



## Year 9 Knowledge Organiser M1 2023-2024

"Knowledge is power" Francis Bacon

I came to give life - life in all its fullness

High Expectations - No excuses

The Bishop of Winchester Academy Weekly Homework Grid 2023-2024 Year 9, Michaelmas 1 - Commencing Monday 11<sup>th</sup> September

Week	Activity	Monday	Tuesday	Wednesday	Thursday	Friday
M1.2 eptember	KO on Quizlet	Drama 1-3 Computer Science 1-9	RS 1-6	Healthy Living 1-9 Food 1-4	Geography 1-8 Music 1-3	History 1-7
11 <sup>th</sup> S	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx
M1.3 eptember	KO on Quizlet	Drama 4-6 Computer Science 10-18	RS 7-12	Healthy Living 10-18 Food 5-8	Geography 9-16 Music 2-6	History 8-13
18 <sup>th</sup> S	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx
M1.4 eptember	KO on Quizlet	Drama 7-9 Computer Science 19-27	RS 13-17	Healthy Living 19-27 Food 9-12	Geography 17-24 Music 7-9	History 14-19
25 <sup>th</sup> S	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx
M1.5 October	KO on Quizlet	Drama 10-11 Computer Science 28-35	RS 18-22	Healthy Living 28-36 Food 13-16	Geography 25-32 Music 10-11	History 20-25
2 <sup>nd</sup>	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx

Week	Activity	Monday	Tuesday	uesday Wednesday Thursday Friday		Friday
M1.7 M1.6 M1.6 A	KO on Quizlet	Drama 12-13 Computer Science 36-42	RS 23-27	Healthy Living 37-45 Food 17-20	Geography 33-40 Music 12-13	History 26-31
	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx
M1.7 October	KO on Quizlet	Drama 14-15 Computer Science 43-50	RS 28-32	Healthy Living 46-53 Food 21-24	Geography 41-48 Music 14-15	History 32-37
16 <sup>th</sup>	HWK on Satchel One	Spanish - LanguageNut	English (Week 1 - AR/Spellings Week 2 - Creative Writing)	Art - booklet	Maths - Sparx	Science - Sparx

		RS - YEAR 9 - M1 Judaism	RAG
1.	Tanakh	The Jewish Bible; derived from the letters of its three sections: Torah, Prophets, Writings.	
2.	Torah	The first section of the <u>T</u> anakh. The five books of Moses, or the written law. It consists of; Genesis, Exodus, Leviticus, Numbers and Deuteronomy. Reading the Torah in public is expected as part of Jewish life.	
3.	Abraham	Jews regard Abraham as the first Patriarch of the Jewish people. Abraham was the first person to teach the idea that there was only one God; before then, people believed in many gods.	
4.	lsaac	Abrahams son.	
5.	Covenant	An agreement established between God and the ancient Israelites, first through Abraham and later through Moses, that designates the Jews as God's Chosen People, with special rights and responsibilities.	
6.	Abrahamic Covenant	Agreement made between God and Abraham. God wanted the Jews to live their lives in such a way as to show the world that God actually was the one and only.	
7.	Canaan	The biblical name for the area of ancient Palestine west of the River Jordan and by some considered the Promised Land of the Israelites.	
8.	Israel	Kingdom in ancient Palestine comprising the lands occupied by the Hebrew people; established about 1025 b.c.	
9.	YHWH(Yahweh)	Yahweh is the name of the state god of the ancient Kingdom of Israel and, later, the Kingdom of Judah.	
10.	Monotheistic	The belief in one God. Judaism is a monotheistic religion. According to Jewish teachings, God does not have multiple parts.	
11.	Reform	Jewish movement that began in the 1800s in Germany, believes Judaism is compatible with surrounding culture and the law is adaptable.	
12.	Moses	Prophet and leader of Jewish people who led Israelites out of slavery. Law revealed to him by God on Mount Sinai.	
13.	Pharoah	A ruler in ancient Egypt.	
14.	Mosaic Covenant	The Mosaic Covenant was a conditional covenant made between God and the nation of Israel at Mount Sinai.	
15.	The 10 Saying (commandments)	God gave Moses a set of ten laws that they should follow in order to please him. The Ten Commandments may be the most well-known part of the Torah.	
16.	David	King who led the Israelite monarchy to its greatest height of power. Conquered neighbouring lands, along with the city of Jerusalem, which he made the capital.	
17.	Passover	The eight-day festival celebrated in early spring that commemorates the Exodus of the Jews from Egypt.	





