

Knowledge Organiser Year 8 Term 4



Name:	Form group:	Masters of Recall Big Quiz:	

Spellings					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
umbrage- resentment,	juncture- a particular	polysyndeton- a list of	asyndeton- a list of words,	conceit- an elaborate and	initiation- the action
offence.	point in events or time; a	words, phrases, or clauses	phrases, or clauses that are	fanciful metaphor or	of admitting someone
	moment.	that are connected by the	connected without	comparison between two	into a secret or
apparition- a ghost or		repeated use of the same	conjunctions.	things which do not	obscure society or
ghostlike image of a	emphatic- strong and	conjunction.		naturally belong	group. Or the action
person.	determined in speech or		colloquialism- a word or	together.	of beginning
	action.	successful- accomplishing a	phrase which is not formal.		something.
erroneous- wrong or		desired aim or result.		silhouette- the dark	
incorrect.	anagram- a word, phrase,		dissatisfied- not content or	shape and outline of	allegiance- loyalty or
	or name formed by	enmity- ill will, hatred,	happy with something.	someone or something	commitment to a
enjambment- the	rearranging the letters of	hostility.		visible in restricted light	superior or to a group
running-over of a	another.		deferential- showing respect	against a brighter	or cause.
sentence or phrase from		epiphany- a moment of	for another's authority.	background.	
one poetic line to the	caesura- a stop or pause	sudden realisation.			circumspect-
next.	in a metrical line, often		deterrent- a thing that	acquiesce- to agree	cautious.
	marked by punctuation.	miscellaneous- consisting	discourages or intended to	without protesting.	
gouge- the make a		or a mixture of various	discourage someone from		repudiate- to reject,
(groove, hole, or	brusque - short, abrupt,	things that are not	doing something.	plethora- an abundance,	refuse to accept.
indentation) with or as	dismissive.	necessarily connected with		excess, a lot.	
with a sharp tool or		each other.			aberration-
blade.				insatiable- incapable of	something that differs
				being satisfied.	from the 'norm'.



Look

Look at the information carefully.

Read it three times.

It may help to say it as you read it.



Cover

Cover it with your hand or a piece of paper.



Write

Write it out, from memory.



Check

Check what you have written matches the information exactly. Have you got it correct? If so, tick your work to show it is correct.



Correct

If it doesn't match exactly, use your purple pen to correct it.

Repeat.

When you get it 100% correct, move on to the **next** piece of information.

English	Poetic Structure and Form	Year 8 Term 4
Week 1: vocabulary	Week 2: vocabulary (concepts)	Week 3: academic writing
The poet (insert an academic verb from below): • indicates • creates • depicts • foreshadows	epiphany: a moment of sudden realisation. conceit: an elaborate and fanciful metaphor or comparison between two things which do not naturally belong together.	Thesis statement, authorial intent and influence, language exploration, links, and development, (commenting on) character journey The character undergoes a profound change when
portrayspersonifies	supernatural : something which goes beyond what is 'natural' and defies explanation.	This is a critical moment for the character
Famous examples of long form poetry: The Prelude by Wordsworth	apparition: a ghost or ghostlike image of a person.	is a key juncture in the character's journey
The Odyssey by HomerInferno by Dante	colloquialism: a word or phrase which is not formal.	The character experiences a moment of realisation when
In Memoriam by Tennyson	descent : the act of moving downwards, dropping, or falling.	forces the character to
Week 4: poetic form and structure	Week 5: poetic listing	Week 6: authorial intent and influence
rhythm: the beat and pace of a poem using stressed and unstressed syllables.	polysyndeton: a list of words, phrases or clauses that are connected by the repeated use of the same conjunction.	Authors can be affected by the society in which they live, the injustices they witness and the problems they see.
stanza: a group of lines in a poem which make a verse.		
quatrain: a group of four lines in a poem.	asyndeton: a list of words, phrases or clauses that are connected without conjunctions.	Examples of other texts where writers address social injustice are 'Blood Brothers' by Willy Russell and 'A Christmas Carol' by Charles Dickens.
couplet : a pair of consecutive lines of poetry that create a complete thought or idea.	verse novel: a novel-length story told through the medium of poetry instead of prose.	The writer reflects their own experiences by
emphatic positioning: when a writer puts language devices in specific places for effect (e.g., at the start or in groups).	narrative poetry: a long poem which tells a story, including plot, character, and setting.	The writer echoes real events and attitudes when
	epic poetry: a long narrative poem recounting heroic deed(s).	The writer challenges their reader to
		The writer is motivated by

