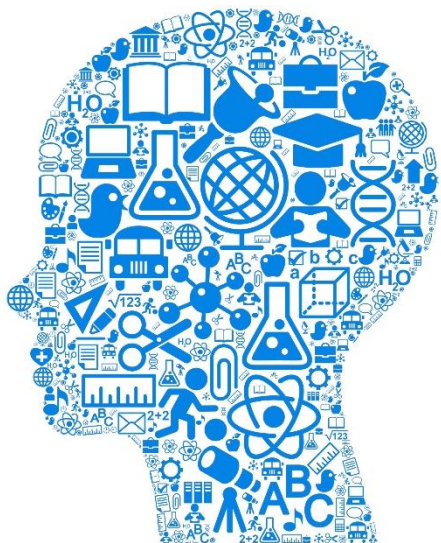


2021-2022

Year 9 | Cycle 1

100% Book



Name:

Tutor group:

Your 100% book and knowledge organisers

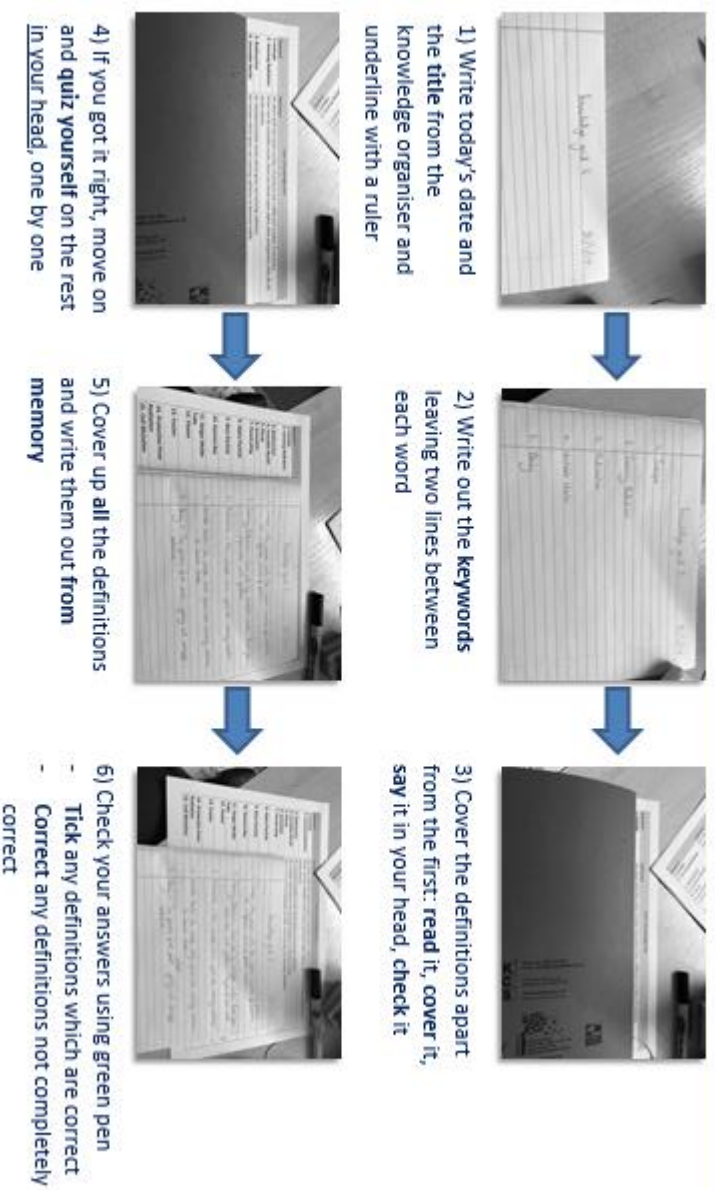
Knowledge organisers contain **critical** knowledge you must know. This will help you recap, revisit and revise what you have learnt in lessons in order to remember this knowledge for the long-term.

Students remember 50% more when they test themselves after learning.

You must have this 100% book for **every** lesson – it is part of your equipment.

You must keep your 100% books (even after you have finished the cycle or the year).

How do I use my 100% book for self-quizzing?



Correcting spelling, punctuation and grammar

Your work will be marked across all subjects to help you improve your literacy. This is the code that will be used.