		RS - YEAR 9 - M1 Judaism	RAG
18.	Seder	Passover meal - an occasion to personally relive and remember the exodus.	
19.	Seder plate	The Seder plate is the focal point of proceedings at the Seder. It bears the symbolic foods to celebrate Passover.	
20.	Mitzvah	A rule or commandment.	
21.	10th plague	The Tenth Plague: The Death of the Firstborn According to the Bible's book of Exodus, God struck down the ancient Egyptians' sons to punish pharaoh.	
22.	Holocaust/Shoah	The persecution of Jews by German Nazis from 1933 to 1945, resulting in the murder of some six million; commonly referred to by Jews as Shoah (shoah is Hebrew for "mass destruction").	
23.	Persecution	Hostility and ill-treatment, especially on the basis of ethnicity, religion, or sexual orientation or political beliefs.	
24.	Anti-Semitism	Hostility toward Jews and Judaism; ranges from attitudes of disfavour to active persecution.	
25.	Inquisition	An institution established to persecute those who didn't follow Christianity in Spain.	
26.	Marrano	Marranos were Spanish and Portuguese Jews living in the who were forced to convert to Christianity but secretly practiced Judaism.	
27.	Christian Aid	A Christian charity that aims to eradicate poverty so that everyone can live a full life.	
28.	Israel	A country in the Middle East, on the Mediterranean Sea.	
29.	Palestine	A territory in the Middle East on the eastern coast of the Mediterranean Sea.	
30.	Intifada	The Palestinian uprising against Israeli occupation of the West Bank and Gaza Strip.	
31.	Occupied	Taken control of by military conquest or settlement.	
32.	Reconciliation	The restoration of friendly relations.	





GEOGRAPHY - YEAR 9 - M1 Biomes			
1.	Biomes	A biome is a large geographical area of distinctive plant and animal groups, which are adapted to that particular environment.	
2.	Tropical Rainforest	Location: centred along the Equator. Temperature: Hot all year 25-30°C. Rainfall: very high over 2000mm/year.	
3.	Tropical Grasslands	Location: Between latitudes 5° - 30° north & south of Equator. Temperature: warm all year 20-30°C. Rainfall: Wet + dry season (500-1500mm/year).	
4.	Hot Desert	Location: Found along the tropics of Cancer and Capricorn. Temperature: Hot by day (over 30°C) Cold by night. Rainfall: Very low (below 300mm/year).	
5.	Temperate Forest	Location: Between latitudes 40°-60° north of Equator. Temperature: Warm summers + mild winters (5-20°C). Rainfall: Variable rainfall (500-1500m /year).	
6.	Tundra	Location: Far Latitudes of 65° north and south of Equator. Temperature: Cold winter + cool summers (below 10°C). Rainfall: Low rainfall (below 500mm/ year).	
7.	Coral Reefs	Location: Found within 30° north - south of Equator in tropical waters. Temperature: Warm water all year round with temperatures of 18°C. Rainfall: Wet + dry seasons. Rainfall varies greatly due to location.	
8.	Equatorial	Zone surrounding the equator. Similar climate pattern throughout the year.	
9.	Climate Of Tropical Rainforests	Hot and wet throughout the year. Cloud builds up during the day with most afternoons having heavy rain showers.	
10.	Distribution of Tropical Rainforests	Tropical rainforests are centred along the Equator between the Tropic of Cancer and Capricorn. Rainforests can be found in South America, central Africa and South- East Asia.	
11.	The Amazon	The Amazon is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.	
12.	Emergent	Highest layer with trees reaching 50 metres.	
13.	Canopy	Most life is found here as It receives 70% of the sunlight and 80% of the life.	
14.	Understorey	Consists of trees that reach 20 metres high.	
15.	Forest Floor	Lowest layer with small trees that have adapted to living in the shade.	
16.	Adaption	How plants and animals change to the conditions they are in.	
17.	Rainforest Nutrient Cycle	The hot, damp conditions on the forest floor allow for the rapid decomposition of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots.	
18.	Buttress Roots	Large roots coming out from the sides of rainforest trees to support them in the shallow soils.	