Maths	Developing Number	Year 8 Term 4
Week 1: Core knowledge	Week 2: Sequences	Week 3: FDP Equivalences
place value: the value of each digit in a number.	term: each number or object in a sequence.	Tenth = $\frac{1}{10}$ = 0.1 = 10%
difference: is the result of a subtraction. ascending: ordered smallest to largest. descending: ordered largest to smallest. percent: is a value out of 100. We must always include the percent symbol, %. Profit: a financial gain Loss: losing money, a financial loss.	linear sequence: a number pattern that increases or decreases by a common difference each time. common difference: the amount a linear sequence increases or decreases by. e.g. 1, 5, 9, 13 has a common difference of +4. geometric sequence: a number pattern made by multiplying or dividing by the same value each time. They are non-linear. 2, 4, 8, 16, 32	Hundredth = $\frac{1}{100}$ = 0.01 = 1% Half = $\frac{1}{2}$ = 0.5 = 50% Third = $\frac{1}{3}$ = 0.3 = 33.3% Quarter = $\frac{1}{4}$ = 0.25 = 25% Fifth = $\frac{1}{5}$ = 0.2 = 20%
Week 4: Percentages	Week 5: Indices	Week 6: Powers of 10
multiplier: a decimal used to calculate a percentage of an amount. percentage to a decimal: to change a percentage to a decimal we divide by 100.	base: the number or variable that is repeatedly multiplied when using an index. index (or power): represents how many times to repeatedly multiply the base.	$10^{3} = 10 \times 10 \times 10 = 1000$ $\div 10$ $10^{2} = 10 \times 10 = 100$ $\div 10$
Examples $5\% = \frac{5}{100} = 5 \div 100 = 0.05$ $17\% = \frac{17}{100} = 17 \div 100 = 0.17$ $104\% = \frac{104}{100} = 104 \div 100 = 1.04$	BASE \longrightarrow 3 5 \longleftarrow INDEX $= 3 \times 3 \times 3 \times 3 \times 3$ $ \underbrace{\text{Examples}}_{a^m \times a^n = a^{m+n}} $ $ \underbrace{a^m \times a^n = a^{m+n}}_{a^n} = a^m \div a^n = a^{m-n} $	$ \begin{array}{c} $
Percentage change formula = $\frac{difference}{original\ value} \times 100$	$(a^{m})^{n} = a^{m \times n}$ $\frac{3^{8}}{3^{2}} = 3^{8} \div 3^{2} = 3^{6}$ $(3^{8})^{2} = 3^{16}$	1 1

Science Enzymes, The Carbon Cycle, Energy Year 8 Term 4 Week 2: Enzymes in Plants Week 3: The Atmosphere Week 1: Enzymes in Animals a biological catalyst that increases the a chemical process in which plants the gases surrounding the planet, held atmosphere enzyme make glucose (food) - takes place in place by Earth's gravity rate of chemical reactions photosynthesis in the chloroplast of the leaf the part of the enzyme which a specific **composition** what something is made up of active site substrate can fit into a type of carbohydrate produced starch by plants a chemical process by which living a substance on which enzymes act substrate organisms release energy from respiration a type of carbohydrate produced cellulose glucose by plants the active site of an enzyme changes shape because of temperature or pH - it denature a chemical process involving the a type of carbohydrate produced sucrose no longer fits the substrate burning of a fuel in the presence of combustion by plants oxygen to release energy a molecule that can bond to other the breakdown of large molecules monomer monomers to form a polymer (polymers) into smaller molecules digestion (monomers) so that they can be a large molecule that consists of many Word equations to memorise absorbed into the blood stream smaller repeating units called polymer Combustion monomers The role of enzymes in digestion fuel + oxygen → carbon dioxide + water (+energy) small digests nutrients and absorbs them into intestine the bloodstream The table shows three polymers found in food, large where water and minerals are absorbed and which enzymes in the digestive system digest intestine into the blood **Aerobic Respiration** them. a type of carbohydrase enzyme that amylase breaks down starch into simple sugars oxygen + glucose → carbon dioxide + water Polymer Enzyme Monomer **Function** (+energy) Substrate used in respiration carbohydrate Carbohydrase glucose to release energy Active site **Photosynthesis** Growth and repair amino acid protein protease light Secondary source carbon dioxide + water oxygen + glycerol & of energy, chlorophyll lipid lipase glucose fatty acids insulation