Correcting your spelling, punctuation and grammar	
Sp + underlined word	The underlined word is spelt incorrectly. Look, cover, write then check. Do this at least three times so you spell it correctly.
A circle around part of a word or a space	Your punctuation is incorrect, or something is missing (including capital letters).
? + wobbly line	You haven't explained your ideas clearly enough.
/	You need to start a new sentence here. Remember: full stop, capital letter.
//	You need to start a new paragraph here. Remember: new paragraphs for time, place, topic, person (TiPToP).
^	A word is missing where the arrow is pointing.



Year 9 – Art and Design – Cycle One

A	Art Terms	
1	Expressionism	Art in which the image of reality is distorted in order to make it expressive of the artist's inner feelings or ideas
2	Cubism	A 20th Century art movement using geometric shapes and multiple viewpoints
3	Analytical cubism	Cubist artworks made up of interweaving planes and lines in muted tones
4	Synthetic cubism	Later cubism using simpler shapes and brighter colours, often including real objects like newspapers
5	Geometric shapes	Shapes made out of points and lines including triangles, squares and circles
6	Abstract	Art that uses basic shapes and colour rather than representing reality
7	Symbolism	The use of symbols to represent ideas or qualities

B	War / Social Terms	
1	Civil war	A war between citizens of the same country
2	Holocaust	World War Two genocide of the European Jews between 1941 and 1945
3	Genocide	Deliberate killing of a large group of people from a particular nation or ethnic group
4	Concentration camps	Set up as prison camps to torture enemies of the Nazi state
5	Working class	People who are employed in manual or industrial work
6	Human condition	Key events and situations that make up the essentials of human existence, such as birth, growth, conflict, and mortality
7	Poverty	The state of being extremely poor

Year 9 – Drama – Cycle One

A	Key Terms	
1	Costume fundamentals	The key areas to consider when designing costume: Time period, character specifics, character personality
2	Set fundamentals	The key areas to consider when designing set: Stage shape, time period, style, themes, locations
3	Lighting fundamentals	The key areas to consider when designing lighting: Time of year/day, location, atmosphere
4	Sound fundamentals	The key areas to consider when designing sound: Location, atmosphere, themes
5	Flats	Large boards used to create a scenery or backdrop to a set
6	Rostra	Metal frame with wooden top, used to create levels in a set
7	Cyclorama	Large white wall or curtain across the back of the stage, used for projection
8	Minimalistic	Simple style with only a few key repeated motifs
9	Futuristic	Bold style set in the future with sharp edges and designs
10	Naturalistic	Style that is true to real life and more believable
11	General wash	Lighting where all of the stage is lit evenly
12	Spotlight	Lighting where one smaller round area is lit
13	Gobo	Small metal frame placed in light to create different lighting shapes on the stage
14	Gel	Plastic placed in front of light to change the light's colour
15	Diegetic	Sounds heard in the world of the character
16	Non diegetic	Sounds not heard in the world of the character

Year 9 – English: Voices for Change – Cycle One

A	Rhetorical Techniques	
1	Allusion	A reference; Obama alludes to the Declaration of Independence in his inaugural speech
2	Inclusive language	Language which includes everyone; words such as “we” are examples of inclusive language
3	Assonance	The repetition of a vowel sound, e.g. “prepared” and “heir”
4	Rhyming couplet	Two similar lines of poetry ending on the same sound
5	Tricolon	A series of three words, phrases, or clauses, e.g. “struggle against illiteracy , poverty and terrorism ”
6	Anecdote	A short true story
7	Persona	Your character or voice; Rashford creates an authentic persona by telling us about his own childhood
8	Hyperbole	Exaggeration
9	Analogy	A comparison; Attenborough describes how Chernobyl and climate change are analogous
10	Tonal shift	A change from one tone to another, e.g. despair to hope
11	Superlative	A very high degree of something, e.g. the bravest , the most costly
12	Focus	What a writer draws attention to; King begins by focusing on Rosa Parks’ arrest

B	Transactional Writing Structures	
1	Four-part plan	Hook, bigger issue, research, call to action
2	Steps to success	TAP the question, brainstorm ideas, four-part plan, methods and vocabulary