		GEOGRAPHY - YEAR 9 - M1 Biomes	RAG
19.	Drip Trip Leaves	Leaves that allow the rain to drip off them quickly so	
		the rain doesn't damage them.	
20.	Emerald Tree Boa Snake	Can grow to 2m, hangs from branches and catches its prey at night.	
21.	Toucan	Lives high in the canopy, large beak allows it to get fruit, berries and seeds.	
22.	Three Toed Sloth	Has strong claws to allow it to hang from branches, hair is filled with algae which helps it to hide among the trees.	
23.	Deforestation	Large scale removal of tropical rain forest.	
24.	Agriculture	Largescale growing of food. Increased demand for food means that large areas of forest are removed.	
25.	Logging	Most common reason for deforestation, logs used to make furniture or for building. Cam lead to violent confrontation between indigenous tribes and logging companies.	
26.	Plantations	Large areas growing a single crop, palm oil, bananas and pineapples are main examples.	
27.	Shifting Agriculture	Local tribes clear an area of rain forest to grow crops for a few years and then move on allowing that patch of forest to regenerate.	
28.	Economic Impacts of Deforestation	Mining, farming and logging creates employment and tax income for government. Products such as palm oil provide valuable income for countries.	
29.	Soil Erosion	Once the land is exposed by deforestation, the soil is more vulnerable to rain. With no roots to bind soil together, soil can easily wash away.	
30.	Climate Change	Rainforests are major carbon 'sinks'. When trees are burnt, they release more carbon in the atmosphere. This will enhance the greenhouse effect.	
31.	Biodiversity Decline	Decline in species could cause tribes being unable to survive and may become extinct. Key medical plants may be lost preventing treatments being found.	
32.	Sustainability	Uncontrolled and unchecked exploitation can cause irreversible damage such as loss of biodiversity, soil erosion and climate change.	
33.	Agro Forestry	Growing trees and crops at the same time. It prevents soil erosion and the crops benefit from the nutrients.	
34.	Selective Logging	Trees are only felled when they reach a particular height.	
35.	Education	Ensuring those people understand the consequences of deforestation	
36.	Afforestation	If trees are cut down, they are replaced	
37.	Ecotourism	Tourism that promotes the environments & conservation	



	GEOGRAPHY - YEAR 9 - M1 Biomes RAG			
38.	Coral Reef	An underwater ecosystem made up of a ridge or mound of coral		
39.	Coral	Very small animals with a hard exoskeleton		
40.	Barrier Reef	Originally a fringing reef but now surrounded by deeper water due to sea level rise		
41.	Fringing Reef	A coral reef developing along a coastline		
42.	Coral Atoll	A circular coral reef commonly formed on top of an underwater volcano		
43.	Polyp	The animal which secretes calcium carbonate to create corals.		
44.	Symbiosis	The close and often long-term interaction between two or more different biological species.		
45.	Salinity	The saltiness of water.		
46.	Algae	Simple organisms which produce food by photosynthesis.		
47.	Bleaching	Coral loses its colour and ides when sea temperatures are raised.		
48.	Acidification	A decrease in the Ph of the World's oceans.		





