



Year 9

Knowledge Organiser

M2 2019 (Options)

“Knowledge is a treasure, but practice is the key to it.”
— *Lao Tzu*

Sapere Aude

What is a Knowledge Organiser?

A Knowledge Organiser (KO) is a set of key facts or information that you need to know and be able to recall to help you master a unit or topic. Each subject has created a list of key facts which covers the basic information that you are expected to learn.

Do I need to bring my Knowledge Organiser to school every day?

Yes, your KO should be brought in every day like your community card and your planner. Your teachers may well want you to use your KOs in lessons. They are yours forever and you may want to annotate or highlight on them when your teacher talks about things in them. They will certainly be used in lessons when you have a cover teacher and you can use them whenever you find yourself with some spare time.

What do I do with my Knowledge Organiser at the end of term?

You should store it, along with previous KOs, in your folder. You are building a revision guide; the information in your KOs are things you will need to continue to know and understand.

What happens if I don't complete my KO homework each night?

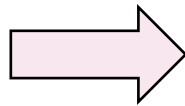
Your mentor will check your KO homework each day using the Homework Timetable and stamp the page for that day to acknowledge successful completion. If you have not completed your KO homework satisfactorily (as set out below) then you will have a compulsory 30 min prep session that same day. If you fail to attend the prep session you will spend the next day in ALC.

What happens if I lose my Knowledge Organiser?

If you lose your KO you will be required to purchase a new one via finance.

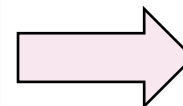
Beginning of each half term:

New Knowledge Organisers (KO) are given to you by your mentors. These are to be stored in your KO folder and brought to school every day.



Every week:

You are expected to show evidence of your learning in each subject. Teachers will start lessons with a "Do Now" activity based around the KOs. Mentors will give house points each morning for outstanding KO homework.



Last week of half term:

You are tested in each subject to show how much knowledge you have learnt.



John 10:10

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



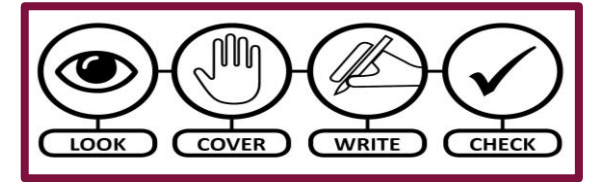
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How to Self-Quiz

Your Knowledge Organiser is a vital document. It contains all the key things from your lessons that you will need to work on committing to your long-term memory.

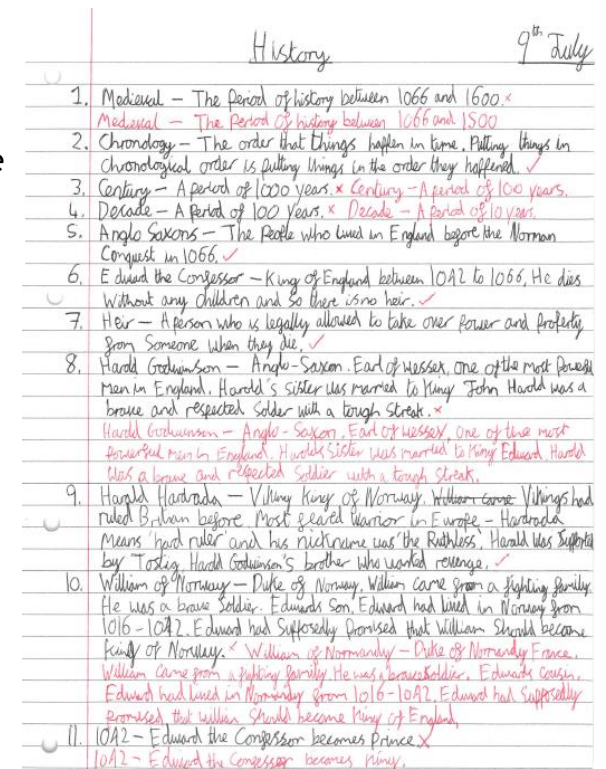
The best method when you are working on memorising things from your Knowledge Organiser is to self-quiz using the look, cover, write, check technique. Use your self-quizzing book for this.

Look	Read the piece of information carefully, two or three times.
Cover	Now cover up what you have just read.
Write	Now try and write down the piece of information you have just read.
Check	Did you write the information down correctly? If not, correct it with a red pen and then repeat!



Each night you should complete one full page (minimum) of self-quizzing in your quiz book. You should write the title (subject) and date at the top of each page. There should be no gaps on the page except for one line underneath the title. You should tick any correct answers and correct any incorrect answers in red pen.

Use the RAG column to self-assess how confident you are on each line once you have completed your self-quizzing.