C	Key Terms	
1	Rhetoric (n)	Persuasive speaking or writing
2	Civil rights (n)	The rights each person has in a society
3	Advocate (n, v)	To support or promote; Yousafzai is an advocate for education
4	Democracy (n)	A form of government where citizens choose who leads them; Ancient Athens was democratic
5	Empathy (n)	Understanding or feeling sympathy; Rashford encourages empathy for schoolchildren
6	Unity (n)	Togetherness; Gorman encourages US citizens to unite
7	Credibility (n)	Reliability; Rashford describes his experiences to show he is credible
8	Incite (v)	To encourage; Attenborough incites us to act

D	Stock Phrases	
1	Picture this / I’ll never forget...	
2	Yet this story is all too familiar:	
3	Indeed, this seems to be the pattern with...	
4	Following pressure from constituents, _____ - councillor for London and the Southeast – reported...	
5	As a result of backlash from _____, the BBC commissioned a study examining...	
6	To me, the solution is simple...	

Year 9 – French – Cycle One

A	Verbs and Phrases	
1	Travailler	To work
2	Aider	To help
3	Enseigner	To teach
4	Vendre	To sell
5	Devenir	To become
6	Rencontrer	To meet
7	Taper	To type
8	Classer	To file
9	Faire de la recherche	To do research
10	Si on veut	If we want
11	On doit	We must
12	Ne ... plus	No more / longer
13	Ne ... que	Only
14	Ne ... guère	Hardly
15	Ne ... jamais	Never

B	Vocabulary	
1	Je travaille comme	I work as
2	Un avocat	A lawyer
3	Un comptable	An accountant
4	Un médecin	A doctor

5	Un infirmier	A nurse
6	Un coiffeur	A hairdresser
7	Au bureau	In an office
8	A l'usine	In a factory
9	Travailleur	Hard working
10	Paresseux	Lazy
11	Le salon	The living room
12	La chambre	The bedroom
13	Le grenier	The attic
14	La cuisine	The kitchen
15	La salle de bain	The bathroom
16	La salle a manger	The dining room
17	L'armoire	The wardrobe
18	Le lit	The bed
19	La fenêtre	The window
20	Une maison	A house
21	Une gite	A cottage
22	Un HLM	A tower block
23	Une ferme	A farm
24	A la campagne	In the countryside
25	En banlieue	In the suburbs
26	En ville	In town
27	Au village	In a village

Year 9 – Geography – Cycle Three

A	Energy	
1	Energy source	A source from which energy can be extracted
2	Energy security	To be relatively self-sufficient in energy supply
3	Energy poverty	A lack of energy infrastructure and resources
4	Renewable energy	Energy which is infinite, sustainable and is easily replenished
5	Non-renewable energy	Energy which is finite, is not sustainable and takes a long time to replenish
6	Fossil fuels	Energy sources created by the decomposition of plant matter over millions of years
7	Energy efficiency	Using less energy to perform the same task
8	Imports	Goods brought into a country
9	Nuclear energy	The process of harnessing energy through the splitting of the atom
10	Fracking	The extraction of gas and oil trapped in shale rock underground

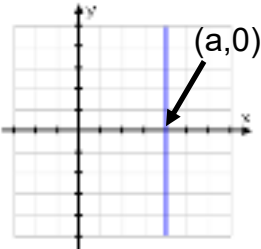
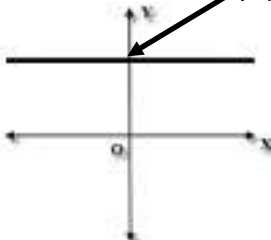
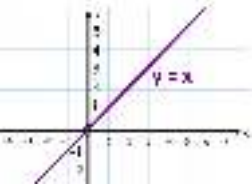

B	Climate Change	
1	Climate	Average weather conditions and temperature over a long period of time
2	Industrialisation	The large-scale use of factories to produce goods
3	Climate change	The process of the Earth's climate changing over time
4	Global warming	The process of average global temperatures rising
5	Greenhouse gas	A gas which contributes to the greenhouse effect
6	Greenhouse effect	The process of the sun's warmth being trapped in the atmosphere
7	Enhanced greenhouse effect	The acceleration warming of the planet due to the increase of greenhouse gases in the atmosphere
8	Mitigation	Trying to reduce carbon emissions to try to slow climate change
9	Adaptation	Preparing for and dealing with the impacts of climate change
10	The Paris Agreement	An international agreement which sets global warming levels to two degrees
11	Green Climate Fund	A global fund created to support developing countries respond to climate change