HISTORY - YEAR 9 - M1 Germany: Democracy to Dictatorship			
1.	Democracy	A form of government which depends on the people voting for who is in charge.	
2.	Dictatorship	A country governed by a dictator (one ruler in complete control), who passes very strict laws.	
3.	Fascism	An anti-democratic system of government developed by Mussolini in Italy and Hitler in Germany.	
4.	The Treaty of Versailles	The Treaty signed at the end of World War One which decided what happened in Europe.	
5.	Article 231	The War Guilt Clause in the Treaty of Versailles, which blamed the whole of the war on Germany.	
6.	Alsace Lorraine	Some land given back to France in the Treaty of Versailles.	
7.	Reparations	What Germany was asked to pay to repair the damage caused by the war. Germany had to pay because Germany had been solely blamed for World War One.	
8.	£6.6 billion	(£6,600,000) The amount of Germany's reparations outlined in the Treaty of Versailles.	
9.	100,000 men	The maximum number of soldiers Germany was allowed in their army, as outlined in the Treaty of Versailles.	
10.	No Tanks	Germany was allowed no tanks after 1919 as outlined in the Treaty of Versailles.	
11.	No Airforce	Germany was allowed no air force after 1919 as outlined in the Treaty of Versailles.	
12.	The Weimar Republic, 1918-1933.	The Weimar Republic was the government of Germany from 1918 to 1933.	
13.	Hyperinflation	When inflation (costs in a country) becomes 'out of control' as money loses its value.	
14.	Currency	The money used by a country. For example, Britain's currency is pounds (£).	
15.	Culture	All the ways of life, including arts and beliefs that are passed down from generation to generation.	
16.	Conservative ideas	If somebody has conservative ideas that means they don't like change and they often hold traditional values. In the Weimar Republic many rural communities were conservative.	
17.	Liberal ideas	If somebody has liberal ideas that means they are open to new ideas. In the Weimar Republic many urban communities were liberal.	
18.	Economic depression	An economic depression is when the economy is getting worse for a prolonged period.	
19.	The Great Depression	Starting in October 1929, a worldwide economic crisis that closed banks and businesses. Germany was the worst hit country in the world.	
20.	The Wall Street Crash	The event that started the Great Depression. Wall Street was America's financial district. When things went wrong there it effected the whole world.	





HISTORY - YEAR 9 - M1 Germany: Democracy to Dictatorship			
21.	Mein Kampf, 1924	Hitler's autobiography, written in prison after the Munich Putsch. It was full of his racist ideas and became a powerful piece of propaganda.	
22.	1933	The year Hitler becomes the German Chancellor of Germany.	
23.	Reichstag	The German Parliament and/or the German Parliament building.	
24.	Reichstag Fire 1934	This was the date when the German Parliament (the Reichstag) was burned down, allowing Hitler to destroy his rivals - the communists.	
25.	How did the Nazis control education?	-Burnt old textbooks and replaced them with Nazi ones. -Ensured boys and girls learned different subjects. -Indoctrinated children with Nazi ideas and racist ideology.	
26.	To indoctrinate	To control what someone thinks; to brainwash.	
27.	Propaganda	Information, especially of a misleading nature, used to promote a point of view or convince people of something.	
28.	Terror	The use of extreme fear to intimidate people.	
29.	Nazi use of Propaganda	The Nazi's use of radios, newspapers, rallies, book burnings and films to convince people to follow Nazi ideas.	
30.	Nazi use of Terror	The Nazi's use of the SS, the Gestapo, informers and concentration camps to force people to follow Nazi ideas.	
31.	What were Nazi aims for young men?	-To train them as soldiers to get ready for the next war.	
32.	What were Nazi aims for young women?	<ul> <li>To train them to be 'ideal' wives to create a perfect world.</li> <li>To have more children to help Germany's army expand.</li> </ul>	
33.	Conform	To behave according to socially acceptable rules.	
34.	Indoctrination	To teach (a person or group) to accept a set of beliefs without them being questioned.	
35.	Aryan	The 'ideal' human according to the Nazis - strong, blond hair, blue eyes, athletic and Germanic (white European).	
36.	Master Race	The Nazi belief that German Aryans were the best race.	
37.	Appeasement	A political plan to make agreements to an aggressive power in order to avoid conflict.	





		COMPUTER S Program	CIENCE - ` ming Tecl	YEAR 9 - M1 nniques	RAG		
1.	Algorithm	An abstracted p the data provid	ed.	nich completes a given task, whatever			
2.	Abstraction	Abstraction is m create a genera Ignoring the grit	specific in order to create a general solution that would work in similar scenarios. gnoring the gritty details to focus on the problem.				
3.	Decomposition	Breaking a prob solvable chunks	Breaking a problem down into smaller, computational solvable chunks.				
4.	Pseudo Code	A structured way of planning code, which is 'computational' in style (uses Boolean logic, variables, comparisons and arithmetic for example) but is not tied to a strict high-level language's syntax.					
5.	Flow Diagram	A diagram, mad the flow of a pr decisions. Flow charts Flow charts like pseudocod	Ianguage's syntax.         A diagram, made using specific shaped boxes that mocks up the flow of a program through various stages, processes and decisions.         Flow charts         Flow charts         Flow charts         Input/Output         Inis shape represents control passing between the connected shapes.         Imput/Output         This shape represents something being performed or done.         Imput/Output         This shape represents the input or output of something into or out of the flow chart.         Imput/Output       This shape represents a decision (Yes/No or True/False) that results in two lines representing the different possible outcomes.         Imput/Output       This shape represents the "Start" and "End" of the process.				
6.	Program Control	Using Boolean lo based on decision	ogic to gui ons.	de the computer through a program			