Year 8 **Science Enzymes, The Carbon Cycle, Energy** Term 4 Week 4: The Carbon Cycle & Climate Change Week 5: Energy Stores Week 6: Energy Transfers the capacity for doing work - the unit the four different ways in which the weather conditions in an area, or climate of measurement for energy is joules energty can be transferred from one over a period of time energy store to another - these are: enhanced a process where the temperature of energy by heating a way in which energy is kept in an greenhouse a planet increases due to the transfer by waves (radiation) object or a group of objects, a store is effect trapping of heat in the atmosphere energy store by electric current not a physical place the action of clearing a large area of by a force moving an object deforestation trees the scientific way of saying that The Law of Conservation of Energy doing work non-renewable fuels that form, over energy has been tranferred Energy cannot be created nor destroyed, only millions of years, from the remains of transferred from one store to another. fossil fuel a process where thermal energy is living organisms - coal, gas and oil are directly transferred through a conduction the three fossil fuels **Energy Store Source** material Examples the process in which carbon a process where thermal energy is hot objects hot coffee Thermal continually travels from the carbon cycle transferred through the emission of atmosphere to the Earth and then radiation moving objects moving bus Kinetic waves/particles through space or a back into the atmosphere substance thunder charged materials Electrostatic clouds a process where thermal energy is CO, in the atmosphere transferred through the bulk objects that are high aeroplane, Gravitational convection movement of fluids, e.g. liquids or kite Potential gases photosynthesis respiration stored in chemical respiration decomposition food, batteries Chemical a material that is used to prevent the bonds insulator transfer of thermal energy stretch or combustion Animals spring, Elastic to keep the same compressed conserve Glucose balloons **Potential** materials Death + Waste dissipate lost to the surroundings fridge magnetic fields magnets, Magnetic how effective something is efficacy around magnets Fossil Fuels compasses stored in atoms Nuclear uranium

French		Les fêtes 2	(Celebratio	ns)	Year 8	Term 4
Week 1: Les vêtements - clothes		Week 2: Adjectiv	ves - colours		Week 3: Adjectives – li	kes and dislikes
un jean un tee-shirt un sweat à capuche. un short un maillot de bain un sac à main un costume une jupe une robe une casquette des baskets des bottes des chaussures	jeans a t-shirt	Remember: colou noun they are des They must 'agree' Je porte un tee-sh I am wearing Je porte une jupe I am wearing	rs are adjectives, a scribing. with the noun the hirt blanc (masculing a white t-shirt. blanche (feminine a white skirt.	e singular) singular)	J'ai un style classique décontracté skateur sportif car c'est branché à la mode démodé laid horrible affreux	I have a style classic relaxed skater sporty because it is trendy fashionable old-fashioned ugly horrible awful
Wook 4: Portor to	a woar	Wook E: Euturo	nlans		nul	rubbish
Week 4: Porter – to Je porte	I wear	Week 5: Future Time phrases: ce soir demain	this e	vening	Week 6: Modal verbs Pour aller à la fête festival / party	In order to go to the
Tu portes Il/elle porte	You (singular/informal) wear He/She wear	•	le weekend prochain next weekend la semaine prochaine next week		il faut (you must) on doit (you must)	porter (wear) donner (give) acheter (buy) manger (eat)
On porte Nous portons	We wear We wear	je vais I am going	aller (to go) célébrer (to celebrate)	chez ma tante Noël	Pour aller à la fête, il faut acheter un Cadeau. In order to go to the party, you must buy a present. Pour aller à la fête, on doit porter un jean bleu et un teeshirt blanc. In order to go to the festival, you must wear blue jeans and a white t-shirt.	
Vous portez Ils portent	You (plural/formal) wear They (masculine/mixed) wear	il/elle va he/she is going	visiter (to visit) manger (to eat)	Londres des huîtres		
Elles portent	They (feminine) wear	on va/nous allons we are going	boire (to drink) donner (to give)	du café un cadeau		

