



Y11 KNOWLEDGE ORGANISER BOOK SPRING TERM 2023

NAME:

.....

TUTOR GROUP:

Please bring this booklet to school every day. Respect it and keep it safe.

SAPIENTIA DUCET AD ASTRA
WISDOM LEADS TO THE STARS



PRINT FOR SCHOOLS

Y11 Knowledge Organisers

Spring Term 2023

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Astrea Academy Sheffield

Vision: To provide an exceptional, knowledge-rich educational experience, which ensures all scholars succeed.

Motto: A relentless commitment to excellence - every day.

Values:

Scholarship	To be committed to advanced academic work
Respect	To be kind, considerate and follow the rules
Responsibility	To do what is morally right and make sensible decisions
Curiosity	To be eager to learn and know more
Tenacity	To be very determined and to not give up easily

School Day

Session	Start Time	End Time	Session Length
Breakfast Club	08:00	08:20	20 minutes
Tutor Time	08:20	08:40	20 minutes
Period 1	08:40	09:35	55 minutes
Period 2	09:35	10:30	55 minutes
Break	10:30	10:45	15 minutes
Period 3	10:45	11:40	55 minutes
Period 4	11:40	12:35	55 minutes
Lunch A / Reading & Fresh Air	12:35	13:15	40 minutes
Lunch B / Reading & Fresh Air	13:15	13:55	40 minutes
Period 5	13:55	14:50	55 minutes
Period 6 (Mon, Wed, Thur only for Y11)	14:50	15:40	50 minutes

Essential equipment

1. Black/blue pen
2. Red pen
3. Pencil
4. Ruler
5. Rubber
6. Reading book
7. Knowledge Organiser
8. Homework Book
9. Bag

Mobile Phones

- Mobile phone use is not permitted on the academy site at any time.
- Mobile phones should not be seen or heard.
- Mobile phones will be confiscated if seen or heard – they will need to be collected by parents and will not be handed back to the scholar.

Whilst it is understood that parents may wish their child to have a phone with them, in this case they should be turned off and remain in your bag at all times. Astrea Academy Sheffield will not take responsibility for the loss or damage, however caused, to mobile phones.

Personal Property: *Parents and scholars should be mindful of the appropriateness of the items that are brought into the academy. Astrea Academy Sheffield will not take responsibility for the loss or damage, however caused, to items of personal property.*

Banned items

Category 1

- ** Mobile phones (should not be seen or heard) / personal tablet devices / earphones
- ** Chewing gum and sweets/confectionery
- ** Glass bottles
- Cable ties
- Laser pens
- LED torches
- ** Fizzy drinks (including energy drinks)
- ** Correction fluid (such as Tippex)
- ** Permanent marker pens
- ** Cigarettes, cigarette papers, tobacco, snuff, matches or lighters (smoking paraphernalia)
- ** E-cigarettes (or liquids that are used in E-cigarettes)
- ** Aerosols other than for medical purposes (non-aerosol deodorants are permitted)
- ** Super glue

Category 2

- ** Needles other than for medical purposes
- ** Alcohol
- ** Illegal drugs
- ** Knives, blades, cutting utensils or tools (hammers, screw drivers, multi-tools etc.)
- ** BB guns or catapults
- ** Fireworks
- Solvents or hazardous chemicals
- ** Offensive material (pornographic, homophobic, racist, extremist)
- ** Any items that is illegal to possess or carry, or inappropriate for the age of the scholar or the Academy environment

Academic Uniform	
ACADEMY dark blue blazer	
ACADEMY tie	
White long or short sleeved school shirt (not polo shirt)	
Black school shoes (not boots or trainers)	
Dark grey tailored trousers or dark grey tailored shorts	Dark grey tailored trousers or dark grey knee or ankle length smart skirt
Dark grey or black socks	Dark grey or black socks or tights
<u>Optional items:</u> ACADEMY burgundy V-neck tank top ACADEMY burgundy V-neck jumper	

Uniform

- All religious headwear should be black, navy blue, dark grey or burgundy and contain no embellishments.
- Belts should be black or navy blue and made from leather/leather look material with a plain buckle.
- Leggings underneath skirts are not permitted.
- No false eyelashes, lash extensions or false nails.
- Earrings - only 1 small stud.
- No other piercings.

Active Uniform
ACADEMY navy trackpants, leggings or shorts
ACADEMY polo t-shirt or ¼ zip jumper
Sports trainers
Important information:
- Long hair must be tied up
- All jewellery must be removed
- When scholars have PE (practical) or electives, they can attend the academy in their PE kit.

Attendance – Every Day Counts

100%	Excellent! Always at school, making good progress	ALWAYS PRESENT
95%	Missing Some Key Lessons A good chance of gaps in knowledge	MISSES 6 LESSONS PER MONTH
90%	Persistent Absence A significant proportion of lessons missed	MISSES 12 LESSONS PER MONTH
85%	Serious Concern Significant intervention from the Academy	MISSES 18 LESSONS PER MONTH
80%	Unacceptable Court Action proceedings will commence	MISSES 30 LESSONS PER MONTH