		COMPUTER SCIENCE - YEAR 9 - M1 Programming Techniques				
7.	Comparison Operators	The symbols used to relation to its simila	o look at a variable or piece of data in arity to another piece of data or variable.			
		Comparison op	perators			
		==	Equal to			
		!=	Not equal to			
		<	Less than			
		<=	Less than or equal to			
		>	Greater than			
		>=	Greater than or equal to			
8.	8.Arithmetic OperatorsThe symbols used to show the mathematics to be carried out on a piece of data.					
		Arithmetic operators				
		+	Addition e.g. $x=6+5$ gives 11			
		-	Subtraction e.g. $x=6-5$ gives 1			
		*	Multiplication e.g. $x=12*2$ gives 24			
		/	Division e.g. $x=12/2$ gives 6			
		MOD	Modulus e.g. 12MOD5 gives 2			
		DIV	Quotient e.g. 17DIV5 gives 3			
		^	Exponentiation e.g. 3 ^ 4 gives 81			
9.	Variable	A piece of stored da be changed or alter	ata, used in a computer program, which ca red by the program.	n		
10.	Constant	A piece of stored da program or user.	ata which cannot be changed by the			
11.	Operator	An operator is a ma data in a program.	thematical symbol, used to work with			
12.	Input	Data, entered into	a program, by the user.			
13.	Output	The returned result	of an algorithm.			
14.	Algorithm	A set of instructions operation, especial	s to carry out a process or problem- solving ly by a computer.	5		
15.	Program Control	Selection of code to	b be executed, based on the results of prio gram, or user input.	r		
L	1					





	COMPUTER SCIENCE - YEAR 9 - M1 Programming Techniques					RA	AG	
16.	Loop	A piece of r	epeating co	de.				
17.	Iteration	A type of LO	)OP which r variable cha	epeats a se	ries of step	s with a fini	te	
18.	Sentinel	A type of LO	OOP that wa	atches a var	iable for a l	ogical (T to	F, or	
		F to T) and	repeats unt	il that chan	ige occurs.			
10			<u> </u>					
19.	Conditional	A method of branching s	t controlling teps - the c	g the inform ode checks	if somethin	through g is True, th	en	
		carries out	carries out one set of instructions if it is, and a different set of instructions if it is False					
20.	Declaration	Assigning a	value to a v	variable.				
21		Casting a variable as an integer. Bool, Float or String.						
	Typecaseing							
22.	Data Arrays	'Lists' of data, stored in an indexable table format.						
		1 D ARRAY:					-lt-	
		0 1	2 3 4	G E 5 6	F K	<ul> <li>single row or o</li> </ul>	elements	
23.	2D Arrays	A data struc	ture which	has more t	han 1 'row'	of data, 2D		
		arrays use 2	indexes to	identify da	ta.			
		IMPORTANT	!!!					
		2D arrays us axis. This is	se the Y axis the opposit	s first in the te wav arou	e co-ordinat nd to most	es, then the other co-	e X	
		ordinates!						
			Column	Column	Column	Column		
			1	2	3	4		
		Row 1	a[0][0]	a[0][1]	a[0][2]	a[0][3]		
		Row 2	a[1][0]	a[1][1]	a[1][2]	a[1][3]		
		Row 3	a[2][0]	a[2][1]	a[2][2]	a[2][3]		



