ago?	Pangaea	Explain why intrusive rocks (like granite) have larger crystals than extrusive rocks (like basalt).	Extrusive rocks cool below the Earth's surface. Magma cools down more slowly. The more slowly it cools, the larger the crystals that are formed. This causes extrusive rocks to have larger crystals.
Which layer of the Earth's structure is at the highest temperature?	Inner core		Why is lots of basalt found in Iceland (which is on the Mid-Atlantic Ridge)?
Why is heat transferred upwards within the mantle?	The core is hotter than the crust, and thermal energy moves from hot to cold.	Why don't igneous rocks contain fossils (remains of living things)?	Igneous rocks are formed from hot magma cooling. No living things can survive in hot magma.
How is heat transferred upwards within the mantle?	Convection currents	What name is given to the movement of rocks, typically by wind, water or ice?	Erosion
What does sideways motion in the upper part of the mantle do to the crust?	Crust separates	What name is given to the movement of rocks by gravity?	Transportation
Sideways motion in the mantle causes the crust to separate. What rises up to fill the gap created?	Hot magma	Give one or more examples of sedimentary rocks.	Limestone, sandstone, shale (or mudstone), conglomerate, chalk.
Sideways motion in the mantle causes the crust to separate. Magma rises up to fill the gap. What happens to the magma as the gap continues to widen?	Magma cools and eventually solidifies.	What word is used to describe pebbles or grains broken down by weathering building up at the bottom of the sea?	Sedimentation
Sideways motion in the mantle causes the crust to separate. Magma rises up to fill the gap and cools to form new crust. What do we call this geological feature?	Constructive plate boundary	What word is used to describe lower layers of sediment being pushed down and squeezed together by the layers above?	Compaction
What are the four main layers that make up the Earth?	Crust, mantle, outer core, inner core	Which is the newest crust: crust close to a constructive plate boundary or far away from it?	Newest crust is close to the constructive plate boundary
		Give an example of a constructive plate boundary.	Mid-Atlantic Ridge (Iceland)

YEAR 8 | Science | Earth and Climate

What word is used to describe all water being forced out from between layers of sediment, with salt and other minerals acting to 'glue' the layers together?	Cementation	What two things cause the remains of living things to be changed into fossil fuels over millions of years?	Intense heat and pressure.
What name is given to the remains of plants or animals that end up being buried within layers of sediment at the bottom of the sea?	Fossils	What is the name of the process by which different substances are separated from crude oil in a large column?	Fractional distillation
Give one or more examples of metamorphic rocks.	Slate, gneiss, quartz or marble	Crude oil vapours rise inside a fractional distillation column. What is the name of this process: conduction, convection, condensation?	Convection
What two things cause igneous or sedimentary rocks to be changed into metamorphic rocks?	Intense heat and pressure.	True or false: temperature increases as you move up a fractional distillation column.	False: temperature decreases as you move up a fractional distillation column.
What provides the heat to change igneous or sedimentary rocks into metamorphic rocks?	The mantle	Crude oil vapours turn to liquids at different heights inside a fractional distillation column. What is this called: conduction, convection, condensation?	Condensation
What provides the pressure to change igneous or sedimentary rocks into metamorphic rocks?	Weight of layers above + movement of the Earth's crust	Which of the following fractions of crude oil has the highest boiling point: bitumen, diesel, petrol?	Bitumen
Why don't metamorphic rocks contain fossils?	They are destroyed by the intense heat and pressure.	Which of the following fractions of crude oil is most viscous (i.e. least runny): bitumen, diesel, petrol?	Bitumen
True or false: metamorphic rocks always contain layers.	False.	Which of the following fractions of crude oil is least viscous (i.e. most runny): bitumen, diesel, petrol?	Petrol
True or false: metamorphic rocks always contain crystals.	False	Which of the following fractions of crude oil has the lowest boiling point: bitumen, diesel, petrol?	Petrol
What term refers to the process by which igneous rocks formed by magma rising from the mantle can eventually be changed and returned to the mantle?	Rock cycle	Which of the following fractions of crude oil condenses highest up in the fractional distillation column: bitumen, diesel, petrol?	Petrol
What are the three major fossil fuels?	Oil, coal, natural gas	True or false: the higher the boiling point of a fraction of crude oil, the higher up in the fractional distillation column the fraction condenses.	False: fractions with lower boiling points condense higher up the column.
True or false: fossil fuels are made from the remains of living things.	True: fossil fuels are made from the remains of living things.	What chemical reaction between fuel + oxygen takes place inside a car engine?	Combustion (or burning)
Fossil fuels are mostly made up of which two elements?	Hydrogen and carbon	What are the products of the combustion of fossil fuels?	Carbon dioxide and water vapour
Approximately how long does it take for fossil fuels to form?	Millions of years	Petrol is burned in a car to release energy. Where do the waste products go?	Out of the exhaust pipe and into the Earth's atmosphere.
What word is used to describe all water being forced out from between layers of sediment, with salt and other minerals acting to 'glue' the layers together?	Cementation	Which chemical reaction in the human body is combustion similar to?	Aerobic respiration
What name is given to the remains of plants or animals that end up being buried within layers of sediment at the bottom of the sea?	Fossils	What two things cause the remains of living things to be changed into fossil fuels over millions of years?	Intense heat and pressure.
Give one or more examples of metamorphic rocks.	Slate, gneiss, quartz or marble		
What two things cause igneous or sedimentary rocks to be changed into metamorphic rocks?	Intense heat and pressure.		
What provides the heat to change igneous or sedimentary rocks into metamorphic rocks?	The mantle		