English	Topic: Power and Conflict Anthology Poetry	Term: Spring
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1 Key Quotation and Analysis					
1	<i>London</i> , William Blake: 'the chartered Thames.' Juxtaposes the idea of something which should be free and natural but is being oppressed and controlled.				
2	<i>My Last Duchess</i> , Robert Browning: 'all smiles stopped together.' Sibilance emphasises the Duke's sinister nature. 'Stopped' is very definitely and echoes the certain death of the first duchess.				
3	<i>Tissue</i> , Imtiaz Dhaker: 'let the daylight break / through capitals and monoliths.' Violent verb 'break' showcases the power of nature against manmade structures.				
4	<i>Extracts from The Prelude</i> , William Wordsworth: 'a huge peak, black and huge.' Repetition of 'huge' highlights the speaker's speechlessness in the presence of such powerful nature.				
5	<i>The Emigrée</i> , Carol Rumén: 'There once was a country... I left it as a child' . Fairytale style beginning suggests that the speaker's memories are more fiction than fact. The ellipses highlights uncertainty.				
6	<i>Checking Out Me History</i> , John Agard: 'Dem tell me / Dem tell me.' Plosive repetition showcases the speaker's anger. Agard writes in non-standard English to represent the speakers identity and dialect.				
7	<i>Storm on the Island</i> , Seamus Heaney: 'spits like a tame cat / Turned savage.' Simile emphasises the dangerous, unpredictable and vicious nature of the ocean.				
8	<i>Ozymandias</i> , Percy Bysshe Shelley: 'a shattered visage lies.' The 'shattered' face symbolises how human power is not permanent and can be destroyed by time and nature.				
9	<i>Kamikaze</i> , Beatrice Garland: 'the little fishing boats strung out like bunting.' This simile takes an everyday boat and compares it to beautiful and joyful bunting. Reminding the speaker of the joy of life.				
10	<i>Poppies</i> , Jane Weir: 'All my words flattened, rolled, turned into felt.' The list explains how the speaker finds struggles to speak. All the verbs are violent and suffocating.				
11	<i>Remains</i> , Simon Armitage: 'But I blink / and he bursts again through the doors of the bank.' Enjambment mirrors the lack of closure the soldier has. The flashbacks continue just like this sentence continues to the next stanza. The plosive alliteration heightens the violent, intrusive flashbacks.				
12	<i>War Photographer</i> , Carol Ann Duffy: 'spools of suffering set out in ordered rows.' Sibilance sounds uncomfortable and sinister, just like the images. The elongated 's' sound suggests the suffering from war goes on and on.				
13	<i>Charge of the Light Brigade</i> , Alfred Lord Tennyson: 'Rode the six hundred.' This repetition highlights just how many men were riding straight into certain death. The fact the soldiers are simply names as 'the six hundred' dehumanizes their individual experiences.				
14	<i>Bayonet Charge</i> , Ted Hughes: 'Suddenly he awoke and was running – raw..' The poem starts in media res, allowing the reader to experience how shocking and overwhelming the experience of war must be. Also suggests that the soldier is acting without thinking.				
15	<i>Exposure</i> , Wilfred Owen: 'the merciless iced east winds that knife us...' The personification of the wind positions it as the true enemy of the soldiers. The semantic field of violence 'knife' and 'merciless' further cement this idea.				
How to structure a comparative poetry essay (Both/However)					
16	Brief introduction (1-2 sentences)	Comparative paragraph 1	Comparative paragraph 2	Comparative paragraph 3	Brief conclusion (1-2 sentences)

English	Topic: Power and Conflict Anthology Poetry	Term: Spring
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Language methods:	
1	Foreshadowing: A sign that suggests something that will happen later.
2	Metaphor: Describing something by referring to something else which is the same a particular way.
3	Simile: A way of describing a person or thing as being similar to something else. Often using the words 'as' or 'like'.
4	Symbolism: Using an object, part of nature or colour to represent something else; telling the readers something in a deeper way without saying it outright.
5	Alliteration: Two or more words that begin with the same letter or sound.
6	Sibilance: The repetition of s, z or soft c sounds.
7	Ambiguity: Something that is unclear, or it can be understood in more than one way.
8	Imagery: The pictures that a writer creates in the mind of their reader. Often symbolic.
9	Semantic field: A group of words/phrases all linked by one idea.
10	Sentence type: When a writer uses very long, very short or fragmented sentences to make a specific point.
11	Personification: When a non-living object is given human qualities or emotions.
12	Dehumanisation: When a character is presented more like an animal or non-living thing using animalistic imagery.
13	Pathetic fallacy: When natural things (such as the weather) are used to represent mood or emotion.
14	Juxtaposition: Two opposites placed close together.
15	Onomatopoeia: A word that sounds like the thing it's describing.
16	Hyperbole: An exaggerated statement that is not meant to be taken literally e.g. 'She jumped miles out of her chair.'
17	Plosive: A short burst of sound made when you say a word containing the letters b, d, g, k, p or t.
Poetry specific methods:	
18	Caesura: A pause in a line, e.g. after the word 'dropped' in 'He dropped, - more sullenly than wearily.'
19	Enjambment: When a sentence or phrase runs over from one line or stanza to the next.
20	Volta: A turning point in a poem, when the argument or tone changes dramatically.
Structural methods:	
21	Shifts: Are there any shifts (changes) in mood, time, voice etc that have an impact on the reader?
22	In media res: Beginning a narrative in the middle of events or action
23	Openings/endings: What choices is the author making to interest the reader at opening and ending of the text?
24	Narrative voice: J: 1 st – I, me, my 2 nd – You, your, you're 3 rd – They, he, she Unreliable – cannot be trusted

Subject: Maths	Topics: Quadratic Expressions, Quadratic Equations, Sampling and Statistics, Simultaneous Equations, Other Graphs, Vectors.	Term: Spring.
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	Key Words	
1	Quadratic	An equation in the form $ax^2 + bx + c$
2	Factorise	To take out the higher common factors of an expression.
3	Equation	A collection of terms equal to some value.
4	Quadratic Formula	A formula derived by completing the square that gives the roots of a quadratic equation.
5	Completing the square	Completing the Square is a method used to solve a quadratic equation by changing the form of the equation so that the left side is a perfect square trinomial .
6	Parabola	The symmetrical open plane curve. Quadratic graphs when plotted are always in the shape of a parabola.
7	Population	The population of a data set is the whole data set
8	Sample	A sample of a data set is a small part of a data set, this can be a bias sample, e.g. taking the first 5 values, random, e.g. pulling names from a hat, or stratified, taking a proportion from each section of the data set.
9	Median	The median is the middle value from an ordered data set
10	Upper/Lower Quartile	The lower quartile is the piece of data 25% of the way through the data set, with the upper quartile being 75% of the way through the data set
11	Interquartile Range	The interquartile range is the difference between the Upper and Lower Quartile
12	Line of Best Fit	The line of best fit is a line drawn on a scatter diagram to best estimate the overall trend of the data, this can then be used to estimate internal data
13	Correlation	Correlation is if the data trends in a certain way, positive correlation both of the variables increase, negative correlation one variable decrease as the other increases, and no correlation means that the data have no pattern.
14	Cumulative	The cumulative total is found by adding together the pieces of data as we pass through the data set
15	Frequency Density	The frequency density is plotted on the Y-axis of a histogram and found by dividing the frequency by the class width.
16	Histogram	A histogram is a way to represent continuous data, the groups are plotted on the x-axis and the frequency density on the y-axis, a histogram uses the area of each bar to give the total for each class.
17	Simultaneous Equations	equations involving two or more unknowns that are to have the same values in each equation.
18	Non-Linear Graph	Non-linear means the graph is not a straight line. The graph of a non-linear function is a curved line
19	Vector	A vector is an object that has both a magnitude and a direction.
20	Magnitude	The size of a vector.
21	Scalar	The number which multiples a vector.