COMPUTER SCIENCE - YEAR 9 - M1 Programming Techniques				
24.	Defensive Design	Planning a program from the very beginning to prevent accidental or purposeful misuse.		
25.	Input Sanitization	Removing erroneous data from a system prior to processing.		
26.	Data Validation	Ensuring all data is in the correct format prior to processing.		
27.	Contingency Planning	Force acting at points of contact between objects moving over each other, to resist the movement.		
28.	Anticipating Misuse	Force on an object moving through the air that causes it to slow down (also known as drag).		
29.	Authentication	Having different levels of user, and preventing everyday users from being able to significantly change a system.		
30.	Maintainability	Building software which is modular to enable sections to be updated and replaced without having to write the whole program again from scratch.		
31.	Code Comments	The velocity an object eventually reaches when it is falling. The weight of the object is then equal to the frictional force on the object. The resultant force is zero.		
32.	Indentation	Forces acting on an object in opposite directions that are the same size.		
33.	Iterative Testing	Forces acting on an object in opposite directions that are not the same size (they are unequal).		
34.	Terminal Testing	Situation in which all the forces acting on an object are balanced. There is no resultant force acting on an object.		
35.	Beta Testing	Making a small release of the software to a group of tech- literate enthusiasts to broaden the usage-testing and get lots of feedback prior to full release.		
36.	Syntax Error	An error in the typing of the code. Missing punctuation, spacing etc.		
37.	Test Data	Data chosen to test the program. Testers use a specific range of data.		
38.	Data Range	The data that will be used to check the code works correctly.		
39.	Valid Data	Obvious data which should definitely pass.		
40.	Valid Extreme	Unusual data - the highest and lowest data - on the very edge of what should pass.		
41.	Invalid Extreme	Data, of correct type, which is on the very edge of what should fail.		





COMPUTER SCIENCE - YEAR 9 - M1 Programming Techniques			
42.	Invalid Data	Data, of the correct type, that should definitely fail.	
43.	Erroneous Data	Data that is the wrong type, and should fail.	
44.	Expected Outcome	The force acting between two charged objects.	
45.	Syntax Error	An error in the code - incorrectly typed, missing punctuation etc.	
46.	Logical Error	An error which, although allows the code to run, produces incorrect outcomes.	
47.	EOF Error	The End of File has been reached, whilst the computer is waiting for a snippet to be completed.	
48.	Type Error	Attempting to use data incorrectly - adding 1 to a string etc.	
49.	Name Error	Using a variable before its declaration.	
50.	Indentation Error	Loops or functions are incorrectly indented.	





		DRAMA - YEAR 9 - M1	RAG
1.	Drama	The activity of acting.	
2.	Stage	A raised floor or platform, typically in a theatre, on which actors, entertainers, or speakers perform.	
3.	Concentration	The action or power of focusing all one's attention.	
4.	Teamwork	The combined action of a group, especially when effective and efficient.	
5.	Audience	The assembled spectators or listeners at a public event such as a play, film, concert, or meeting.	
6.	Movement	An act of moving.	
7.	Body Language	The conscious and unconscious movements and postures by which attitudes and feelings are communicated.	
8.	Emotions	A strong feeling deriving from one's circumstances, mood, or relationships with others.	
9.	Facial Expressions	One or more motions or positions of the muscles beneath the skin of the face. These movements convey the emotional state of an individual to observers.	
10.	Gesture	A movement of part of the body, especially a hand or the head, to express an idea or meaning.	
11.	Improvisation	A piece that is created on the spot.	
12.	Physical Skills	The use of the body: posture, stance, facial expressions, body language, gesture.	
13.	Vocal Skills	The use of the voice: pitch, pace, accent, tone, projection.	
14.	Role on the Wall	A technique used to build a character. It is a visual map that invites participants to explore the inner feelings and outer influences on a character, place, or idea.	
15.	Characterisation	Understanding the basic foundation of constructing a character for a role, using various techniques.	