Geography	Coasts	Year 8 Term 4	
Week 1: Coastal Erosion	Week 2: Longshore Drift and Transportation	Week 3: Landforms of Erosion	
erosion: overall process of wearing down and removing rock or soil. abrasion: rocks and pebbles carried by waves wear down coastal surfaces. attrition: rocks and pebbles in the water collide, breaking into smaller particles. hydraulic action: force of waves breaking against cliffs, causing erosion through pressure and compression.	longshore drift: the movement of sediments along a coast, involves various transportation processes. solution: dissolved minerals carried within the water. traction: larger rocks and pebbles rolled along the seabed by waves. saltation: smaller particles, like sand, bounced along the seabed by waves. suspension: fine particles, like silt and clay, suspended and carried within the water.	Week 3: Landforms of Erosion headlands and bays: sea erodes soft rock faster than hard rock. Creates a curvy coastline with protruding headlands and sheltered bays. caves: formed by wave erosion into cliffs. arches: continuous erosion may create openings through headlands. stacks: isolated pillars result from collapsed arches. stumps: remnants of stacks gradually erode over time	
Week 4: Landforms of Deposition	Week 5: Hard Engineering	Week 6: Soft Engineering	
 deposition: the dropping of sand or rocks spits: long, thin land created when waves deposit sand at the coastline. Energy levels decrease, and the sand forms a stretch of land. bars: underwater hills made by waves depositing sand in the sea, affecting energy levels and sometimes reaching the surface. 	hard engineering: tough structures built to control and protect the coastline from erosion. sea wall: a strong barrier against waves and storms, reducing their impact on the land. groynes: wooden or concrete structures extending into the sea to trap sand and build up beaches. gabions: cages filled with rocks placed along the coast, absorbing wave energy and preventing erosion.	soft engineering: using natural processes and materials to manage and protect the coastline. beach nourishment: adding sand or pebbles to beaches to build them up, absorbing wave energy and preventing erosion. beach reprofiling: adjusting the shape of the beach to absorb and spread wave energy more effectively. sand dunes: natural mounds of sand formed by wind, providing a natural barrier against coastal erosion.	

History	Russian Revolution	Year 8 Term 4	
Week 1: Key People/groups	Week 2: 1905 Revolution	Week 3: 1917 Revolution	
Tsar Nicholas II: the Tsar (Emperor) of Russia from 1894- 1917.	Communism: a left-wing political ideology.	abdicate: to give up the throne.	
Vladimir Lenin: the leader of the Bolshevik Party. He rules Russia from 1917 until 1924.	mutiny : to go against orders or rise up against your superior officers in the military.	Petrogad : the name for St Petersburg during the First World War.	
Karl Marx: German philosopher who wrote the Communist Manifesto. Bolsheviks: a far-left revolutionary Marxist faction who were led by Lenin and come to power in October 1917. Provincial Government: the Government who ruled Russia after the February 1917 revolution. It was made	Bloody Sunday: the events which took place on the 22nd of January 1905 which led many people being killed by the Tsar's forces. protest: to resist (stand up against) something that has happened.	manifesto: a public declaration of aims or policies. Vladimir Lenin was a Communist who was the leader of the Bolshevik Party. In April 1917 he returned to Petrograd and promised the Russian people: Peace Land Bread	
up of Russian nobility.			
Week 4: Russian Civil War	Week 5: Consequences of the Revolution	Week 6: Chronology	
civil war: a conflict which takes place between two or more sides inside of one country.	Cheka: Russian secret police.	1894 Tsar Nicholas became Tsar (Emperor of Russia).	
Greens : armed peasant groups who fought in the Civil War.	distribute: to share.	In 1905, there was a revolution against Tsar, Nicholas II and his family known as 'Bloody Sunday'	
Reds : the Bolsheviks who fought in the Civil War.	Nationalisation: when the government takes control of public services.	Russia withdrew from WW1 in 1917	
Whites: the Tsarist forces who fought in the Civil War.	social: to do with people and the way they live their lives.	22nd of February 1917, 20,000 workers protested on the streets of Petrograd. Tsar abdicated. (Feb Revolution)	
	economic: to do with money.	October 1917 The Bolsheviks seized control of the country. (October Revolution)	
	political: to do with laws, leaders and power.	1917-1921 Russian Civil War 1921 Bolsheviks had complete control of Russia	