Subject: Maths	Topics: Quadratic Expressions, Quadratic Equations, Sampling and Statistics, Simultaneous Equations, Other Graphs, Vectors.	Term: Spring.
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Key formulae		
1	Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
2	Complete the square	$a(x + b)^2 - c$
3	Stratified Sampling	$\frac{\text{total Sample Size}}{\text{Population}} \times \text{population of subgroups}$
4	Median	$\frac{n+1}{2}$
5	Lower Quartile	$\frac{n+1}{4}$
6	Upper Quartile	$3 \times \left(\frac{n+1}{4}\right)$
7	Frequency Density (Histogram)	$\frac{\text{frequency}}{\text{class width}}$
8	Equation of a circle	$x^2 + y^2 = r^2$
9	SDT	$\text{speed} = \frac{\text{distance}}{\text{time}} \quad \text{distance} = \text{speed} \times \text{time} \quad \text{time} = \frac{\text{distance}}{\text{speed}}$
10	Area of a Trapezium	$\frac{1}{2}(a + b)h$

Key Examples

Solving a quadratic equation by using the formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$= \frac{-(-4) \pm \sqrt{(-4)^2 - 4(-8)(5)}}{2(-8)}$$

$$= \frac{4 \pm \sqrt{16 + 160}}{-16}$$

$$= \frac{4 \pm \sqrt{176}}{-16}$$

$$= \frac{4 \pm \sqrt{16 \cdot 11}}{-16}$$

$$= \frac{4 \pm 4\sqrt{11}}{-16}$$

$$x_1 = \frac{4 + 4\sqrt{11}}{-16} = \frac{-1 - \sqrt{11}}{4}$$

$$x_2 = \frac{4 - 4\sqrt{11}}{-16} = \frac{-1 + \sqrt{11}}{4}$$

Solve the simultaneous equations

$$5x + 4y = 23$$

$$5x + 2y = 19$$

Step 1: Number the equations 1 and 2

$$5x + 4y = 23 \quad \textcircled{1}$$

$$5x + 2y = 19 \quad \textcircled{2}$$

Step 2: Subtract equation 2 from equation 1

$$5x + 4y = 23 \quad \textcircled{1}$$

$$5x + 2y = 19 \quad \textcircled{2}$$

$$2y = 4$$

Step 3: Divide to find y

$$\begin{array}{c} \textcircled{\div 2} \quad \textcircled{\div 2} \\ y = 2 \end{array}$$

Step 4: Substitute the value of y into equation 1

$$5x + 4(2) = 23$$

$$5x + 8 = 23$$

$$\begin{array}{c} \textcircled{-8} \quad \textcircled{-8} \\ 5x = 15 \end{array}$$

$$\begin{array}{c} \textcircled{\div 5} \quad \textcircled{\div 5} \\ x = 3 \end{array}$$

The solutions are $x = 3, y = 2$

The graph shows part of Matthew's journey to the gym and back.

Find Matthew's speed on his way to the gym

Draw a triangle to find the time taken and the distance.

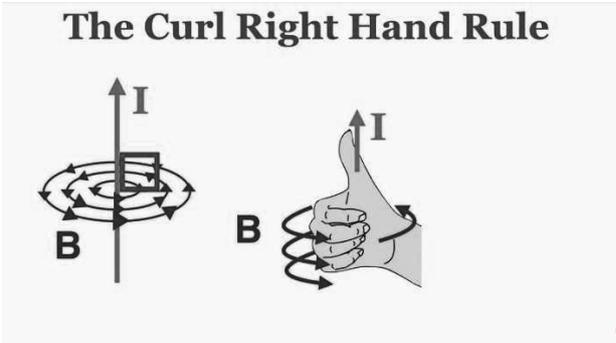
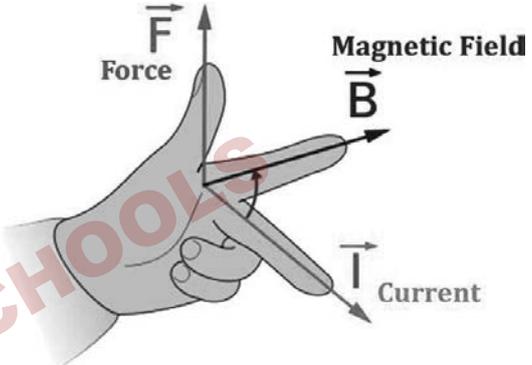
Time = 1H 15m

Distance = 12km

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{Speed} = 9.6\text{km/h}$$

Subject: Physics	Topic: Magnetism and Electromagnetism	Term: Spring
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Key Words	
1	Permanent magnet – produce own magnetic field
2	Induced magnet – magnetic materials that turn into a magnet when placed in a magnetic field
3	Solenoid – coil of wire
4	Electromagnet – A magnet that can be turned on and off
5	Magnetic field - region around a magnet where force acts on another magnet or on a magnetic material
6	Split ring commutator – reverses the current direction
7	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Right hand rule (see below)</p>  <p>The Curl Right Hand Rule</p> </div> <div style="text-align: center;"> <p>Left hand rule (see below)</p>  </div> </div>
Facts on energy	
8	Magnets produce a magnetic field; shown by drawing field lines; always go north to south
9	A moving charge creates a magnetic field
10	Right hand thumb rule – thumb in direction of current, curl fingers, direction of fingers is the field direction
11	A current in a field experiences a force
12	Left hand rule – first finger in direction of field; second finger in direction of the current; thumb is direction of force(movement)
13	A current carrying coil of wire rotates in a magnetic field
14	The direction of a motor can be reversed by reversing the polarity of the dc supply

Subject: Chemistry	Topic: Crude Oil and Chemical Analysis	Term: Spring
	Crude Oil	
1	Alkane - Saturated hydrocarbon. A compound of hydrogen and carbon only, with no C=C bonds.	
2	Alkene - Unsaturated hydrocarbon with a double bond between the carbon atoms.	
3	Boiling point - The temperature at which a substance rapidly changes from a liquid to a gas.	
4	Carbon dioxide - A gaseous compound of carbon and oxygen, which is a by-product of respiration, and which is needed by plants for photosynthesis.	
5	Carbon monoxide - Poisonous gas produced during incomplete combustion.	
6	Complete combustion - Burning in a plentiful supply of oxygen or air. Complete combustion of a hydrocarbon produces water vapour and carbon dioxide.	
7	Condensation - A change of state in which gas becomes liquid by cooling.	
8	Covalent bond - A bond between atoms formed when atoms share electrons to achieve a full outer shell of electrons.	
9	Cracking - The breaking down of large hydrocarbon molecules into smaller, more useful hydrocarbon molecules by vaporising them and passing them over a hot catalyst.	
10	Crude oil - Mixture of hydrocarbons, mainly alkanes, formed over millions of years from the remains of ancient dead marine organisms.	
11	Exothermic - Reaction in which energy is given out to the surroundings. The surroundings then have more energy than they started with so the temperature increases.	
12	Finite - Something that has a limited number of uses before it is depleted. For example, oil is a finite resource.	
13	Flammable - Able to ignite and burn.	
14	Fractional distillation - In fractional distillation a mixture of several substances, such as crude oil, is distilled and the evaporated components are collected as they condense at different temperatures.	
15	Fuel - Material that is used to produce heat, like coal, oil or gas.	
16	Hydrocarbon - A compound that contains hydrogen and carbon only.	
17	Ignite - Set on fire.	
18	Incomplete combustion - Set on fire.	
19	Intermolecular forces - Weak attractive forces between molecules. When a simple molecular substance melts or boils, it is the intermolecular forces that are broken (not the covalent bonds in each molecule).	
20	Polymer - A large molecule formed from many identical smaller molecules known as monomers.	
21	Properties - The characteristics of something. In chemistry, chemical properties include the reactions a substance can take part in. Physical properties include colour and boiling point.	
22	Saturated - A saturated hydrocarbon contains no carbon-to-carbon double bonds, only single bonds.	
23	Unsaturated - An unsaturated compound contains at least one double or triple bond.	
24	Viscosity - A measure of how difficult it is for a substance to flow - the higher the viscosity, the 'thicker' it is.	