		FOOD TECH - YEAR 9 - M1	RAG
1.	Good Nutrition	Eating a wide variety of foods, that are mostly unprocessed and drinking plenty of water.	
2.	Diet	The food people eat every day.	
3.	Whole Foods	Foods that have not had any nutrients removed during processing.	
4.	Basal Metabolic Rate	The amount of energy needed to keep a person alive and their body working normally. It varies according to age, gender, body size and their Physical Activity Level.	
5.	Physical Activity Level	How physically active someone is and the amount of energy they need.	
6.	Balanced Diet	Eating foods which provide a range of nutrients to meet daily needs.	
7.	Eat Well Plate	This helps to explain a balanced diet and is recommended by the Government.	
8.	Carbohydrate	To provide energy.	
9.	Protein	For growth and repair.	
10.	Lipids (Fats and Oils)	To provide energy. Also, to store energy in the body and insulate it against the cold.	
11.	Minerals	Needed in small amounts to maintain health.	
12.	Vitamins	Needed in small amounts to maintain health.	
13.	Dietary Fibre	To provide roughage to help to keep the food moving through the gut.	
14.	Vegetables	Provides vitamins and minerals.	
15.	Fruit	Provides vitamins and minerals.	
16.	Calcium	Main mineral in the body, teeth and bones. It needs vitamin D to help absorption.	
17.	Vitamin A	Needed to keep the skin healthy.	
18.	Vitamin D	Helps the body absorb calcium during digestion.	
19.	Vitamin E	Antioxidant which helps prevent the development of heart disease.	
20.	Vitamin K	Helps the blood clot after an injury.	
21.	Vitamin B1	Allows energy to be released from carbohydrates in the body.	
22.	Vitamin B9	Helps to make healthy red blood cells and prevent spinal cord defects in unborn babies.	
23.	Vitamin B12	Helps to make healthy nerve cells.	
24.	Vitamin C	Helps the body to absorb iron during digestion and maintain connective tissue which binds body cells together.	





PE - Year 9 - M1 RAG			
1	Bones in the	Cranium clavicle sternum humerus ribs ulna radius carnals	
••	body	phalanges, femur, patella, tibia, fibula, tarsals, scapula,	
	•	vertebrae, pelvis.	
2.	Function of	Give shape and support to the body. Allow movement. Protect	
	the skeletal	vital organs, Produce blood cells, Store minerals.	
	system		
3.	Synovial joint	Freely moveable joint.	
4.	Hinge Joint	Allows flexion and extension at the knee and elbow.	
5.	Ball and	Allows wide range of movement at the shoulder and hip.	
	Socket	Flavian automaion abduction adduction retation	
6.	Types of	riexion, extension, adduction, adduction, rotation,	
	ioints		
7.	Components	Ligaments, cartilage, tendons, muscles, bones, joint capsule,	
	of a joint	synovial membrane, synovial fluid.	
8.	Ligaments	Attach bone to bone (tissue) assists with stability.	
9.	Cartilage	Connective tissue reduces friction and acts as a shock absorber.	
10.	Tendons	Connects muscle to bone allow movement.	
11.	Muscles in the	Trapezius, triceps, latissimus dorsi, gluteus maximus,	
	body	hamstrings, gastrocnemius, soleus, deltoid, pectorals, biceps,	
12	Euroction of	Produce movement, either shorten, lengthen er remain the	
12.	the muscular	same length	
	system	Sume tengen.	
13.	Antagonistic	Muscles that work together to contract and relax.	
	pairs		
14.	Agonist	Working muscle that contract to produce movement.	
15.	Antagonist	Working muscle that relaxes, opposite to the agonist.	
16.	Fixator	Muscle that stabilises the agonist muscle.	
17.	Short Term	increase in muscle temperature, build-up of lactic acid.	
	Muscular		
	System		
18.	Long term	Muscular Hypertrophy, Increase muscular endurance, Increase	
	effects on the	muscular strength, Increase flexibility, Increase tolerance of	
	muscular	lactic acid, Muscles can work harder for longer.	
10	system	Occurs during apparable oversize lack of everyon, causes muscle	
17.		fatigue.	
20.	Components	Lever, effort - muscle, fulcrum - joint, load - resistance.	
	of a Lever		
21.	1 <sup>st</sup> Class Lever	Load, fulcrum, effort.	
22.	2 <sup>nd</sup> Class	Fulcrum, load, effort.	
	Lever		
23.	3 <sup>rd</sup> Class	Fulcrum, effort, load.	
	Lever		