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The Bishop of Winchester Academy Weekly Homework Grid 2019 - 2020

Year 9, Michaelmas 2 - Commencing Monday 4th November

Week	Activity	Monday	Tuesday	Wednesday	Thursday		Friday, Saturday, Sunday
1 4 th Nov	Self Quizzing	English Lines 1 - 10 (Language) Lines 1 - 12 (Literature)	Science (Separate) Lines 1 - 15 Science (Combined) Lines 1 - 10 R.S. Lines 1-2	History Lines 1 - 9 Geography Lines 1 - 4	Art	1 - 8	Maths (H) Lines 1-8 Maths (F) Lines 1-7 Sports Science (Core PE) Lines 1 Sports Leaders (Core PE) Lines 1 - 5
					Business	1 - 3	
					Computing	1 - 5	
					Drama	1	
					Food Tech	1 - 8	
					Geography	1 - 4	
					H & SC	1-5	
					Music	1 - 5	
					Music Tech	1 - 5	
					PE	1 - 2	
Psychology	1-10						
	Spanish	1-43					
2 11 th Nov	Self Quizzing	English Lines 11 - 24 (Language) Lines 13 - 18 (Literature)	Science (Separate) Lines 16 - 29 Science (Combined) Lines 11 - 20 R.S. Lines 3-4	History Lines 10 - 18 Geography Lines 5 - 13	Art	9 - 16	Maths (H) Lines 9-15 Maths (F) Lines 8-15 Sports Science (Core PE) Lines 2 Sports Leaders (Core PE) Lines 6 - 10
					Business	4 - 7	
					Computing	6 - 10	
					Drama	2 - 7	
					Food Tech	9 - 16	
					Geography	5 - 13	
					H & SC	6-10	
					Music	6 - 10	
					Music Tech	6 - 11	
					PE	3 - 5	
Psychology	11-20						
	Spanish	44-59					
3 18 th Nov	Self Quizzing	English Lines 25 - 34 (Language) Lines 19 - 24 (Literature)	Science (Separate) Lines 30 - 43 Science (Combined) Lines 21 - 30 R.S. Lines 5-6	History Lines 19 - 27 Geography Lines 14 - 23	Art	17 - 24	Maths (H) Lines 16-24 Maths (F) Lines 16-24 Sports Science (Core PE) Lines 3 - 4 Sports Leaders (Core PE) Lines 11 - 20
					Business	8 - 12	
					Computing	11 - 15	
					Drama	8 - 11	
					Food Tech	17 - 24	
					Geography	14 - 23	
					H & SC	11-15	
					Music	11 - 19	
					Music Tech	12 - 14	
					PE	6 - 8	
Psychology	21-30						



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Week	Activity	Monday	Tuesday	Wednesday	Thursday		Friday, Saturday, Sunday
					Spanish	60-90	
4 25 th Nov	Self Quizzing	English Lines 35 - 40 (Language) Lines 25 - 30 (Literature)	Science (Separate) Lines 44 - 58 Science (Combined) Lines 31 - 40 R.S. Lines 7-8	History Lines 27 - 36 Geography Lines 24 - 32	Art	25 - 32	Maths (H) Lines 25-33 Maths (F) Lines 25-32 Sports Science (Core PE) Lines 5 Sports Leaders (Core PE) Lines 21 - 25
					Business	13 - 17	
					Computing	16 - 20	
					Drama	12 - 20	
					Food Tech	25 - 32	
					Geography	24 - 32	
					H & SC	16-18	
					Music	20 - 35	
					Music Tech	15 - 19	
					PE	9 - 10	
					Psychology	31-35	
					Spanish	91-111	
5 2 nd Dec	Self Quizzing	English Lines 41 - 49 (Language) Lines 31 - 34 (Literature)	Science (Separate) Lines 59 - 72 Science (Combined) Lines 41 - 49 R.S. Lines 9-10	History Lines 37 - 45 Geography Lines 33 - 37	Art	33 - 40	Maths (H) Lines 34-47 Maths (F) Lines 33-42 Sports Science (Core PE) Lines 6 Sports Leaders (Core PE) Lines 26 - 30
					Business	18 - 22	
					Computing	21 - 24	
					Drama	21 - 34	
					Food Tech	33 - 40	
					Geography	33 - 37	
					H & SC	19-23	
					Music	36 - 46	
					Music Tech	20 - 27	
					PE	11 - 15	
					Psychology	36 - 40	
					Spanish	1-111	



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GEOGRAPHY - YEAR 9 - M2			RAG
Paper 1: The Challenge of Natural Hazards			
1.	The Structure of the Earth	The crust, the mantle, the inner and outer core.	
2.	Destructive Plate Margin	When the denser plate subducts beneath the other, friction causes it to melt and become molten magma . The magma forces its ways up to the surface to form a volcano. This margin is also responsible for devastating earthquakes .	
3.	Constructive Plate Margin	Here two plates are moving apart causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the Mid Atlantic Ridge .	
4.	Conservative Plate Margin	A conservative plate boundary occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.	
Subject Specific Vocabulary			
5.	Low Income Country (LIC) and High Income Country (HIC)	This subdivision of countries is based on the World Bank income classifications (GNI per capita), which in 2013 were Low Income \$1045 or below, and High Income \$12746 or above.	
6.	Newly Emerging Economies (NEEs)	Countries that have begun to experience higher rates of economic development, usually with higher levels of industrialisation. They differ from LICs in that they no longer rely primarily on agriculture, have made gains in infrastructure and industrial growth, and are experiencing increasing incomes and high levels of investment, e.g. Brazil, Russia, China and South Africa.	
7.	Hazard Risk	The probability or chance that a natural hazard may take place.	
8.	Natural Hazard	A natural event (for example an earthquake, volcanic eruption, tropical storm, flood) that threatens people or has the potential to cause damage, destruction and death.	
9.	Earthquake	A sudden or violent movement within the Earth’s crust followed by a series of shocks.	
10.	Immediate Responses	The reaction of people as the disaster happens and in the immediate aftermath.	
11.	Long-term Responses	Later reactions that occur in the weeks, months and years after the event.	
12.	Monitoring	Recording physical changes, such as earthquake tremors around a volcano, to help forecast when and where a natural hazard might strike.	
13.	Plate Margin	The margin or boundary between two tectonic plates.	