YEAR 8 | Science | Earth and Climate

True or false: the concentration of carbon dioxide in the Earth's atmosphere has decreased in the last 100 years.	False: the concentration of carbon dioxide in the Earth's atmosphere has increased in the last 100 years.
Why do car engines sometimes release carbon monoxide into the atmosphere?	Incomplete combustion of fuels produces carbon monoxide (not carbon dioxide)
Which polluting gas released by cars can cause acid rain?	Oxides of nitrogen
What is the name given to tiny pieces of carbon or rubber produced by cars?	Particulates
Write down one or more risks to humans from breathing in particulates.	Aggravated asthma, decreased lung function, irritation of the airways or coughing, premature death in people with heart or lung disease
Which polluting gas released by burning coal can cause acid rain?	Sulphur dioxide
In what part of a coal power station is ground up coal placed to be burned?	Furnace
What is the heat from the furnace of a coal power station used to do?	Heat up water in a boiler to make steam
In a coal power station, steam produced in the boiler is at high pressure. What is this high pressure steam used for?	To turn large turbines, which turn a generator.
Many power stations involve turning a turbine. What is the turbine connected to?	A generator
Write down one or more energy resources that involves burning fuels.	Fossil fuels (oil, coal, natural gas), biofuels.
Write down one or more energy resources that harnesses motion on the surface of the earth.	Wind, wave, hydroelectric, tidal
Which energy resource harnesses thermal energy from the Earth?	Geothermal
Write down one or more non-renewable energy resources.	Fossil fuels (oil, coal, natural gas), nuclear.
True or false: the concentration of carbon dioxide in the Earth's atmosphere has decreased in the last 100 years.	False: the concentration of carbon dioxide in the Earth's atmosphere has increased in the last 100 years.
Why do car engines sometimes release carbon monoxide into the atmosphere?	Incomplete combustion of fuels produces carbon monoxide (not carbon dioxide)
Which polluting gas released by cars can cause acid rain?	Oxides of nitrogen
What is the name given to tiny pieces of carbon or rubber produced by cars?	Particulates