Religious Studies	Social Justice	Year 8 Term 4
Week 1: religion and gender	Week 2: religious expression	Week 3: social justice
Previously, women were not allowed to be ordained into leadership roles within the Church. However, in 1994 the first 32 women were ordained as Church of England priests. In 2015, Libby Lane became the Church of England's first female bishop. Ordained: make (someone) a priest or minister; confer holy orders on. Priest: a religious leader who can perform certain rites and sacraments.	religious expression: refers to the different ways that people choose to express their religion to others. This can be done through wearing certain clothes or displaying symbols. Religious expression can include: • wearing religious jewellery • wearing religious clothing • wearing religious symbols Human Rights Act: sets out the fundamental rights and freedoms that everyone in the UK is entitled to.	 Social justice: is when each person can exercise their rights within a society. Jesus and the Leper The Leper asked for Jesus to rid him of his leprosy Jesus touches the man and immediately cures him of leprosy Jesus sends the man to a priest to pray People here of this miracle and begin to look for Jesus slavery: is the practice of forced labour and restricted liberty.
		abolish: to officially end or stop (something, such as a law).
Week 4: prejudice	Week 5: animal testing	Week 6: environment
Prejudice: preconceived opinion that is not based on reason or actual experience. Persecution: punishment or harassment usually of a severe nature based on race, religion, or political opinion in one's country of origin.	medical testing (vivisection): the practice of performing operations on animals for the purpose of experimentation or scientific research. Cosmetic testing: cosmetic testing on animals is a type of animal testing to test the safety of products used by	Stewardship: the duty of human beings to care for the world and maintain balance in nature. Global warming: the current rise in the average temperature of Earth's air and oceans.
Examples of prejudice:	humans.	Obligation: an act of making oneself responsible for doing something.
 religious persecution racial hatred 	Dominion: to have rule or control over something, in this case humans having control of the world.	doing something.
Dictatorship: form of government in which one person or a small group possesses absolute power without effective constitutional limitations. Oppression: is the social act of placing severe restrictions on an individual group, or institution.	Religious teachings on animals: • "The righteous care for the needs of their animals." • "Rule over the fish in the sea and birds in the sky and over every living creature that moves on the ground."	

PSHE	Crime and Punishment	Year 8 Term 4
Week 1: alcohol and the law	Week 2: police, CPS and courts	Week 3: young offenders
alcohol: a chemical substance found in drinks such as beer, wine, and liquor.	Police: responsible for the prevention and detection of crime and the maintenance of public order.	Young offenders: a person aged between 10 and 17 who has committed a criminal offence.
unit of alcohol: alcohol units are a simple way of understanding the quantity of pure alcohol in a drink. One unit is 10ml (millilitres) or 8g (grams) of pure alcohol.	CPS: The Crown Prosecution Service (CPS) prosecutes criminal cases that have been investigated by the police and other investigative organisations in England and Wales.	Age of criminal responsibility: the age of criminal responsibility in England and Wales is 10 years old.
 British law on alcohol: It is illegal for under-18s to buy alcohol anywhere in the UK. It is illegal for an adult to buy or try to buy alcohol for anyone under 18. Local councils can put measures in place to stop drinking in certain areas where they believe alcohol could contribute to anti-social behaviour. 	Courts: an authority having power in civil, criminal or military matters.	offence: an offence is a crime that breaks a particular law and requires a particular punishment.
Week 4: how do we punish offenders	Week 5: gangs	Week 6: joint enterprise
 prison: a building in which people are legally held as a punishment for a crime they have committed or while awaiting trial. community service: gives people who have offended opportunities to make amends for their crime. 	gangs: a gang is an ongoing, organized association of three or more persons. bullying: seek to harm, intimidate, or coerce (someone perceived as vulnerable).	Joint enterprise: joint enterprise is where, if one or more people commit an offence and another/ others intended to encourage or assist them to commit the offence, the secondary offender(s) can be prosecuted as if they were a main offender.
Examples:		
authority decides has to be paid as punishment for a crime or other offense.		