GEOGRAPHY - YEAR 9 - M2 Paper 1: The Challenge of Natural Hazards			RAG
14.	Planning	Actions taken to enable communities to respond to, and recover from, natural disasters, through measures such as emergency evacuation plans, information management, communications and warning systems.	
15.	Prediction	Attempts to forecast when and where a natural hazard will strike, based on current knowledge. This can be done to some extent for volcanic eruptions (and tropical storms), but less reliably for earthquakes.	
16.	Primary Effects	The initial impact of a natural event on people and property, caused directly by it, for instance the ground buildings collapsing following an earthquake.	
17.	Protection	Actions taken before a hazard strikes to reduce its impact, such as educating people or improving building design.	
18.	Secondary Effects	The after-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale, for instance fires due to ruptured gas mains resulting from the ground shaking.	
19.	Tectonic Hazard	A natural hazard caused by movement of tectonic plates (including volcanoes and earthquakes).	
20.	Tectonic Plate	A rigid segment of the Earth's crust which can 'float' across the heavier, semi-molten rock below. Continental plates are less dense, but thicker than oceanic plates.	
21.	Volcano	An opening in the Earth's crust from which lava, ash and gases erupt.	
22.	Economic Impact	The effect of an event on the wealth of an area or community.	
23.	Environmental Impact	The effect of an event on the landscape and ecology of the surrounding area.	
24.	Extreme Weather	This is when a weather event is significantly different from the average or usual weather pattern, and is especially severe or unseasonal. This may take place over one day or a period of time. A severe snow blizzard or heat wave are two examples of extreme weather in the UK.	
25.	Global Atmospheric Circulation	The worldwide system of winds, which transports heat from tropical to polar latitudes. In each hemisphere, air also circulates through the entire depth of the troposphere which extends up to 15 km.	
26.	Immediate Responses	The reaction of people as the disaster happens and in the immediate aftermath.	



GEOGRAPHY - YEAR 9 - M2			RAG
Paper 1: The Challenge of Natural Hazards			
27.	Long-term Responses	Later reactions that occur in the weeks, months and years after the event.	
28.	Management Strategies	Techniques for controlling, responding to, or dealing with an event.	
29.	Primary Effects Tropical Storms	The initial impact of a natural event on people and property caused directly by it, for instance buildings being partially or wholly destroyed by a tropical storm.	
30.	Secondary Effects Tropical Storms	The after-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale, for instance impact on access to potable water can lead to spread of disease.	
31.	Social Impact	The effect of an event on the lives of people or community.	
32.	Tropical Storm (Hurricane, Cyclone, Typhoon)	An area of low pressure with winds moving in a spiral around the calm central point called the eye of the storm. Winds are powerful and rainfall is heavy.	
Climate Change- Subject Specific Vocabulary			
33.	Adaptation	Actions taken to adjust to natural events such as climate change, to reduce potential damage, limit the impacts, take advantage of opportunities, or cope with the consequences.	
34.	Climate Change	A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature.	
35.	Mitigation	Action taken to reduce or eliminate the long-term risk to human life and property from natural hazards, such as building earthquake-proof buildings or making international agreements about carbon reduction targets.	
36.	Orbital Changes	Changes in the pathway of the Earth around the Sun.	
37.	Quaternary Period	The period of geological time from about 2.6 million years ago to the present. It is characterized by the appearance and development of humans and includes the Pleistocene and Holocene Epochs.	



HISTORY - YEAR 9 - M2			RAG
Paper 1: Crime and Punishment in Britain 1000-present			
1.	Puritan Moral Laws 1650s	Laws brought in by Oliver Cromwell based on religious teachings, e.g. no sports on Sundays, no traditional celebration of Christmas.	
2.	Vagabond	A homeless, unemployed person.	
3.	Reasons for Vagabondage Becoming a Crime	Rich/poor divide; rising population; high unemployment in 16 th century; high food prices; printed pamphlets that spread hysteria about the number of vagabonds.	
4.	1547 Vagrancy Act	Any ‘able-bodied’ vagabond could be punished by branding with a letter v and sold into slavery for 2 years. Withdrawn after 2 years.	
5.	1597 Act for Relief of the Poor	Vagabonds are to be whipped and have their ears burnt with hot iron.	
6.	1601 Poor Laws	Makes a distinction between deserving and undeserving poor.	
7.	Deserving Poor	Old, sick and children.	
8.	Undeserving Poor	‘Able-bodied’ workers who are seen as lazy.	
9.	Game Act 1671	First law change to combat the rise of poaching.	
10.	Hue and Cry 1500-1700	They were no longer used in towns, still used in rural areas. The hue and cue was gone by the end of the period.	
11.	Tithings 1500-1700	They were no longer used in towns, still used in rural areas. The tithings was gone by the end of the period.	
12.	Town Constables	Same job title, but their role increases in this period. They are semi-professional and locally based. They have to arrest suspects, take criminals to court, break up fights, round up vagabonds and organise road repairs.	
13.	Night Watchmen	Same medieval job title, but a much bigger role. Every male in the town has to do this job. They are unpaid. They have another day job. They patrol between 10pm and dawn with a lamp and a bell.	
14.	Thief Takers	New to this period. They claim rewards for catching criminals or returning stolen property. Some are just criminals themselves.	
15.	Jonathan Wild	A famous criminal thief taker, who was caught and hanged.	
16.	Use of the Army	In this period, the army is used to put down rebellions and keep law and order. People become scared of absolutist monarchs.	
17.	Absolutist Monarchs	Monarchs (kings or queens) who hold all the power in a country and rule alone, and who often use this power harshly.	
18.	What Changes about Trials in this Period?	Justices of the Peace still control courts in local areas - they still are noblemen with little or no legal training.	
19.	Quarter Sessions	Courts that started in 1388 but were used a lot in the early modern period.	