Year 9 – History – Cycle One

A	Causes of the Great War	
1	Alliance	An agreement between countries that benefits each of them
2	Triple Alliance	An alliance formed between Germany, Austria-Hungary and Italy
3	Triple Entente	An alliance formed between Britain, Russia and France
4	Imperialism	Growing an empire through colonizing other countries
5	Nationalism	An intense form of patriotism where the value and importance of your country is exaggerated
6	Militarism	The belief that a country should have a strong military
7	Naval race	The competition between Britain and Germany to build the strongest navy
8	Archduke Franz Ferdinand	The heir to the throne of Austria-Hungary who was assassinated by the Serbian Black Hand Gang in 1914
9	Assassinate	To murder someone for political reasons
10	Encirclement	When a country is surrounded on all sides
11	Schlieffen Plan	The German war plan to quickly defeat France and then attack Russia
12	Stalemate	A situation where neither side fighting in a war can make progress
13	Trench	A connection of long narrow ditches for soldiers to take shelter from enemy fire
14	No Man's Land	The disputed ground between the front lines or trenches of two opposing armies
15	Artillery	Heavy guns and cannons which fire shells

B	How did Medicine Develop During WW1?	
1	Front line	The military line or part of an army that is closest to the enemy
2	Casualty	A person killed or injured in a war or accident
3	Trench foot	A painful condition of the feet caused by long exposure to cold water or mud
4	Shell shock	Mental health problems caused by prolonged exposure to fighting in a war
5	Stretcher bearers	The people who collected injured men from No Man's Land using stretchers
6	Triage	The process by which medical personnel assess the seriousness of all patient injuries, to decide which order to treat them in
7	Amputate	To cut off a limb by surgical operation
8	Vaccination	An injection that makes someone immune to a disease
9	Blood transfusion	An injection of a volume of blood, previously taken from a healthy person, into a patient
10	Thomas Splint	A new type of splint developed for trenches to stop broken bones grinding together
11	Spanish Flu	A pandemic in 1918 that killed between 20 – 40 million people worldwide

Year 9 – Maths – Cycle One

A Straight Line Graphs			B Coordinates and Equations of Straight Lines		
1	$x = a$	Vertical 	1	Formula for midpoint of (x_1, y_1) and (x_2, y_2)	$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$
2	$y = a$	Horizontal 	2	Equation of a straight line	$y = mx + c$
3	$y = x$	Diagonal 	3	Gradient in the equation of a straight line	m
4	$y = -x$	Diagonal 	4	Y-intercept in the equation of a straight line	c
			5	Formula for gradient of line joining (x_1, y_1) and (x_2, y_2)	$\frac{y_2 - y_1}{x_2 - x_1}$
			6	Parallel lines...	...have the same gradient
			C Standard Form		
			1	Standard form	$a \times 10^n$
			2	a	Between 1 and 10
			3	n	A positive or negative integer
			4	n is positive	Number is larger than 1
			5	n is negative	Number is smaller than 1
			D Sequences		
			1	Arithmetic / linear sequence	The difference between one term and the next is a constant
			2	nth term of an arithmetic sequence	$an + b$
			3	Fibonacci sequence (first 10)	1, 1, 2, 3, 5, 8, 13, 21, 34, 55
			4	Triangular numbers (first 10)	1, 3, 6, 10, 15, 21, 28, 36, 45, 55
			E Angles in Polygons		
			1	Sum of interior angles	$(n - 2) \times 180$
			2	Each interior angle in a regular polygon	$\frac{(n - 2) \times 180}{n}$
			3	Each exterior angle in a regular polygon	$\frac{360}{n}$
			4	Interior + Exterior angle	180
			5	Number of sides in a regular polygon	$\frac{360}{\text{exterior angle}}$