Write down one or more renewable energy resources.	Wind, wave, hydroelectric, tidal, geothermal, solar, biofuels.
Write down one or more energy resources that release carbon dioxide into the Earth's atmosphere.	Fossil fuels (oil, coal, natural gas), biofuels.a
Write down one or more energy resources that are considered unreliable.	Solar, wind, wave
Which energy resource is only available in volcanic countries like Japan and Iceland?	Geothermal
What was the Earth's early atmosphere mostly made up of?	Water vapour
What process caused water vapour in the Earth's early atmosphere to form oceans: conduction, convection, condensation?	Condensation
Which two gases were released into the Earth's atmosphere as a result of volcanic eruptions?	Nitrogen and carbon dioxide
Write down two reasons the concentration of carbon dioxide in the Earth's early atmosphere began to decrease.	Absorbed by oceans. Used by plants to carry out photosynthesis.
True or false: a lot of carbon dioxide is dissolved in the Earth's oceans.	True: a lot of carbon dioxide is dissolved in the Earth's oceans.
What process is responsible for a lot of carbon dioxide being taken out of the Earth's atmosphere by plants: photosynthesis, respiration, transpiration?	Photosynthesis
Which gas began to be released into the Earth's atmosphere for the first time because of plants carrying out photosynthesis?	Oxygen
What are the two most common elements present in the Earth's atmosphere today?	Nitrogen, then oxygen
Give one or more reasons the concentration of carbon dioxide in the Earth's atmosphere has increased rapidly in the last 200 years.	Increased burning of fossil fuels, increased global population, more farming because of an increase in consumption of meat.
What process has caused the temperature of the Earth's atmosphere to increase significantly in the last 200 years?	Greenhouse effect
What name is given to the process by which the temperature of the Earth's atmosphere has increased in the last 200 years?	Global warming
Write down the names of any gases that contribute to the greenhouse effect.	Carbon dioxide, methane, water vapour.
Write down one or more renewable energy resources.	Wind, wave, hydroelectric, tidal, geothermal, solar, biofuels.
Write down one or more energy resources that release carbon dioxide into the Earth's atmosphere.	Fossil fuels (oil, coal, natural gas), biofuels.
Write down one or more energy resources that are considered unreliable.	Solar, wind, wave

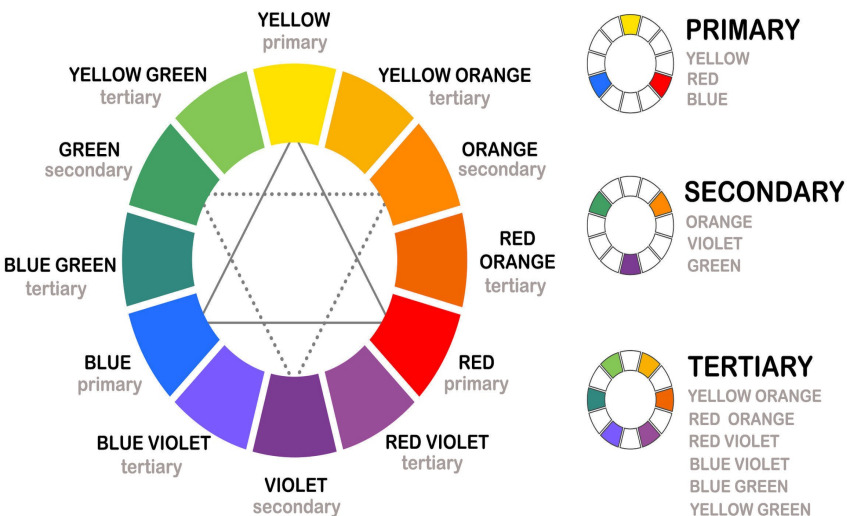
Sentence Builder 7	Español	English
	El verano pasado fui de vacaciones a Portugal con mi colegio.	Last summer I went on holiday to Portugal with my school.
	Viajé en autocar y fue lento y bastante incómodo.	I travelled by plane and it was slow and quite uncomfortable.
	Me alojé en un albergue juvenil en el campo.	I stayed in a youth hostel in the countryside.
	Cada día hice senderismo y hace dos años hicimos piragüismo en la costa.	Every day I did hiking and two years ago we did canoeing on the coast.

Sentence Builder 8	Español	English
	El año próximo voy a ir de vacaciones a Gales con mis abuelos.	Next year I am going to go on holiday to Wales with my grandparents
	Vamos a viajar en tren y será verdaderamente divertido.	We are going to travel by train and it will be really fun.
	Voy a alojarme en un camping lejos de la playa.	I am going to stay in a campsite far from the beach.
	Todos los días voy a hacer ciclismo en el centro.	Every day I am going to do cycling in the centre.

Sentence Builder 9	Español	English
	Para ir de vacaciones en mi maleta llevo mi ropa.	In order to go on holiday in my suitcase I take my clothes.
	El año pasado llevé mi pasaporte y unos pantalones.	Last year I took my passport and trousers.
	El año próximo voy a llevar una chaqueta.	Next year I am going to take a jacket.
	Generalmente necesito unos pantalones y gafas de sol.	Generally I need trousers and sunglasses.
	En el aeropuerto hay las puertas de embarque.	In the airport there are gates.