HISTORY - YEAR 9 - M2			RAG
Paper 1: Crime and Punishment in Britain 1000-present			
20.	The Bloody Code	From 1688, there was a vast increase in the number of capital offences, even for minor crimes such as stealing. In 1688 there were 50 capital offences.	
21.	What Stays the Same about Punishments in 1500-1700?	Fines, corporal punishment - stocks and pillory, whipping and maiming. Capital punishment - hanging.	
22.	Bridewell Prison & Houses of Correction	A new use of prisons (named after the Bridewell Royal Palace which was converted). Used for vagabonds and prostitutes.	
23.	Carting	The criminal is tied to a cart and then dragged through the town by a horse. This is a show of public humiliation.	
24.	Debtors Prison	A new use of prisons - if you cannot pay your debts, you can be sent to prison instead.	
25.	Have Attitudes to Punishment Changed 1500-1700?	Not really, they are still dominated by harsh concepts such as retribution and deterrent. Most punishments are about humiliating and hideous public punishment.	
26.	Transportation	Starting in James I's reign, sending convicted criminals to colonies rather than prison. 50-80000 convicts were sent to North America before 1776. Sentences were 7 or 14 years. Convicts were freed after this, but often could not afford the cost of returning home.	
27.	Why was transportation used?	A chance to reform, rather than retribution by means of execution. Colonies needed populating. Still removes criminals from society.	
Industrial period 1700-1900			
28.	Do Crimes Change their Importance between 1700-1900?	Treason still most serious crime possible but less common. Theft still most common crime. Vagabondage remains a crime. There is a <u>perception</u> that crime is on the increase in this period.	
29.	Were any Crimes Viewed as Less or More Important between 1700-1900	Punishment for witchcraft changes and effectively disappears in 1735. Punishment for poaching, smuggling and highway robbery started at the end of the last period but became more common in this period.	
30.	Smuggling	Sneaking in luxury goods into the country to avoid paying import tax (known as customs and excise, or duties - like duty free).	
31.	Why did Smuggling Increase?	The government increased duties on luxury items e.g. tea, wine, spirits and silk to pay for wars. Seen as a social crime because people can get cheap luxuries.	
32.	Hawkhurst Gang	A famous, violent, organised gang of smugglers who operated in the Poole area.	



HISTORY - YEAR 9 - M2			RAG
Paper 1: Crime and Punishment in Britain 1000-present			
33.	Why was Smuggling Hard to Combat?	Ineffective customs forces; long coast lines; social crime effect means there are people willing to hide/give alibis to smugglers and their goods.	
34.	Why did Smuggling Decrease?	1780s tax duties decrease. Robert Peel also reduces them further.	
35.	Highway Robbery	Stopping coaches and forcing people to give up their possessions. Often violent. A problem from 1640s, most serious between 1680 and 1800.	
36.	Dick Turpin	Famous highwayman with reputation for adventurous ride robberies in record time.	
37.	George Duval	Famous highwayman with reputation as dashing gentleman who danced with his lady victims before robbing them.	
38.	Why did Highway Robbery Increase?	Increased wealth; solitary travel; poor quality roads; ineffective banking systems; availability of horses and guns; poverty; lots of demobilised soldiers with no work.	
39.	Why did Highway Robbery Decline?	Stagecoaches with armed guards begin; growth of towns and improvements on roads; better control of inns and their licensing laws; mounted patrols around London; effective banking develops.	
40.	Poaching	Another ‘social crime’, hunting animals/catching fish on land that is not yours.	
41.	Why did Poaching Increase?	Enclosure; growth in poverty; rising food prices.	
42.	Black Act 1723	Make poaching a capital offence (part of the Bloody Code).	
43.	Tolpuddle Martyrs, 1834	A group of farm workers who are arrested for taking an illegal oath when trying to start a trade union. Fear of popular uprising against the gentry after the Napoleonic wars. Economic depression after Napoleonic wars harms workers’ rights. Martyrs are transported. Public outcry means they are pardoned in 1836 and returned to UK in 1837-9.	
44.	Change in Transportation	1776 America declares independence. Britain starts sending convicts to Australia from 1786. Transportation used more often - 160,000 transported (60% women).	
45.	Why did Transportation Decline?	Australia becoming hostile to Britain’s continued use of Australia as a penal colony (a colony where prisoners are sent); prisons improving at home; better ideas about reformation as purpose of punishment; high cost - £500,000 a year; 1851 gold rush made people want to go to Australia voluntarily.	