Year 9 – Music – Cycle One

A	Key Terms	
1	Structure	The order of the different sections of music
2	Verse	Part of the song where lyrics and melody change each time they are played
3	Chorus	Part of the song that stays the same and is repeated after every verse in popular music
4	Bridge	Contrasting part of the song
5	Bassline	Low pitched line of music to compliment the melody
6	Primary chord	Chords based on the first, fourth and fifth notes
7	Secondary chord	Chords based on the second, third, sixth and seventh notes
8	Texture	The layers within a piece of music
9	Monophonic	One layer of melody
10	Polyphonic	Multiple layers of different melodies
11	Homophonic	Melody and texture mainly based on chords
12	Perfect cadence	Chords that sound finished one after each other
13	Imperfect cadence	Chords that sound unfinished one after each other
14	Intervals	The difference in pitch between two sounds

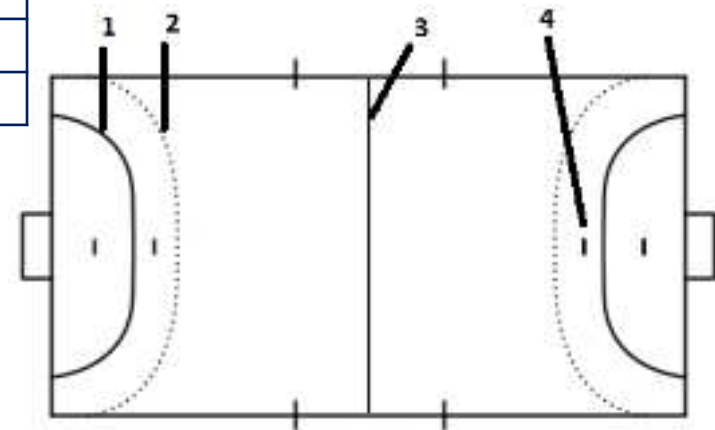
Year 9 – PE – Cycle One

A Athletics – Terminology		
1	Kick	A final increase in speed that comes towards the end of a running event
2	Staggered start	Starting lines are staggered lane by lane to make sure athletes run the same distance, in races from 200m to 800m
3	Flight	Flight is the heat rounds for the field events where the top three qualify
4	Fosbury Flop	A technique in high jump where the jumper goes over the bar head first with their back towards the bar

B Athletics – Relay Technique Terminology		
1	Upsweep	When the incoming athlete passes the baton upward into the receiving hand
2	Down-sweep	When the incoming athlete passes the baton downward into the receiving hand

C Handball – Key Terminology		
1	Free throw line	Nine metre line that the players must leave before taking a free throw
2	Foot	A foul when a player touches the ball with their foot or shin
3	Walking	When a player takes more than three steps without dribbling or holds the ball for more than three seconds without bouncing, shooting or passing
4	Six metre line	No handball player (other than the goalkeeper) is allowed in the goal area
5	Team shape	The formation and structure of your team when in and out of possession of the ball during both the attacking and defensive phases of the game
6	Pivot	This position plays most of the game along the six-metre line, forming a close partnership with the centre back

D Handball Court Lines	
1	Six metre line
2	Nine metre line
3	Half-way line
4	Seven metre line



Year 9 – PE – Cycle One

E Badminton – Key Terminology			F Fitness – Key Terminology			G Football – Key Terminology		
1	Clear	A shot hit deep into the opponent's court	1	Progressive overload	Making training steadily harder to gradually improve fitness	1	Indirect free kick	A free kick in which you can not directly score from
2	Passing shot	A shot which passes the opponent	2	Overtraining	Training too much, which can lead to injury and prevent improvement	2	Counterattack	Breaking forward at pace with the ball, towards the opposition's goal
3	Long service line	In singles, the back boundary line; the serve must not go past this line	3	Continuous training	Training for a minimum of 20 minutes without any rest breaks	3	High press	The team without the ball, moves higher up the pitch within the attacking half to apply pressure on the team with the ball
4	Lob	A shot that is hit in a high arc usually over the opponent's head	4	Fartlek training	Meaning 'speed play'; training at different speeds and/or over different terrains	4	Zonal marking	A defensive strategy where the defenders cover an area of the pitch
5	Alley	Side extension of the court on both sides, used for doubles play	5	Frequency	How often you train	5	Near post	The goalpost nearest the ball's current position
6	Back alley	Area between the back-boundary line and the long service line for doubles	6	Intensity	How hard you train	6	Sweeper	The 'free' player in defence who covers the marking defenders
			7	Time	How long you train for			
			8	Type	What training method you use			