Subject: Chemistry	Topic: Crude Oil and Chemical Analysis	Term: Spring
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Chemical Analysis	
25	Atom - the smallest part of an element that can exist.
26	Chromatogram - the results of separating mixtures by chromatography
27	Chromatography - is used to separate different substances dissolved in a liquid.
28	Compound - substance formed by the chemical union of two or more elements.
29	Dissolved - substance is said to be dissolved when it breaks up and mixes completely with a solvent to produce a solution.
30	Element - substance made of one type of atom only.
31	Formulation - mixture that is always made with the same proportions of the same substances.
32	Freeze - change of state in which liquid becomes solid by cooling.
33	Impure - substance that consists of more than one element or compound.
34	Melting - process that occurs when a solid turns into a liquid when it is heated.
35	Melting point - temperature at which a solid changes into a liquid as it is heated.
36	Mixture - two or more substances that are not joined together. The substances can be elements, compounds, or both.
37	Mobile phase - phase in chromatography that moves, usually a solvent or mixture of solvents.
38	Pure - substance that consists of only one element or only one compound.
39	Soluble - able to dissolve in solvent. For example, sugar is soluble in water because it dissolves to form sugar solution.
40	Solvent - liquid in which the solute dissolves to form a solution.
41	Stationary phase - phase in chromatography that does not move, for instance, the paper in chromatography.
42	Ion – positively or negatively charged particle formed when atoms lose or gain electrons.
Disciplinary knowledge	
43	Hypothesis – a prediction of what is going to happen in an experiment.
44	Control variable – the variable(s) which does not change during an experiment.
45	Independent variable – the variable which is changed during an experiment.
46	Dependent variable – the variable which is measured during an experiment.

Subject: Biology	Topic: Ecology	Term: Spring
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	Key Words
1	Abiotic - Non-living elements of an ecosystem, such as climate, temperature, water and soil type.
2	Biotic - Living elements of an ecosystem, such as plants and animals.
3	Biodiversity - The range of animals and plants in a given area.
4	Biomass - The dry mass of an organism.
5	Ecosystem - The living organisms in a particular area, together with the non-living components of the environment.
6	Food chain - A sequence of feeding relationships between organisms, showing which organisms eat what and the movement of energy through trophic levels.
7	Peat bog - Poorly drained areas made up of partially decomposed organic matter due to waterlogging.
8	Sustainable - An activity which does not consume or destroy resources or the environment.
9	Quadrat - A square frame of known area used for sampling the abundance and distribution of slow or non-moving organisms.
10	Trophic levels - The stages in a food chain or web.
	Key Ideas
11	Interdependence is when species within a community depend on other species for food, shelter, pollination and seed dispersal.
12	Food chains begin with a producer which synthesises molecules such as glucose by photosynthesis.
13	In a stable community the numbers of predators and prey rise and fall in cycles.
14	Pollution can occur in water, from sewage, fertiliser or toxic chemicals, in air, from smoke and acidic gases and on land, from landfill and from toxic chemicals.
15	The decay or burning of the peat releases carbon dioxide into the atmosphere.
16	Large-scale deforestation in tropical areas has occurred to provide land for cattle and rice fields and grow crops for biofuels.
17	Decomposers break down dead plant and animal matter by secreting enzymes into the environment.
	Disciplinary Knowledge – Required Practicals ‘Field Investigations’ and ‘Decay’
18	Population size of a common species in a habitat is measured with a quadrat through random sampling.
19	Estimated population size = mean population per m ² x total area (m ²)
20	Lipase is used in the ‘Decay’ required practical to model the effect of bacteria breaking down lactose in milk and making lactic acid.
21	Phenolphthalein is an indicator that is pink in alkaline solutions.
22	When the pH drops below pH 7, phenolphthalein becomes colourless.

Subject: Biology	Topic: Inheritance and Genetics	Term: Spring
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	Key Words
1	Cystic fibrosis – an inherited disorder of cell membranes that is caused by a recessive allele.
2	DNA - a polymer containing genetic material made up of two strands forming a double helix. The DNA is contained in structures called chromosomes.
3	Evolution - a change in the inherited characteristics of a population over time through a process of natural selection which may result in the formation of a new species.
4	Genetic engineering - a process which involves modifying the genome of an organism by introducing a gene from another organism to give a desired characteristic.
5	Linnaean system of classification – Living things are classified into kingdom, phylum, class, order, family, genus and species.
6	Meiosis – a type of cell division in sex cells which halves the number of chromosomes in gametes and fertilisation restores the full number of chromosomes. Non-identical cells are formed.
7	Mitosis - a type of cell division which produces daughter cells identical to the parent.
8	Polydactyly – an inherited disorder that is caused by a dominant allele and causes the person to have extra fingers or toes.
9	Selective breeding - the process by which humans breed plants and animals for particular genetic characteristics.
10	Variation - differences in the characteristics of individuals in a population.
	Key Ideas
11	Sexual reproduction involves the joining of male and female gametes - meiosis occurs.
12	Asexual reproduction involves only one parent and no fusion of gametes or genetic information which leads to identical offspring - only mitosis occurs.
13	Genes have different forms called alleles → A gene is a small section of DNA → DNA is wrapped around chromosomes → Chromosomes are found in the nucleus → The nucleus is an organelle inside of a cell.
14	The alleles present for a trait are called the genotype . The physical characteristics that are expressed are called the phenotype .
15	A dominant allele is always expressed, even if only one copy is present.
16	A recessive allele is only expressed if two copies are present.
16	If the two alleles present are the same, the organism is homozygous for that trait. If the alleles are different they are heterozygous .
17	Ordinary human body cells contain 23 pairs of chromosomes. 22 pairs control characteristics only, but one of the pairs carries the genes that determine sex – XX for female and XY for male.
18	If two populations of one species become so different in phenotype that they can no longer interbreed to produce fertile offspring they have formed two new species.
19	Fossils may be formed from parts of organisms that have not decayed, part of the organism has been replaced by minerals or as footprints or other traces.
20	Extinctions occur when there are no remaining individuals of a species still alive.