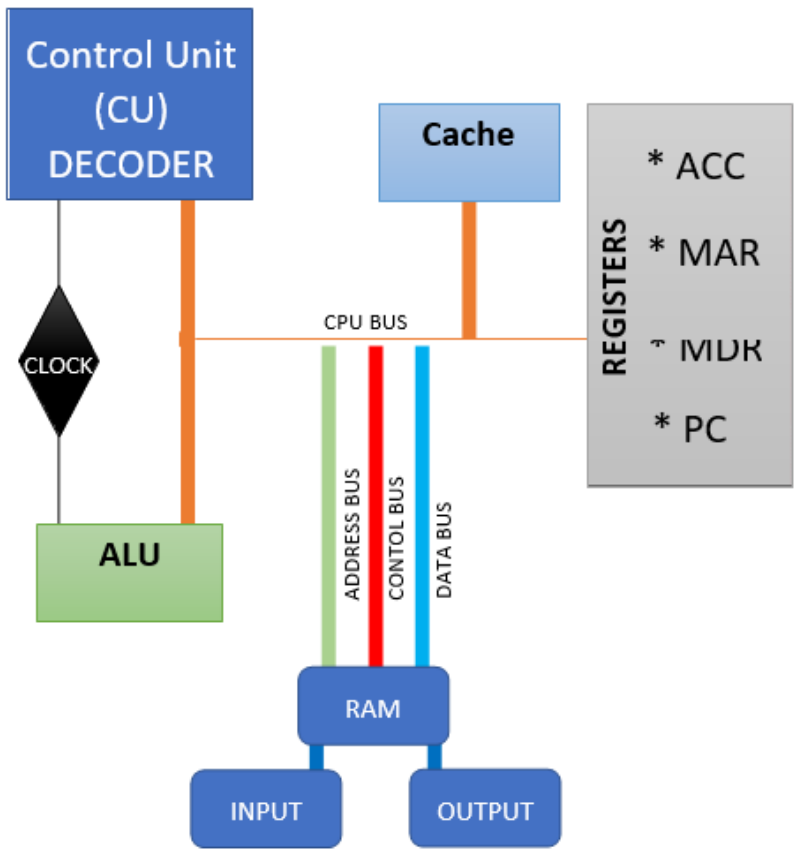


BUSINESS STUDIES - YEAR 9 - M2			RAG
Marketing			
1.	Market Research	Finding out what potential customers might want and need and are willing to pay, also what they like and don't like.	
2.	Primary Research	Questionnaire - a set of questions asked to a group of respondents. Survey - a way to find out what people want. Focus group - a small targeted group of people. Observation - watching people to find out what they do.	
3.	Secondary Research	Internet - online way to find information often using search engines. Social media - interactive ways to find out what people like or want. Published literature - the written word could be in the form of books. Government publication - data found out by govt and published. Journals - specific magazines related to certain topics.	
4.	Marketing Mix	Product - what the business is selling. Price - how much the business is selling the product/service for. Promotion - how the business will get the message to customers. Place - where the product will be sold. People - those persons involved with the selling of a product. Process - the systems and processes that deliver the product to customers. Physical environment - what the customer experiences.	
5.	Boston Matrix	Cash cow - high market share with low market growth - steady earner. Dog - low market share, low market growth, get rid of these. Star - high market share, high market growth, generate high income. Problem child - low market share, high market growth - should you continue?	
6.	Product Life Cycle	Introduction - product launched into market. Growth - sales start to increase. Saturation - sales at maximum level. Decline - sales start to decline.	
7.	Market Segmentation	Splitting your target market into groups. Demographics - segment by age, gender, race, religion. Geographics - segment by where people live. Psychographics - segment by what people are interested in. Socio economic group - segment by income level and education.	
8.	Market	A place where buyers and sellers come together.	
9.	Target Market	Your ideal people that you wish to sell your products or services to.	