Year 9 – PE – Cycle One

H Basketball – Key Terminology			I Table Tennis – Key Terminology			J Cricket – Key Terminology		
1	Shooting guard	Roles are to assist the point guard in dribbling the ball up the court and shoot effectively from a range of positions	1	Chop	A defensive return of a topspin stroke played with backspin, usually well away from the table	1	Leg Before Wicket (LBW)	A batsman dismissed when the ball hits any part of the batsman's body before the bat, when it would have gone on to hit the stumps
2	Power forward	Usually a tall player on the team whose key roles are to block shots, get rebounds and score from close to the hoop	2	Drive	A stroke played close to the table with your racket arm moving forward and slightly upwards in the direction that the ball is going to travel	2	No ball	An illegal delivery usually because of the bowler overstepping the crease
3	Turnover	Occurs when a team loses possession of the ball to the opposing team	3	Drop shot	A shot which drops very short over the net on your opponent's side of the table	3	Collapse	The loss of several wickets in a short space of time
4	Zone defence	A defensive strategy requiring each player to mark a zone on the court rather than a player on the opposition's team	4	Heavy	Used to describe excessive spin	4	Batting end	The end of the pitch at which the striker stands
5	Screen	A blocking move by an offensive player standing beside or behind a defender, to free a teammate to shoot, pass, or drive in to score	5	Deuce	A term used when the score is 10-10	5	Follow on	The team batting second, continuing for a second innings, having fallen short of the 'follow on target'
6	Eight second violation	The team has eight seconds to bring the ball over the half-way line, otherwise it is a turnover	6	Smash	An aggressive shot hit with speed, often in response to a high bouncing return	6	Tail-ender	A batsman who bats towards the end of the batting order

Year 9 – Religious Studies: Islam – Cycle One

A	Beliefs and Teachings	
1	Islam	‘Submission’ or ‘peace’
2	Tawhid [2]	The belief in the oneness of God
3	Shirk	The sin of worshipping something else other than God
4	Fitrah	The natural instinct all humans have, from birth, to know and worship God
5	Taqwa	Having an awareness of God
6	Muhammad	The final prophet who the Qur’an was revealed to
7	Prophethood / Risalah [2]	Messengers of God, beginning with Adam and ending with Prophet Muhammad
8	Hanif	Anybody who believed in Tawhid before Prophet Muhammad
9	Malaikah	Angels
10	Qur’an	The Muslim holy book
11	Sunnah	The record of all that Muhammad said and did
12	Hadith	The sayings of the Prophet Muhammad
13	Shari’ah [2]	The straight path; Shari’ah Law is the set of moral and religious principles set out by the Qur’an and Hadith
14	Halal [2]	Anything which is permitted in Islam, e.g. eating permitted foods
15	Haram [2]	Anything which is forbidden in Islam, e.g. eating forbidden foods
16	Al-Qadr	The belief that God has set out a divine plan for all things
17	Ummah [2]	Worldwide Muslim community who share a common religious identity
18	Sunni	A sect of Islam; ‘one who follows the Sunnah’
19	Shi’a	A sect of Islam; ‘From the house of Ali’

B	Practices	
1	Mosque [2]	A place of prostration for Muslims, a communal place of worship
2	Ibadah	Acts of worship
3	Shahadah	The declaration of faith which states ‘there is no God but Allah and Muhammad is his prophet’
4	Salah	Prayer, five times a day
5	Zakah	Charity, 2.5% of one's annual wealth
6	Sadaqah	Any voluntary good deed done on top of Zakah
7	Khalifah	Steward or caretaker
8	Sawm	Fasting during the month of Ramadan
9	Hajj	Pilgrimage to Makkah
10	Ihram	A state of purity
11	Jihad [2]	To strive or struggle. There are two forms of jihad: greater and lesser
12	Greater Jihad	Daily, inner and spiritual struggle to become a better Muslim
13	Lesser Jihad	A physical struggle or holy war in defence of Islam
14	Id-ul-Adha	Festival of sacrifice
15	Id-ul-Fitr	A festival to celebrate the end of Ramadan
16	Ashura (Sunni)	A day of fasting to commemorate Moses' parting of the Red Sea
17	Ashura (Shi’a)	A day of sorrow where Shi'as remember the martyrdom of Husayn