Year 11
Subject: History
Conflict and Tension between East and West, 1945-1972

Term: Spring

Key words

1	Cold War	A state of conflict between nations that does not involve direct military action.
2	Communism	An economic ideology that advocates for a classless society in which all property and wealth are communally-owned
3	Capitalism	An economic system for dealing with money and wealth. In a capitalist country, citizens, not governments, own and run companies.
4	Red Scare	The widespread fear of Communism in 1920s America.
5	Self-Determination	The right for people to choose how their country is governed.
6	United Nations	An international organisation that aimed to stop conflict.
7	Ideology	A political belief like socialism, capitalism, communism.
8	Secretary of State	The US chief diplomat – in charge of foreign relations.
9	Boycotting	Refusing to buy goods or services from someone for political reasons.
10	Vietcong	The communist guerrilla fighters in Vietnamese.
11	MAD	The idea that the full-scale use of nuclear weapons by opposing sides will cause the complete destruction of all countries involved.

Timeline

12	Feb 1944	Yalta Conference
13	May 1945	End of WW2 in Europe
14	July-Aug 1945	Potsdam Conference
15	Aug 1945	Atomic bombing of Hiroshima and Nagasaki. End of WW2 in the Pacific
16	March 1947	Churchill's Iron Curtain speech
17	Sep 1947	Cominform is established
18	April 1948	The Marshall Plan is put into action
19	June 1948	The Berlin Blockade begins
20	Jan 1949	Comecon established
21	April 1949	NATO is formed
22	Aug 1949	The USSR successfully tests atomic bomb
23	June 1950	North Korea invades the South leading to the Korean War
24	July 1954	The French withdraw from Vietnam
25	May 1955	The formation of the Warsaw Pact
26	April 1961	The Bay of Pigs invasion attempt
27	August 1961	The Berlin Wall constructed
28	Oct 1962	The Cuban Missile Crisis
29	Jan-Aug 1968	The Prague Spring movement
30	July 1969	Neil Armstrong a American, becomes the first man to set foot on the moon
31	May 1971	SALT I

Year 11		
Subject: History		Term: Spring
Tsarism and Communism, 1894-1945		
Key words		
1	Exile	The removal and banning of a person from a country.
2	Revolution	The (often violent) overthrow of a ruling power.
3	Soviet	Elected councils often made up of workers or soldiers
4	Civil War	When a country is at war with itself.
5	Propaganda	An organized spreading of often false ideas or the ideas spread in such a way.
6	Communism	A type of government as well as an economic system (a way of creating and sharing wealth).
7	Kulaks	A peasant in Russia wealthy enough to own a farm and hire labour.
8	Collectivisation	The act of making something apply to a group of people as a whole rather than as individuals
Timeline		
9	1894	Nicolas became Tsar
10	January 1905	Bloody Sunday
11	17 October 1905	October Manifesto published
12	1906	The Duma met for the first time
13	1907	Rasputin started to treat Alexei Romanov
14	August 1914	Russia enters WW1
15	September 1915	The Tsar takes personal command of the army
16	December 1916	Rasputin was assassinated
17	9 January 1917	150,000 workers demonstrated in Petrograd on the anniversary of Bloody Sunday
18	14 February 1917	100,000 workers from 5 factories were on strike; the Duma demanded the abdication of the Tsar
19	24-25 February 1917	Demonstrations grew more and people were asking for the Tsar to abdicate
20	27 February 1917	The Duma formed a Provisional Committee to take control. The Petrograd Soviet was formed
21	2 March 1917	Tsar Nicolas abdicated
22	October/November 1917	The Bolsheviks seized power and the Provisional Government collapsed
23	8 November 1917	Petrograd Soviet announced the Provisional Government had been overthrown and people could look forward to the end of war and increase their rights and freedoms
24	March 1918	The Treaty of Brest-Litvosk- Russia leave WW1
25	July 1918	Tsar and his family were assassinated by the Bolsheviks in July 1918
26	1918-1921	Russia Civil War
27	1922	The Russian empire as renamed the Union of the Soviet Socialist Republics (USSR or Soviet Union)
28	January 1924	Lenin died
29	1924	Stalin becomes leader of Soviet Union
30	1939	Soviet Union enters WW2
31	1945	WW2 ends

Subject: RE	Topic: Religion and Life	Term: Spring
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Key words	
1	Abortion: The removal of a foetus to end a pregnancy
2	Big Bang Theory: Scientific theory of the creation of the universe through a large explosion.
3	Dominion: The belief that humans have power over God's creation.
4	Euthanasia: The painless killing of a terminally ill patient.
5	Evolution: a process of gradual change that takes place over many generations, during which species of animals slowly change some of their physical characteristics.
6	Heaven: Paradise; where those judged good go after death to be forever with God.
7	Hell: Damnation; where those judged bad go after death to be forever without God.
8	Judgement: Being judged for actions or belief.
9	Liberal: A type of Christian who reads the Bible as stories, myths and metaphors.
10	Literalist: A type of Christian who believes the Bible is literally true and is the word of God.
11	Natural Resources: Materials found in nature (e.g. coal, oil) which are exploited by humans.
12	Purgatory: Where Catholics believe souls are purified after death, before they enter heaven.
13	Quality of Life: How easy or difficult someone's life is – e.g. poverty causes a low quality of life.
14	Sanctity of Life: The belief that all life is sacred as humans are made in God's image.
15	Stewardship: The belief that God gave responsibility to humans to look after the world.
16	Vegetarian: Someone who does not eat animals.
Creation of the Universe and Humans	
17	Christians believe the universe was designed and made by God.
18	The creation story in Genesis 1 says that God made the world in six days.
19	Literalist Christians believe this is true and that God created Adam and Eve from whom all humans descend.
20	Liberal Christians say the creation story in the Bible is just a story and may agree with scientific ideas about creation.
21	<i>"In the beginning God created the heavens and the earth."</i> – Genesis 1:1
22	The Big Bang Theory argues that the universe started as a dense collection of mass which massively expanded creating stars, galaxies and planet.
23	The Theory of Evolution comes from Charles Darwin who observed that animals change over time and argued that humans were not designed by God but evolved from apes.
24	These theories do not fit with a literalist Christian's view but could fit with a liberal view.