24.	Mechanical	Moving a large load with a small effort - 1 <sup>st</sup> class and 2 <sup>nd</sup> class	
	Advantage	lever have a mechanical advantage over 3 <sup>rd</sup> class lever.	
25.	Frontal Plane	Divides the body front and back.	
26.	Sagittal Plane	Divides the body left and right.	
27.	Transverse	Divides the body top and bottom.	
20			
28.	Frontal Axis	Front to Back Axis.	
29.	Transverse Axis	Side to Side.	
30.	Longitudinal	Top to Bottom.	
24	AXIS	Double size with the trip of under black flow view to the beautered burger	
51.		Double circuit that includes blood flowing to the heart and lungs	
	circulatory	and then the heart to the rest of the body.	
22	System	Transportation of blood between the lunger and the board	
32.	Pulmonary	Transportation of blood between the lungs and the heart.	
22	System	Transportation of blood between the beart and the body	
55.	systemic	Transportation of blood between the heart and the body.	
24	System Structure of	Vana cava right atrium triguanid valva right vantriala comi	
54.	the heart	lupar valve, nulmenany artery, pulmenany voin left atrium	
	the heart	bicuspid valve, left ventricle, somi lupar valve, perta	
25	Blood colls	Transport oxygon to the body and carbon dioxide to the lungs	
33.		Plead versels carpying overgenated blood at high prossure from	
30.	Arteries	the heart.	
37.	Veins	Blood vessels carrying deoxygenated blood at low pressure from the body back to the heart, have valves to prevent the backflow of blood.	
38.	Capillaries	Blood vessels that are one cell thick and allow gaseous exchange of oxygen and carbon dioxide	
39	Heart rate	Amount of beats per minute	
40	Stroke volume	Volume of blood pumped out the left ventricle per beat	
41	Cardiac	Volume of blood pumped out of the left ventricle per beat.	
	output	= $SV \times HB$ ).	
42	Vascular	Redirection of blood flow from organs towards working muscles.	
	Shunt		
	Mechanism		
43.	External	Exchange of gases between the lungs and heart.	
	respiratory	5 5 5	
	system		
44.	Internal	Exchange of gases between the blood and the body cells.	
	respiratory		
	system		
45.	Pathway of air	Nose, Mouth, Pharynx, Larynx, Trachea, Lungs, Bronchi,	
	through the	Bronchioles, Alveoli, Diaphragm.	
	respiratory		
	system		
46.	Inspiration	Breathing in - external intercostal muscles contract and move	
		up, diaphragm contracts and moves down.	
47.	Expiration	Breathing out - external intercostal muscles relax and move	_
		down, diaphragm relaxes and moves down.	





48.	Diffusion/gase	Involves CO2 moving from blood to the alveoli and out of the	
	ous exchange	body and O2 moving from the alveoli to the blood and then to	
		the heart and muscles.	
49.	Breathing rate	How many breaths per minute.	
50.	Tidal volume	Volume of air inspired or expired per breath.	
51.	Minute	Volume of air inspired or expired in one minute (VE = $TV \times F$ ).	
	volume		
52.	Aerobic	Low to moderate intensity exercises that uses oxygen for a long	
	exercise	duration.	
53.	Anaerobic	High intensity exercises that does not use oxygen for a short	
	exercise	duration.	





		MUSIC - YEAR 9 - M1	RAG
1.	Beat	The ongoing pulse of a piece of music, what you would dance or move your feet to	
2.	Pulse	Another word sometimes used instead of beat	
3.	Rhythm	A pattern of sounds, short and long	
4.	Accuracy	Performing rhythms that fit with the music's beat and the other performers	
5.	Duration	How many beats - or fractions of a beat - a note lasts for	
6.	Texture	How the different layers of a piece of music are combined to produce the overall sound	
7.	Polyrhythm	When two or more different rhythms that follow the same basic pulse are played at the same time	
8.	Notation	Musical ideas written in a common language so that others can understand and play them back	
9.	Crochet	A musical note with a duration of 1 beat	
10.	Rest	A pause, or silence in the music	
11.	Chord	a group of typically three or more notes sounded together, as a basis of harmony.	
12.	Improvisation	The act of writing music while you are playing it.	
13.	Rhythm	a strong, regular repeated pattern of movement or sound.	
14.	Syncopation	Syncopation is the accenting of a note which would usually not be accented. Syncopation is often described as being "off beat".	
15.	Structure	Structure describes how a piece of music is put together; the sections in a piece of music.	











I came to give life - life in all its fullness High Expectations - No Excuses