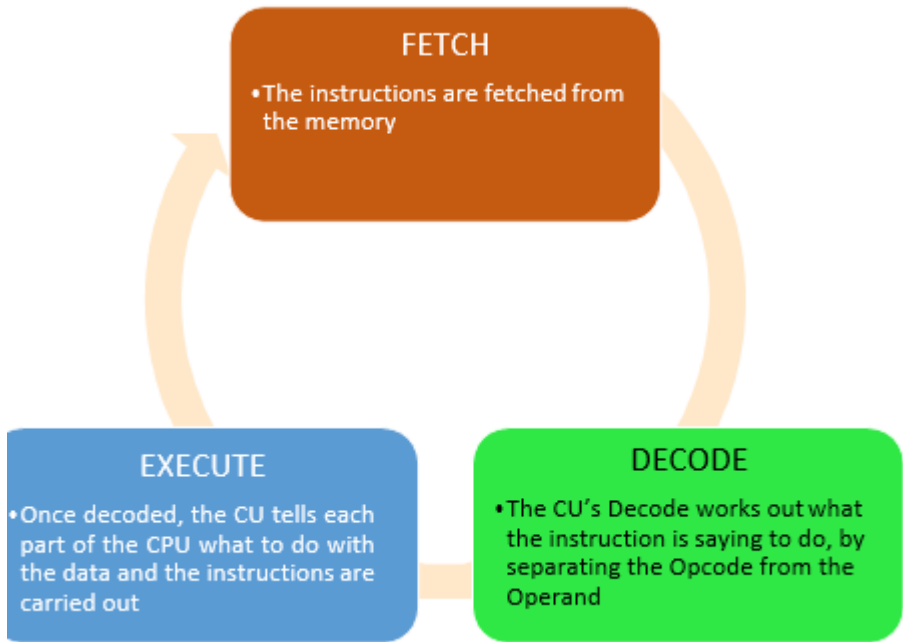


BUSINESS STUDIES - YEAR 9 - M2			RAG
Marketing			
10.	Sampling	A way of selecting a group of whom you will carry out your research. Cluster - divide population into separate groups. Convenience - drawing on people that are close to hand. Stratified - select a sample representative of different groups. Quota - picking a set number of people e.g. 20 men Random - choosing people without thinking.	
11.	Pricing Strategies	Penetration - low price to start to get product into the market. Skimming - high price initially to recoup some costs of research and development. Cost plus - what it costs to make plus a percentage mark up. Competitor - pricing similar to other products that are your competition. Psychological - pricing at a price like £9.99 just below £10.	
12.	MINTEL	Marketing Intelligence - an organisation that carries out market research for businesses and publishes the results.	
13.	Brand	An identifying mark which is used to create recognition, a company that uses a particular name.	
14.	Branding	A way to promote a particular product or company by means of advertising or distinctive design.	
15.	Logo	A symbol or other small design adopted by an organisation to identify its products.	
16.	Slogan	A short and striking or memorable phrase used in advertising.	
17.	Brand Loyalty	The tendency of some consumers to continue buying the same brand of goods rather than competing brands.	
18.	Purchase and User Types	Impulse - buys without planning to, off the cuff. Rare - buys not often, maybe yearly. Occasional - buys more frequently, maybe monthly. Medium - buys fairly frequently, maybe weekly. Heavy - buys and uses all the time i.e. daily.	
19.	Pitch	Presenting to a group or audience your product ideas.	
20.	Design Mix	A triangle which contains three aspects of design that all products need to address in the research and development stage. The design mix takes into account economic manufacture, function and aesthetics.	
21.	Quantitative Research	Research where responses can be broken down into numeric data such as how many?	
22.	Qualitative research	Research where the response gives detailed answers such as why?	



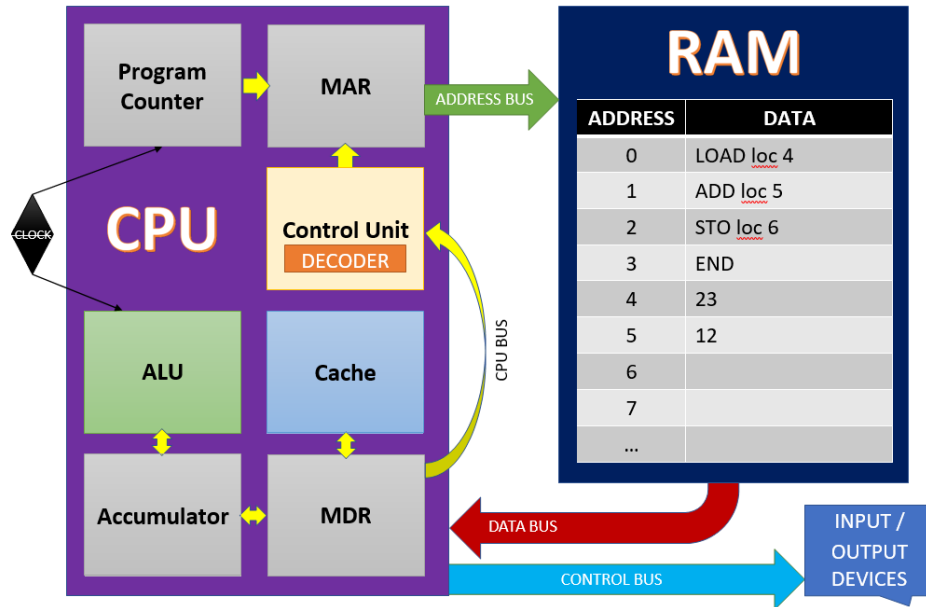
COMPUTER SCIENCE - YEAR 9 - M2			RAG
1.	CPU	<i>Central Processing Unit</i> - The “brain” of the computer.	
2.	CU	<i>Control Unit</i> - Part of the CPU that manages the functions of all other parts of the CPU.	
3.	Decoder	Part of the CU which decodes the binary instructions fetched from memory.	
4.	RAM	<i>Random Access Memory</i> - The main volatile memory into which programs are loaded from the hard drive.	
5.	Bus	A physical connection between two elements of a computer system that allows the transfer of data.	
6.	Cache	Incredibly fast, but very expensive volatile memory used in the CPU.	
7.	MAR	<i>Memory Address Register</i> - Small, fast memory, used to store the RAM address of the next instruction.	
8.	MDR	<i>Memory Data Register</i> - Small, fast memory used to store the information collected from the RAM before processing.	
9.	PC	<i>Program Counter</i> - Keeps track of the current instruction number of the program.	
10.	Accumulator	Small, fast memory, used to keep track of the data currently being processed.	
11.	ALU	<i>Arithmetic and Logic Unit</i> - Does the basic mathematics and comparisons during processing.	
12.	Processor Architecture	 <p>The diagram illustrates the internal components of a processor. At the top left is the 'Control Unit (CU) DECODER' in a blue box. A black diamond labeled 'CLOCK' is connected to it. Below the decoder is a green box labeled 'ALU'. To the right of the decoder is a blue box labeled 'Cache'. A horizontal orange line labeled 'CPU BUS' connects the decoder, cache, and a grey box labeled 'REGISTERS'. The registers box lists: '* ACC', '* MAR', '* MDR', and '* PC'. Below the CPU BUS are three vertical lines: a green line labeled 'ADDRESS BUS', a red line labeled 'CONTROL BUS', and a blue line labeled 'DATA BUS'. These three lines connect to a blue box labeled 'RAM'. Below the RAM are two blue boxes labeled 'INPUT' and 'OUTPUT'.</p>	
13.	Bridge (North South)	Junctions on a motherboard where the bus connections are controlled and routed. Northbridge deals with core functions whilst the southbridge deals with the peripherals, input and output devices and secondary storage.	