Computing	Computer bots	Year 8 Term 4	
Week 1: artificial intelligence	Week 2: bots	Week 3: different types of bots	
artificial intelligence: is the simulation of human intelligence processes by machines, such as computer systems.	bot: short for robot. It is a software application programmed to run specific tasks as part of another computer program or to simulate human activity. Bots are designed to automate tasks on their own without human intervention.	chatbots: simulate conversations with a human being. One of the first and most famous chatbots prior to the web was Eliza, an NLP program developed in 1966 as a Massachusetts Institute of Technology research project. social bots: these bots are often considered opinion bots, influence discussions with users on social media platforms. shopbots: many of these programs shop around the web and locate the best price for a product a user is interested in buying.	
Week 4: coding	Week 5: iteration	Week 6: operators	
sequence: the order which the computer will run code, one line at a time. (One of the building blocks of coding.) selection: a decision made by a computer choosing what code should be run when certain conditions are met. One of the building blocks of coding.	iteration: when a section of code is repeated several times. Also known as forever loop. (One of the building blocks of coding.) for loop: is count controlled. while loop: is condition controlled.	comparison operators: symbols used to represent actions, such as (>) greater than (<) less than (=) equal to. boolean expressions: sometimes you will want to use the additional expressions, AND, OR, NOT.	

Music	Music Theory	Year 8 Term 4
Week 1: elements of music	Week 2: note values	Week 3: Medieval, Renaissance and Baroque periods of music
dynamics: the volume of a piece of music. pp, p, mp, mf,	semibreve: a note lasting 4 beats	Medieval: c. 1150-c. 1400, instruments featured
f,ff, crescendo.		were the flute, recorder and lute. The main type of music was the Gregorian chant.
tempo: the speed of a piece of music. lento, adagio,	minim: a note lasting 2 beats	
andante, moderato, allegro, presto.	crotchet: a note lasting 1 beat	Renaissance: (c. 1400-c. 1600), heavily featured
structure: the sections within a piece of music	Surgery a mate leating half a heat	choral music with a big focus on harmony. Songs included madrigals, masses and motets.
pitch: the high and low notes	quaver: a note lasting half a beat	Composers such as Byrd, Tallis & Purcell. The
texture: the musical layers	semiquaver: a note lasting a quarter of a beat	harpsichord was a key instrument.
rhythm: the arrangement of notes and rests		Baroque: (c. 1600-c. 1750), keys were introduced, as well as new instruments such as the oboe,
harmony: complimentary notes played simultaneously		bassoon and cello. Orchestras were formed.
Week 4: Classical, Romantic & 20 th and 21 st century.	Week 5: musical elements	Week 6: notes on the stave
Classical: (c. 1750-c. 1830) new structures of music; sonata and symphony. The piano replaced the	treble clef: represents notes played above a middle C. Played with right hand.	Treble Clef: E G B D F
harpsichord. Composers include Mozart, Beethoven and Haydn.	bass clef: represents notes played below a middle C. Played with left hand.	E G B D F
Romantic: (c.1830-1920) bigger orchestras, composers	bar: how we split music up.	F A C E
pushed musicians and instruments to their extremes, very difficult virtuoso pieces. Composers included Chopin & Liszt.	sharp: raises the pitch of a note by a semitone. Played as the black note to the right.	Bass Clef: Notes On Lines G B D F A
20th and 21st century: (c. 1920-present), composers broke the rules and experimented with styles and techniques, such as Stravinsky & Shostakovich.	flat: lowers the pitch of a note by a semitone. Played as the black note to the left.	Notes In Spaces
teeningues, such as stravilisky & shostakovich.	natural: cancels out a flat or sharp. Played as the normal white note.	A C E G

Design and Technology		Year 8	Term 4	
Week 1: hand tools	Week 2: CAD and CAM	Week 2: metals		
junior hacksaw: used to make small and fine cuts in a range of materials, including timbers and plastics, but most commonly metals. centre punch: used to mark the centre point of a hole when drilling hard materials, such as metals. hand files: used to remove fairly small amounts of material and smooth the edges. They can be used with metals, plastics and timbers.	 3 advantages of Computer Aided Designing (CAD) are: it is easier to make changes to a design; designs can be viewed from different angles; it can be more precise than drawing by hand. 3 advantages of Computer Aided Manufacturing (CAM) are: it is cheaper than making by hand; lots of identical products can be made quickly; it is much quicker than making by hand. 	ore: a naturally occurring solid material from which a metal can be extracted. malleable: the property a material displays that means it can be bent and shaped into different forms.		
Week 4: metals	Week 5: user-centred design	Week 6: creating prototype	es	
ferrous metal: contains iron. They often rust when exposed to oxygen and moisture. Examples include mild steel and cast iron. non-ferrous metal: do not contain iron. Examples include aluminium and copper. alloys: metals that are a mixture of two or more metals, or a mixture of a metal and another element. Examples include brass and steel.	user-centered design: a creative approach that focuses on making products by considering the needs, preferences, and experiences of the people who will use them. iterative design: the process of making repeated improvements to a product by testing, receiving feedback, and then refining the design based on that feedback to create a better product.	Designers create prototyp test ideas; see details; fix problems with t show others their i test materials.	he design;	