Year 9 – Science – Cycle One

A	Biological Systems Key Terms	
1	Skeleton	Protects vital organs and supports movement
2	Muscles	Contract causing the bone to move
3	Tendon	Rigid fibres that connect muscles to bones
4	Ligament	Stretchy fibres that connect bones to other bones
5	Antagonistic muscle pairs	A pair of muscles: when one muscle contracts, the other relaxes
6	Diffusion	The movement of particles from an area of high concentration to an area of low concentration
7	Gas exchange	Oxygen diffuses out of the alveoli into the blood, and carbon dioxide does the opposite
8	Adaptations of the lungs for gas exchange	Moist, good blood supply, large surface area

9	Ventilation	The process of breathing in and out
10	Inspiration	Diaphragm contracts and moves down, intercostal muscles contract, ribcage moves up and out
11	Pressure changes during inspiration	Pressure in thorax decreases and volume increases, so air moves into the lungs
12	Expiration	Diaphragm relaxes and moves down, intercostal muscles relax, ribcage moves in and down
13	Pressure changes during expiration	Pressure in thorax increases and volume decreases, so air moves out of the lungs
14	Nicotine	Chemical in cigarette smoke; causes blood pressure to increase
15	Tar	Chemical in cigarette smoke; causes lung cancer
16	Carbon monoxide	Chemical in cigarette smoke; prevents red blood cells from binding with oxygen

Year 9 – Science – Cycle One

B	Biological Systems Key Terms	
1	Reflex action	An involuntary and almost instant response, which takes place without impulses reaching the brain
2	Stimulus	A change in the environment
3	Receptor	Cells that detect stimuli
4	Sensory neurones	Carries information as electrical impulses from the receptor to the nervous system
5	Motor neurones	These carry electrical impulses from the central nervous system to the effectors
6	Effectors	A muscle or gland that carries out the response to a stimulus
7	Respiration	A chemical reaction that takes place in the mitochondria of all cells to release energy from glucose
8	Aerobic respiration	Glucose + oxygen → carbon dioxide + water
9	Anaerobic reaction	Respiration in the absence of oxygen: glucose → lactic acid
10	Homeostasis	Maintenance of a constant internal environment

11	Chromosomes	Long lengths of DNA; humans have 46 chromosomes in each cell
12	DNA	A large molecule with a double helix structure; found in the nucleus of cells
13	Gene	Section of DNA that codes for a particular protein
14	Crick and Watson	Scientists that first built a model of DNA
15	Wilkins and Franklin	Provided the data that allowed the model of DNA to be developed
16	Characteristics	The features that we have
17	Drug	A chemical that affects how the body works
18	Clone	A genetically identical organism
19	Genetic engineering	Transferring a gene from one species to another
20	Economic	Issues relating to money
21	Moral	Issues relating to beliefs

Year 9 – Science – Cycle One

C	Matter Key Terms	
1	Particle	All matter is made up of tiny particles
2	Solid	Particles are arranged in rows and are touching, with strong bonds between them
3	Liquid	Particles are randomly arranged and most are touching, with only some bonds between them so they can move
4	Gas	Particles are randomly arranged and don't touch, with no bonds so they can move freely
5	Properties of solids	Fixed shape and cannot flow; cannot be compressed (squashed)
6	Properties of liquids	They flow and take the shape of their container; they cannot be compressed
7	Properties of gases	They flow and completely fill their container; they can be compressed
8	Melting	Change of state from solid to liquid
9	Changes to particles when substances melt	Gain energy, arrangement becomes random, start to move around
10	Evaporation	Change of state from liquid to gas
11	Changes to particles when substances evaporate	Gain energy, become much further apart, start to move quickly in all directions
12	Condensation	Change of state from gas to liquid
13	Changes to particles when substances condense	Lose energy, become much closer together, bonds form between particles