COMPUTER SCIENCE - YEAR 9 - M2			RAG
14.	von Neumann Architecture	The method used by all modern computers to allow the programming of a machine to be changed depending on the required function.	
15.	Fetch/Decode/Execute Cycle	Basis of the von Neumann architecture - the repeated process where instructions are fetched from RAM, decoded into tasks and data and carried out.	
16.			
17.	Clock Speed	The number of FDE cycles that a CPU can carry out per second. Measured in GHz (1 GHz = 10^9 cycles per second or 1,000,000,000hz).	
18.	Cores	Some processors have multiple CPUs which can work in parallel, sequentially or can multitask. Dual and quad cores are common in modern PCs.	
19.	Machine Code	A program, stored in binary, that the CPU undertakes the FDE cycle on. All programs must be in machine code to work.	
20.	Instruction	A single line of machine code containing the command and data location on which it is to be executed. Stored in binary.	
21.	Opcode	The first part of the instruction is the command.	
22.	Operand	The second part of the instruction is the data on which to carry out the command. This may be actual data stored in binary form or a memory location reference of where to find the data.	
23.	Little Man Computer	A Little Man Computer (LMC) is a simulator which has many of the basic features of a modern computer that uses the von Neumann architecture (including CPU and RAM).	



24. Processor Architecture



CREATIVE ARTS - YEAR 9 - M2			RAG
1.	Collage	A piece of art made by sticking various different materials, such as photographs and pieces of paper or fabric, on to a backing.	
2.	Paper Cut	A piece of art made by cutting into paper with a craft knife (Rob Ryan's work is an example of this).	
3.	Line Drawing	A drawing using an outline only.	
4.	Print Making	The activity or occupation of making pictures or designs by printing them from specially prepared plates or blocks.	
5.	Embroidery	Decorated with patterns sewn on with thread.	
6.	Stencil	A thin sheet of card, plastic or metal with a pattern or letters cut out of it, used to produce the cut design on the surface below by the application of ink or paint through the holes.	
7.	Identity	The fact of being who or what a person or thing is.	
8.	Portrait	A painting, drawing, photograph or engraving of a person, especially one depicting only the face or head and shoulders.	
9.	Self Portrait	A portrait that an artist produces of themselves.	
10.	German Expressionism	German expressionism was an early twentieth century German art movement that emphasized the artist's inner feelings or ideas over replicating reality. This was characterised by simplified shapes, bright colours and gestural marks or brushstrokes.	
11.	Expressionism	Expressionism refers to art in which the image of reality is distorted in order to make it expressive of the artist's inner feelings or ideas.	
12.	Mood Board	A collection of images, such as market research, inspirational images and colour palettes, that shows a concept and gives a designer's work direction.	
13.	Annotations	Written explanation and evaluation of your work.	
14.	Artists Analysis	Analysing an artist's work. Discussing what an artist's work is about and how it could influence your own project.	
15.	Health and Safety	The process by which you ensure you use tools and processes safely.	
16.	Mounting	Presenting your work professionally by framing art work with black paper.	
17.	Symbolic	Involving the use of symbols or symbolism.	
18.	Denotes	Be a sign of; indicate.	
19.	Derives	To receive or obtain from a source or origin.	
20.	Analyse	Examine (something) methodically and in detail, typically in order to explain and interpret it.	
21.	Connotation	An idea or feeling which a word invokes for a person in addition to its literal or primary meaning.	
22.	Semiotics	The study of signs and symbols and their use or interpretation.	