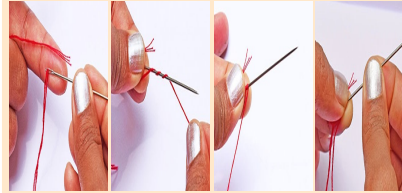
STENCILLING PROCESS STEPS

H&S	Craft knives are sharp and can cut your fingers easily. Always use a cutting mat and cut away from your hand.
EQUIPMENT	Card, pencil, ruler, craft knife, cutting mat, masking tape, sponge, painting card, fabric paint, fabric, newspaper.
FRAME	To ensure that the stencil has stability, you will need to have a frame drawn around the outside of the piece of paper or card to hold the entire work together.
DESIGN	Draw your design onto the surface of the paper or card – within the frame – making sure that there are gaps left to keep the image with linear details and shapes.
CUT	ALWAYS CUTTING AWAY FROM YOUR HAND. Cut each of the sections of the stencil out with the craft knife, leaving bridges safely in between segments to keep the stencil stable. Any repairs can be done with masking tape and recut once stabilised.
PRINT	Using an up and down tapping motion as opposed to a side-to-side swiping motion as this will keep the print cleaner and without much oozing paint. Apply paint through the stencil onto fabric. Make sure that there is newspaper underneath the fabric to reduce mess and damage.
DRYING TIME	Place the printed stencil and the fabric on a flat surface to dry for at least 24 hours until completely dry.



HAND SEWING PROCESS STEPS

TYING A KNOT



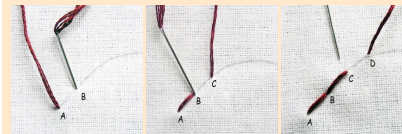
1. Place the needle and longer end of the thread together.
2. Pinch them between your thumb and index finger.
3. Take the thread (NOT the one closer to the needle), and wind it twice or thrice around it.
4. Clump it down to the bottom by pulling the thread downwards.
5. Now, gently pinching the needle, the end of the thread, and the clumped thread between the fingers, slowly pull out the needle.
6. The wound and clumped thread form a knot at the end of the thread as you finish pulling out the needle completely.

RUNNING STITCH



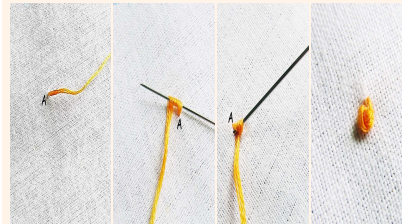
1. Begin the running stitch by poking your threaded needle up through the fabric (A).
2. Poke the needle back down through the fabric next (B) to where you just came up and pull the thread down into your first stitch.
3. Now poke your needle back up through the fabric, leaving a space from the previous stitch. Then poke the needle back down through the fabric again making your second stitch.

BACK STITCH



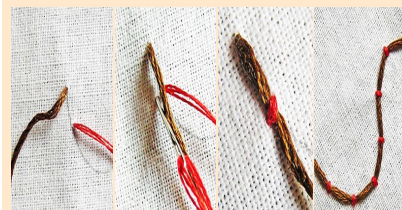
1. Bring the thread through (A) from the back to the front and take it through (B) to the back. This creates one stitch.
2. Bring the thread through (C) and take it in through (B). This way we are creating a stitch by taking the thread backwards.
3. Bring the thread through (D) and take it in through (C). Continue this pattern to finish the design.

FRENCH KNOTS



1. Bring the needle up from the back of the fabric. (A)
2. Place the needle close to the fabric. Wrap the thread that is coming out of the fabric (A) around the needle twice – don't pull too tight or it won't work!
3. Hold the longer end (not the bit coming out of the fabric) of the thread between your fingers.
4. Thread the needle back into the fabric close to the starting point (A) but not in the same hole.
5. Whilst holding the longer end of the thread, pull the needle through the fabric until you see a French Knot form.

COUCHING



1. You will need two threads – one sits on the top (B) and the other hurdles over it (R).
2. Place your top thread on the fabric. Bring the needle up from the back of the fabric with your hurdle thread.
3. Jump over the placed thread with the needle and thread into the fabric on the other side of the top thread (next to) to fasten the top thread down.
4. Bring the needle out a short distance from the previous stitch. Make sure your top thread is near this.