Subject: RE	Topic: Religion and Life	Term: Spring
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Stewardship and Dominion	
25	Stewardship refers to the belief that people have the duty to look after the environment on behalf of God and for future generations.
26	This can be seen where Christians campaign for environmental charities or choose to reduce waste and recycle.
27	Dominion is the idea that God gave humans power and authority over the world.
28	Some Christians believes this allows them to use natural resources (e.g. oil and coal) and animals to make their lives better.
29	In Genesis God gives Adam and Eve the power to name the animals and rule over them.
30	<i>"Rule over [...] every living creature."</i> – Genesis 1:28
Abortion	
31	Abortion is the removal of a foetus from the womb in order to end a pregnancy.
32	In the UK (except Northern Ireland) it is legal during the first 24 weeks of pregnancy unless the mother's life is in danger or the foetus is severely deformed.
33	This is not the case when the mother's life is in danger or the foetus is severely deformed.
34	The Catholic Church is strongly against abortion.
35	They believe in sanctity of life, the idea that life is a sacred gift from God which only God can take away. They see the foetus as a living thing.
36	The Church of England think abortion is sometimes acceptable as a pregnancy as a result of rape or where the child would be very ill would lead to a very poor quality of life.
Euthanasia	
37	Euthanasia is the painless killing of a patient with a terminal illness.
38	Voluntary euthanasia is where the patient asks for their life to be ended.
39	Non-voluntary euthanasia is where the patient is not capable of asking to die, perhaps in a coma.
40	All forms of euthanasia are currently illegal in the UK.
41	The Catholic Church is strongly against euthanasia. They believe that only God can give and take life and that life is sacred.
42	Some liberal Christians think euthanasia can be an act of mercy which Jesus tells them is a good thing to do, this is especially the case when someone's quality of life is very poor.
Afterlife	
43	Christians believe that when you die you will be judged.
44	Some Christians believe that Jesus will return on a future Day of Judgement.
45	Those who are found to be good will go to heaven but those who have sinned and gone against God's wishes will go to hell.
46	Roman Catholics believe that there is a middle stage called purgatory where souls go to be purified of sin before they go to heaven.

Subject: Geography	Topic: Physical Landscapes of the UK	Term: Spring
The physical Landscapes of the UK		
1	The main upland areas of the UK tend to be in the north and the west of the country e.g. Scotland – North West Highlands England - he Lake District Wales – Snowdonia	
2	Lowland areas can be found in the following places: The Wash (East Anglia and Lincolnshire), the Fens in East Anglia, the Midlands.	
3	During the last ice age , ice covered a large part of the UK. This ice eroded the land producing some of the mountainous landscapes which exist today.	
4	The erosive power of rivers has shaped the relief of the land.	
Waves		
5	When the wind blows over the sea, it creates waves. The size and energy of the wave depends on certain factors: the fetch - how far the wave has travelled, the strength of the wind, how long the wind has been blowing for.	
6	When a wave reaches the shore, the water that rushes up the beach is known as the swash .	
7	The water that flows back towards the sea is known as the backwash .	
8	The characteristics of a destructive wave are: weak swash and strong backwash, the strong backwash removes sediment from the beach, the waves are steep and close together	
9	The characteristics of a constructive wave are: strong swash and weak backwash, the strong swash brings sediments to build up the beach, the backwash is not strong enough to remove the sediment the waves are low and further apart.	
Coastal processes		
10	Types of weathering: Freeze-thaw weathering, biological weathering and chemical weathering.	
11	Erosion: Hydraulic action, attrition, abrasion and solution.	
12	Transportation: Traction, saltation, suspension and solution.	
13	Deposition: When the sea loses energy, it drops the material it has been carrying.	
Erosion landforms		
14	Headlands and bays - formed from different types of rock, headlands and bays can form.	
15	Cliffs and wave-cut platforms - Soft rock erodes quickly and forms gentle sloping cliffs, whereas hard rock is more resistant and forms steep cliffs. A wave-cut platform is found at the foot of a cliff.	
16	Caves, arches, stacks and stumps: erosional features that are commonly found on a headland.	
Depositional landforms		
17	When water loses its energy, any sediment it is carrying is deposited. The build-up of deposited sediment can form different features along the coast.	
18	Depositional features include: beaches, spits and bars	
19	<p>Dorset is located in the south of England. Its coastline has examples of many erosional and depositional landforms. For example:</p> <p>Swanage is an example of a headland and bay Old Harry Rocks is an example of caves, stacks and stumps at Chesil Beach there is a bar</p>	

Subject: Geography		Topic: Physical Landscapes of the UK	Term: Spring
Coastal management strategies			
1	Erosion is a natural process which shapes cliffs. Over time, erosion can cause cliff collapse - therefore the coastline needs to be managed.		
2	Hard engineering involves building artificial structures which try to control natural processes.		
3	Sea walls - Concrete walls that are placed at the foot of a cliff to prevent erosion. Rock armour - Large boulders placed at the foot of a cliff. They break the waves and absorb their energy. Groynes - Wooden or rock structures built out at right angles into the sea.		
4	Soft engineering does not involve building artificial structures, but takes a more sustainable and natural approach to managing the coast.		
5	Beach nourishment - Sand is pumped onto an existing beach to build it up. Reprofiling - The sediment is redistributed from the lower part of the beach to the upper part of the beach. Dune nourishment - Marram grass planted on sand dunes stabilises the dunes and helps to trap sand to build them up.		
The River Valley			
7	Long profile - a line representing the river from its source (where it starts) to its mouth (where it meets the sea). It shows how the river changes over its course.		
8	Cross profile - a cross-section of a river's channel and valley at a certain point along the river's course.		
River Landforms			
9	The process of erosion can create different landforms. The erosional features are often found in the upper course of the river. Waterfall and gorges		
10	Erosional and depositional landforms - Meanders Oxbow lakes		
11	Depositional landforms – Floodplain (an area of land which is covered in water when a river bursts its banks). Levees - A build-up of alluvium on the banks of a river can create levees, which raise the river bank.		
River discharge and flooding			
12	Causes of flooding: Prolonged rainfall, Heavy rainfall, Relief, Geology, Vegetation, Urban land use.		
13	A hydrograph shows how a river responds to a period of rainfall.		
14	Lag time - the time taken between peak rainfall and peak discharge. Factors influencing lag time include: Size of drainage basin, Vegetation, Valley side steepness, Soil type		
River management strategies			
15	Hard engineering strategies: Hard engineering involves building artificial structures which try to control rivers. They tend to be more expensive. Each hard engineering strategy has its advantages and disadvantages.		
16	Soft engineering strategies Soft engineering does not involve building artificial structures, but takes a more sustainable and natural approach to managing the potential for river flooding. Each approach has its advantages and disadvantages.		