Art	Art and Design Key Concepts	Year 8	Term 4
Week 1: complementary colours	Week 2: complementary colours	Week 3: understandin	g complementary colours
complementary colours: pairs of colours that, when combined, create a sense of contrast, and reinforce each other. These pairs are located opposite each other on the colour wheel. When mixed, they produce a neutral colour, such as grey or white, depending on the intensity of the colours involved	The primary complementary colour pairs are: red and green: associated with vibrancy and high contrast. blue and orange: this combination is commonly used in art and design for its strong visual impact. yellow and purple (or violet): this pair provides a striking contrast, often seen in nature and various art forms	Complementary colours are frequently used in art, design, and colour theory to create visually appealing compositions, enhance certain elements, or draw attention. Understanding complementary colours is valuable for artists, designers, and anyone working with colour, as it can be used to create balance, harmony, and visual interest in compositions.	
Week 4: mark making techniques	Week 5: mark making techniques	Week 6: Architecture	career
mark-making techniques: various methods and tools artists use to create marks, lines, textures, and patterns on a surface. These techniques are fundamental to drawing and painting and play a crucial role in conveying artistic expression and visual communication. Different mark-making techniques can evoke various emotions, suggest movement, and contribute to the overall aesthetic of an artwork.	 hatching: creating parallel lines to build up value or shading. cross-hatching: overlapping sets of parallel lines to achieve darker tones or textures. stippling: applying small, distinct dots to create tones, shades, or textures. The closer the dots, the darker the area appears. contour lines: drawing lines that follow the outlines of a form or object, emphasizing its shape. scumbling: rubbing or smudging dry or semi-dry media, like charcoal or pastel, to create a hazy or textured effect 	constructing buildings structures. Architects work to des	sign structures that are not fe but also aesthetically

Knowledge Recall Questions

Step 1 - learn the knowledge using your recall book and look, cover, write, check, correct.

Step 2 – from memory, complete the weekly recall questions. These are mandatory. Use family and friends to test you \odot .

Step 3 – any question you cannot confidently answer, go back and learn the knowledge again.

Science Enzymes, The	Year 8 Term 4	
Week 1: Enzymes in Animals	Week 2: Enzymes in Plants	Week 3: The Atmosphere
1. Define enzyme.	1. What is photosynthesis?	What is respiration? Define combustion
2. Define polymer	Name the enzyme that breaks down starch into glucose.	3. What does 'composition' mean?
3. What does 'denature' mean?	3. Which enzyme breaks down lipids?4. What is the monomer of a protein molecule?	4. Recall the word equation for: Respiration
4. Draw and label (<i>enzyme</i> , <i>active site</i> , <i>substrate</i>) a diagram of an enzyme and its substrate.	·	Photosynthesis
	5. What is the monomer of carbohydrates?	Combustion
Week 4: The Carbon Cycle & Climate Change	Week 5: Energy Stores	Week 6: Energy Transfers
 Define fossil fuel, give examples. Look at the diagram, list two ways that carbon is released into the atmosphere. 	 Which type of energy is stored in a moving object? Which type of energy is stored in an object that is high up? 	 Which type of material is used to prevent the transfer of thermal energy? Which word means 'thermal energy is transferred through the bulk movement of fluids'?
3. Look at the diagram, list one way that carbon is removed from the atmosphere.	3. What is energy?	3. What is meant by the term 'doing work?'
4. Define deforestation	4. Recall the law of conservation of energy.	4. Define dissipates.