14	Freezing	Change of state from liquid to solid
15	Changes to particles when substances freeze	Lose energy, become regularly arranged in rows, stop moving around each other, and only vibrate on the spot
16	Gas pressure	Particles collide with the sides of a container creating pressure; pressure increases when temperature increases
17	Density	Density = $\frac{\text{Mass}}{\text{Volume}}$
18	High density	Particles tightly packed, e.g. solids
19	Low density	Particles loosely packed, e.g. gases, and could be compressed to become more dense
20	Internal energy	Total energy stored by particles in a system
21	Latent heat	Energy being used for breaking bonds between particles, so that it can change state; this energy doesn't raise the temperature
22	Specific latent heat of fusion	Energy needed to change 1kg of a solid into a liquid without changing its temperature
23	Density of a regular solid	Measure the sides using a ruler and the mass using scales, find volume of the solid, then calculate density
24	Density of an irregular solid	Use scales to find the mass, put the solid in a Eureka can full of water and measure the volume displaced using a measuring cylinder, then calculate density
25	Density of a liquid	Use scales to find the mass, use a measuring cylinder to find the volume, then calculate density

Year 9 – Science – Cycle One

D	Reactivity Key Terms	
1	Nucleus	The centre of an atom; it contains protons and neutrons
2	Proton	Found in the nucleus; it has a charge of +1 and a relative mass of 1
3	Neutron	Found in the nucleus of an atom; it has a charge of 0 and a mass of 1
4	Electron	Found in the shells of an atom; it has a charge of -1 and a negligible mass
5	Electron shells	First shell contains a maximum of two electrons; second and third shells contain a maximum of eight electrons
6	Atomic number	The number of protons in an atom
7	Mass number	The total number of protons and neutrons in an atom
8	Ion	An atom that has lost or gained electrons to become charged
9	Reactivity	The tendency of a substance to undergo a chemical reaction
10	Metal structure	Rows of positive metal ions, surrounded by delocalised electrons which move through the structure

11	Alloy	A mixture of a metal with another element, e.g. steel is an alloy of iron and carbon
12	Naming salts	Sulfuric acid makes sulfates, hydrochloric acid makes chlorides, nitric acid makes nitrates
13	Acids with metals	Metal + acid \rightarrow salt + hydrogen
14	Acids with metal oxides	Acid + metal hydroxide \rightarrow salt + water
15	Acids with metal carbonates	Acid + metal carbonate \rightarrow salt + water + carbon dioxide
16	Test for hydrogen	Using a lit split, a squeaky pop with sound
17	Test for carbon dioxide	If carbon dioxide bubbles through limewater it will turn cloudy
18	Displacement	Reaction where a more reactive metal takes the place of a less reactive metal in a compound
19	Ore	A rock containing enough metal compound to make it worthwhile extracting the metal from

Year 9 – Spanish – Cycle One

A	Verbs and Phrases	
1	Me despierto (despertarse)	I wake up
2	Me levanto (levantarse)	I get up
3	Me ducho (ducharse)	I shower
4	Me lavo los dientes (lavarse)	I wash / brush my teeth
5	Me visto (vestirse)	I get dressed
6	Me duele(n)	It hurts
7	Dormir	To sleep
8	Entrenar	To train
9	Fumar	To smoke
10	Hacer deporte	To do sport
11	Ver un partido	To watch a match
12	Probar comida basura	To try junk food
13	Necesitamos	We need
14	Apagar la luz	To turn off the light
15	Malgastar agua	To waste water
16	Reciclar vidrio	To recycle glass
17	Estoy cansado	I am tired
18	Estoy enfermo	I am ill
19	Tengo gripe	I have the flu
20	Fui	I went
21	Visité	I visited

B	Vocabulary	
1	Todos los días	Every day
2	A menudo	Often
3	A veces	Sometimes
4	Primero	First
5	Luego	Then
6	Desde hace	For... (a period of time)
7	En la foto hay	In the photo there is / there are
8	Se puede ver	You can see
9	Veo	I see
10	Al lado de	Next to
11	Detrás de	Behind
12	Delante de	In front of
13	La carne	Meat
14	Los pasteles	Cakes
15	El pescado	Fish
16	La garganta	Throat
17	La mano	Hand
18	La pierna	Leg
19	El medioambiente	Environment
20	La contaminación	Pollution
21	El ruido	Noise