Subject: Spanish	Topic: Mi ciudad y mi región	Term: Spring
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Key Nouns					
1	un ayuntamiento	a town hall	13	una carnicería	a butcher's
2	una piscina	a swimming pool	14	una joyería	a jeweller's
3	una plaza (mayor)	a (main) town square	15	una librería	a bookshop
4	una biblioteca	a library	16	una tienda	a shop
5	un gran almacén	a department store	17	una camisa	a shirt
6	una iglesia	a church	18	una corbata	a tie
7	una mezquita	a mosque	19	un traje	a suit
8	una oficina de correos	a post office	20	unas media	tights
9	los lugares de interés	places of interest	21	las pegatinas	stickers
10	un estanco	a tobacconist's	22	los sellos	stamps
11	una ganga	a bargain	23	los juguetes	toys
12	la gente	people	24	unos pendientes	earrings
Key Adjectives					
25	histórico/a	historical	30	acogedor/a	welcoming
26	animado/a	lively/busy	31	fiable	reliable
27	ruidoso/a	noisy	32	tranquilo/a	calm/ quiet
28	conocido/a por	known by	33	económico/a	cheap
29	caro/a	expensive	34	barato/a	cheap
Key Verbs					
35	vivo en (vivir)	I live in	45	estar al aire libre	to be in the open air
36	está situado	it is situated	46	disfrutar de las vistas	to enjoy the views
37	me pongo (ponerse)	I put on/wear	47	apreciar la arquitectura	to appreciate the architecture
38	llevo (llevar)	I wear	48	aprovechar del buen tiempo	to make the most of the good weather
39	está	it is (location)	49	probar platos típicos	to try local dishes
40	hay	there is/are	50	practicar senderismo	to go hiking/trekking
41	había	there was/were	51	ir de compras	to go shopping
42	tiene	it has	52	hacer un recorrido en autobús	to do a bus tour
43	tenía	it had	53	practicar los deportes acuáticos	to practise water sports
44	era	it was (description)			

Subject: Spanish	Topic: Mi ciudad y mi región	Term: Spring
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Key Phrases		
54	Tiene unos impresionantes paisajes naturales	It has some amazing natural landscapes
55	Tiene el bullicio de la ciudad	It has the hustle and bustle of the city
56	Es mi ciudad natal	It is my home city
57	Hay mucho que hacer	There is lots to do
58	No hay nada que hacer	There is nothing to do
59	Hay una zona peatonal	There is a pedestrian area
60	Es tan fácil desplazarse	It is so easy to get around
61	Hay muchas/pocas posibilidades de trabajo	There are lots/few job opportunities
62	se lleva una vida frénética	Life is so hectic
63	la gente no se conoce	People don't know each other
64	conozco a todos mis vecino	I know all my neighbours
65	hay demasiada contaminación	There is to much pollution
66	hay bastante desempleo	There is quite a lot of unemployment
67	el transporte público no es fiable	Public transport is not reliable
68	introduciría transporte público gratis	I would introduce free public transport
69	crearía más espacios verdes	I would create more green spaces
70	invertiría en educación	I would invest in education
71	construiría más tiendas en el centro	I would build more shops in the centre
Key Structures		
72	Lo bueno de mi ciudad es que	The good thing about my town is that
73	Lo malo de mi ciudad es que	The bad thing about my town is that
74	Lo mejor de vivir en es que	The best thing about living in is that
75	Lo peor de vivir en es que	The worst thing about living in is that
76	Si fuera posible	If it was possible
77	Si fuera el alcalde/alcaldesa de mi ciudad	If I was the mayor of my city.....
78	Suelo + Infinitive	I usually...
79	Solía + Infinitive	I used to...
80	La gente dice que	People say that
81	La gente decía que	People used to say that
82	Siempre me ha gustado + Infinitive	I have always liked ...
83	Preferiría + Infinitive	I would prefer

Key words

1	Aerobic endurance	The ability of the cardiorespiratory system to supply oxygen and nutrients to working muscles over a long period of time.
2	Body composition	The ratio of fat mass to fat-free mass in the body. Tested by skinfold testing, measuring BMI and Bioelectrical Impedance Analysis
3	Flexibility	Having good range of movement at a joint.
4	Muscular endurance	The ability of muscles to work repeatedly over a period of time against a light-moderate resistance.
5	Muscular strength	The maximum force a muscle or muscle group can produce.
6	Speed	The time taken to cover a distance.
7	Agility	The ability to change direction quickly.
8	Balance	The ability to maintain a centre of mass over the base of support. (Static = still and dynamic moving)
9	Coordination	The ability to parts of the body to work together to move smoothly and accurately.
10	Power	The product of speed and strength.
11	Reaction time	The time it takes for a sports performer to respond to a stimulus and start their response.
12	Additional Principles of training	Specificity, Progressive Overload, Rest and recovery, reversibility and Variation
13	Basic Principles of training	FITT – Frequency, Intensity, Time and Type

Key words

1	Continuous Training	Steady pace training at a medium intensity for at least 30 minutes.
2	Fartlek Training	Continuous training with no rest, can be varied using different speeds, terrain or equipment.
3	Interval Training	Periods of work and rest or recovery. Recovery can be jogging, walking or rest.
4	Circuit Training	Exercises that focus on aerobic endurance completed in an order.
5	Static Stretching	Stretch a muscle and hold it in one position. Active: own muscles. Passive: something else.
6	Ballistic Stretching	Fast bouncing movements that stretch muscles through its full range of movement.
7	PNF Stretching	Use a partner or object to stretch muscles further than its normal range.
8	Hollow Sprints	Sprints with a walk or jog (hollow period) in between them.
9	Acceleration Sprints	Increase the pace to a full sprint from a standing start over a short distance.
10	Free Weights	Weights not attached to a machine. Barbells and dumbbells used to target muscles.
11	Plyometrics	Exercises where muscles are lengthened and shortened producing high force.
12		

Key words

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Movement Analysis Keywords

1	Tendons	Fibrous tissue that joins bone to muscle
2	Lever	A rigid bone that turns round a pivot (joint) The fulcrum is the point at which the lever will rotate
3	Ligament	Strong, flexible connective tissue that connect bones to other bones
4	Flexion	A bending movement that decreases the angle between body parts (The movement of a bicep curl)
5	Extension	A straightening that increase the angle between body parts (A swimmer swings their arm backwards in preparation for a racing dive)
6	Adduction	A movement that pulls towards the midline of the body (A golfer on the tee swings the club down towards the ball)
7	Abduction	A movement that pulls away from the midline of the body (A gymnast moves their arm out sideways)
8	Circumduction	Moving a part of the body in a circular shape (A cricketer bowls a ball)