French		Les fêtes 2 (Celebrations)	Year 8 Ter	m 4
Week 1: Les vêten	nents - clothes	Week 2: Adjectives - colours	Week 3: Adjectives – likes and dislikes	
Match up the French and English.		Remember: colours are, and they	J'ai un style sportif	
un jean	a hoodie	follow the noun they are describing.		
un tee-shirt	a swimming costume	They must '' with the they are describing:	J'ai un style skateur	
un sweat à capuche	a suit	Le mante con top about blooms /		
un short	shorts	Je porte un tee-shirt blanc (singular)	J'ai un style démodé	
un maillot de bain	boots	I am wearing a <u>white</u> t-shirt.		
un sac à main	a dress	Je porte une jupe blanche (J'ai un style laid	
un costume	shoes	singular)		
une jupe	a t-shirt	I am wearing a white skirt.	J'ai un style affreux	
une robe	jeans		J al all style all eax	
une casquette	a handbag	Je porte des baskets blancs (plural)		
des baskets	a skirt	I am wearing white trainers.	J'ai un style décontracté	
des bottes	а сар	Le mente des abeccessos blanches		
des chaussures	trainers	Je porte des chaussures blanches (plural) I am wearing white shoes.	J'ai un style à la mode	

French		Les fêtes 2 (Celebrations)		Year 8	Term 4	
Week 4: Porter – to	4 : Porter – to wear Week 5 : Future plans			Week 6: Modal Verbs		
Je porte Tu Il/elle porte On porte Nous	wear You (singular/informal) wear He/She wearwear We wear	ce soir demain weekend le weekend proc		English. next week next next tomorrow	Pour aller à la fête In order to go to the il faut (you must) on doit (you must)	
Vous portez	You (plural/formal) wear They	l'année prochai		this evening	Pour aller à la fête il	faut porter des baskets.
Elles	() wear They (feminine) wear	I am going	aller () célébrer ()	chez ma tante Noël	Pour aller à la fête or	n doit donner un cadeau.
l wear a skirt.		he/she is	visiter ()	Londres		
He wears a jumper.		gomg	manger ()	des huîtres	Pour aller à la fête il	faut manger du gâteau.
They (masc) wear t	trainers.	/	boire ()	du café	Pour aller à la fête on doit acheter une costume.	
I wear jeans and a	hoodie.	we are going	donner ()	un cadeau		

Music	Music Theory	Year 8 Term 4
Week 1: elements of music	Week 2: note values	Week 3: periods of music
Order the dynamic markings from quietest to loudest.	Draw a semibreve, how many beats does it last for?	Which period of music features the flute, recorder and lute?
2. What is structure?	2. Draw a minim, how many beats does it last for?	2. When was the Renaissance period of music?
3. What is pitch?	3. Draw a crotchet, how many beats does it last for?	3. What was introduced in the Baroque period of music?
4. What is tempo?	4. Draw a quaver, how many beats does it last for?	
5. What is texture?	5. Draw a semiquaver, how many beats does it last for?	
6. What is rhythm?		
7. What is harmony?		

N	Music	Music Theory	Year 8 Term 4
W	/eek 4: periods of music continued	Week 5: musical elements	Week 6: notes on the stave
1.	Which period replaced the harpsichord with the piano?	1. What clef tells you to play with your right hand?	1. What note sits on the third line of the stave?
2.	Which composers were examples in the Romantic period of music?	2. What clef tells you to play with your left hand?	2. What note sits on the fifth line of the stave?
		3. What does a bar do?	
			3. What note sits on the first line of the stave?
3.	Which period of music broke the rules?	4. How do you play a sharp?	
		5. How do you play a flat?	4. What note sits in the first space on the stave?
		6. How do you play a natural?	5. What note sits in the third space on the stave?

Design and Technology		Year 8 Term 4
Week: Hand Tools	Week 2: sketching initial ideas	Week 6: metals
Which material do we commonly cut with a junior hacksaw?	Give 3 advantages of Computer Aided Designing (CAD):	1. What is an ore?
2. What is the name of the tool that we use to create the centre point of a hole when drilling metals?3. What is a hand file used for?	Give 3 advantages of Computer Aided Manufacturing (CAM):	2. What is the meaning of the term 'malleable'?
Week 4: Metals	Week 5: creating prototypes	Week 6: creating prototypes
 What is a ferrous metal? What is a non-ferrous metal? 	1. What is the definition of 'user-centred design'?	Why do designers create prototypes? Give 5 distinct reasons:
3. What is an alloy?	2. What is the definition of 'iterative design'?	

Art	Art and Design Key Concepts	Year 8 Term 4	
Week 1: complementary colours	Week 2: complementary colours	Week 3: understanding complementary colours	
Describe complementary colours	Describe the complementary colour combinations	Describe why complementary colours are important	
Week 4: mark making techniques	Week 5: mark making techniques	Week 6: Architecture career	
Describe mark making techniques	Describe the top 5 mark making techniques	Describe an architecture	