Muscular System Key Words

11	Antagonistic Pair	Muscles that work together to create movement. For example, the bicep and tricep. When one muscle contracts, the other will relax
12	Muscle Fibres	Type 1 slow twitch muscle fibres are suited to low intensity work eg marathon running Type 2a fast twitch muscle fibres are used in anaerobic work and can be improved through endurance training Type 2b fast twitch muscle fibres are used in anaerobic work and can generate greater force/power than others but will fatigue quickly

The Cardiorespiratory System Key Words

13	Cardio-respiratory	The interaction of the heart and lungs to supply oxygen to the working muscles during exercise
14	Vasodilation	When the veins swell up or dilate: widening of the internal diameter of the blood vessel to allow increased blood flow
16	Vasoconstriction	When veins shrink down: narrowing of the internal diameter to decrease blood flow
17	Systole	The phase of the heartbeat when the heart muscle contracts
18	Diastole	The phase of the heartbeat when the heart muscle relaxes
19	Vascular Shunting	Process that increases blood flow to active areas during exercise by diverting blood away from inactive areas achieved by vasodilation or vasoconstriction
20	Stroke Volume	The amount of blood pumped by the left ventricle of the heart in one contraction.
21	Vital Capacity	Greatest amount of air that can be made to pass into and out of the lungs by the most forceful inspiration and expiration
22	Tidal Volume	The amount of air inspired and expired with each normal breath
23	Cardiac Output	The product of heart rate and stroke volume $Q=HR \times SV$

Subject: Personal Development	Topic: PSHE, Citizenship & careers	Term: Spring
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	Key Words
1	Protected Characteristics - Character traits of a person that it is against the law to discriminate against- there are 9 in total.
2	Characteristic - A quality or feature that is characteristic of someone or something is one which is often seen in them and seems typical of them.
3	Discrimination - The practice of treating one person, or a group of people, less fairly or less well than others.
4	British Values - British Values are what means to be a citizen in a modern and diverse Britain- there are 5 in total.
5	Tolerance - The quality of allowing people to say and do as they like, even if you do not agree or approve of it.
6	Democracy - A system of government in which people choose their leaders by voting for them in elections.
7	Health - A state of complete mental, physical and social wellbeing, and not merely the absence of disease and infirmity.
8	Wellbeing - The state of being comfortable, healthy, or happy. Examples include; physical, emotional and social.
9	Harassment - Aggressive pressure or intimidation. Examples include; Physical, verbal and sexual
10	Careers - an occupation undertaken for a significant period of a person's life and with opportunities for progress
	Key topics
11	Protected Characteristics: Age, Disability, Sex, Sexual orientation, Pregnant, Marriage/civil partnership, gender reassignment, religion, race
12	British values: Mutual respect & tolerance, Democracy, Rule of law, Individual liberty
13	CEIAG: Careers education, information and guidance
14	SMSC: Spiritual, Moral, Social and Cultural
15	Citizenship: the position or status of being a citizen of a particular country.
16	Relationships: the way in which two or more people or things are connected, or the state of being connected.

Subject: Art	Topic: Refine and Record	Term: Spring
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	Key Words
1	Refine: Modification of the composition – eg replacing one object with another or changing a pose slightly. A variation of a technique - eg trying oil pastel rather than painting to achieve an expressive style.
2	Tone: Tone means how light or dark something is. The tones artists and designers use and the contrast between them can create very different moods and visual effects.
3	Texture: Artists and designers can use actual texture in their work or they can suggest how something feels using techniques that imply texture.
4	Colour: Element of art derived from reflected light. We see color because light waves are reflected from objects to your eye.
5	Line: Lines are used by artists and designers to describe objects, add detail or create expression. Some form of line is used in every piece of artwork.
6	Space: Three-dimensional work creates real space. Two-dimensional works can create implied space using artistic technique. Objects take up positive space, while negative space is the empty space around them.
7	Form: refers to three dimensional objects. While shapes have two dimensions (height and width), forms have three dimensions (height, width and depth).
8	Gradation: in art is a visual technique of gradually transitioning from one colour hue to another, or from one shade to another, or one texture to another.
9	Blending: is a technique of shading that on concealing the application of marks by either applying them seamlessly or by rubbing in the media.
10	Develop: developing ideas is part of the creative process for artists and designers. By exploring and refining ideas, effective decisions can be made about the final piece of artwork or design solution.
	Assessment criteria
11	AO1: Develop your ideas through investigation informed by contextual and other sources, demonstrating analytical and cultural understanding. 1) Have you explored the work of artists. 2) Have you analysed their work to understand the reasoning and context behind their work. 3) Present your work to clearly show the links to the artists work
12	AO2: Refine your ideas through experimenting and selecting appropriate resources, media, materials, techniques and processes. 1) Use a range of materials and processes. 2) Evaluate your work, making intelligent improvements and showing links to the artists you have studied. 3) Trialing different materials to create the same/ similar outcome.

Subject: Art	Topic: Refine and Record	Term: Spring
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Key Words	
13	<p>A03: Record your ideas through investigation informed by contextual and other sources, demonstrating analytical and cultural understanding.</p> <ol style="list-style-type: none"> 1) Collect images to inspire your project. 2) Have you got drawings and observations, using a range of materials. 3) Take your own photos and create artworks using these. 4) Make annotations to explain your thought process..
14	<p>A04: Present a personal, informed and meaningful response demonstrating analytical and critical understanding, realising intentions.</p> <ol style="list-style-type: none"> 1) Producing a final piece that represents the artists and experiments explored throughout.

A01 EXPLORE
 ANNOTATE
 BEGIN TO LINK A
THEME IMAGES
 TO YOUR CHOSEN ARTISTS WORK
 WRITTEN ANALYSIS
 LINK ARTISTS WORK TO
 IDEAS AND ARTWORK
ARTISTS RESEARCH

A02 EXPERIMENT
 WITH A
 DRAWING
RANGE
 LINKING TECHNIQUES
TO ARTISTS
 AND THEMES
OF MEDIA
 TEXTILES
 WATERCOLOUR
 CLAY
 MIXED MEDIA
 PHOTOGRAPHS
 OIL PASTEL
PEN AND INK

A03 IDEAS
 IDEAS LINKING TO
 ARTISTS WORK
OBSERVATIONAL
DRAWINGS
 ALL ARTWORK
 LINKING TOGETHER
 PLANS, DESIGNS
PLANS
 IN A RANGE OF
 EXPLANATIONS
 DIFFERENT MEDIA
ANNOTATION

A04 FINAL
 MEANINGFUL
PIECE OF WORK
 INFORMED
 SHOW UNDERSTANDING
RESPONSE LINKS
 LINK BETWEEN
 VISUALS AND ARTISTS
 PRESENTATION
RELEVANT



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