CREATIVE ARTS - YEAR 9 - M2			RAG
23.	Symbolizes	Represent by means of symbols.	
24.	Suggestive	Tending to suggest an idea.	
25.	A01	Develop ideas through investigations, demonstrating critical understanding of sources.	
26.	A02	Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.	
27.	A03	Record ideas, observations and insights relevant to intentions as work progresses.	
28.	A04	Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.	
29.	Final Outcome	A piece of work made at the end of a project.	
30.	Theme	A topic selected for artistic representation. Themes are open to different interpretations and relate to what the piece is about rather than the specific things it shows.	
31.	Experimentation	Experimentation with different materials, processes and ideas.	
32.	Development	Developing ideas, experiments and responses to project theme.	
33.	Mono-printing	Mono-printing is a form of printmaking that has images or lines that can only be made once, unlike most printmaking, where there are multiple originals.	
34.	Cold Colours	Cold colours are blues, greens and purples. They give an impression of calm and create a soothing impression.	
35.	Colour Wash	A term used to describe the transparent layers of colour in a watercolour.	
36.	Contrast	The difference in colour found between the light and dark parts of an image.	
37.	Monochromatic	Having only one colour in a piece of work.	
38.	Tint	A colour is made lighter by adding white.	
39.	Contours	The imaginary lines that make the shape of an object.	
40.	Modroc	Plaster bandage that is used for modelling, casting and crafting.	




DRAMA - YEAR 9 - M2			RAG
	Plot of Othello		
1.	Plot of Othello	<p>Othello marries Desdemona in secret. Othello is then sent to defend Cyprus against the Turks. Cassio, Othello's lieutenant, arrives in Cyprus, followed by Iago and Desdemona and then by Othello. Cassio becomes angry, and attacks Montano, the Cyprus governor. Othello is roused, and removes Cassio from office. Iago advises Cassio to work his way back into Othello's affections by speaking to Desdemona.</p> <p>Iago hints at Cassio's role in the infidelity. Emilia finds a handkerchief that Desdemona has dropped and passes it to Iago. Othello's jealousy grows and he asks Iago to prove his suspicions.</p> <p>Bianca appears with the handkerchief and returns it to Cassio. This enrages Othello and he hits Desdemona, much to the dismay of his kinsman Lodovico who has arrived from Venice with letters ordering Othello to return. Othello asks Emilia about Desdemona's unfaithfulness but she denies any knowledge of it. He then accuses Desdemona to her face, leaving her distraught.</p> <p>Iago convinces Roderigo that Cassio must die to keep Desdemona in Cyprus. Roderigo attacks Cassio but is wounded by him. Iago wounds Cassio. Hearing Cassio's cries, Othello thinks Iago has killed him and leaves to deal with Desdemona. Iago then kills Roderigo. Othello kills Desdemona, strangling her in her bed. Emilia discovers her body and tells Othello that she was innocent and that Iago had lied to him; she is stabbed and killed by Iago. Letters are revealed telling of Iago and Roderigo's plot to kill Cassio. Othello, realising Desdemona was innocent, laments, then stabs Iago but only wounds him. Lodovico gives Cassio power to rule in Cyprus and is about to arrest Othello, when Othello commits suicide.</p>	
	Characters of Othello		
2.	Othello	The play's protagonist and hero. A Christian Moor and general of the armies of Venice, Othello is an eloquent and physically powerful figure, respected by all those around him.	
3.	Desdemona	While in many ways stereotypically pure and meek, Desdemona is also determined and self-possessed. She is equally capable of defending her marriage, jesting bawdily with Iago and responding with dignity to Othello's incomprehensible jealousy.	





DRAMA - YEAR 9 - M2			RAG
4.	Iago	The villain of the play. While his ostensible reason for desiring Othello's demise is that he has been passed over for promotion to lieutenant, Iago's motivations are never very clearly expressed and seem to originate in an obsessive delight in manipulation and destruction.	
5.	Cassio	Othello's lieutenant. Cassio is a young and inexperienced soldier, whose high position is much resented by Iago. Iago uses Cassio's youth, good looks and friendship with Desdemona to play on Othello's insecurities about Desdemona's fidelity.	
6.	Emilia	Iago's wife and Desdemona's attendant. A cynical, worldly woman, she is deeply attached to her mistress and distrustful of her husband.	
7.	Roderigo	A jealous suitor of Desdemona. Young, rich and foolish, Roderigo is convinced that if he gives Iago all of his money, Iago will help him win Desdemona's hand. Repeatedly frustrated as Othello marries Desdemona and then takes her to Cyprus, Roderigo is ultimately desperate enough to agree to help Iago kill Cassio after Iago points out that Cassio is another potential rival for Desdemona.	
Performance Mark Scheme			
8.	Limited Contribution to Performance: 1-5	<ul style="list-style-type: none"> Narrow range of skills are demonstrated. Skills are deployed uncertainly with little effectiveness. Personal interpretation lacks appropriateness for the play as a whole. Personal interpretation lacks sensitivity to context. Artistic intentions are achieved to a minimal extent. 	
9.	Reasonable Contribution to Performance: 6-10	<ul style="list-style-type: none"> Fair range of skills are demonstrated. Skills are deployed with care and effectiveness in places. Personal interpretation has some relevance to the play as a whole. Personal interpretation is sensitive to context in places. Artistic intentions are partly achieved. 	
10.	Good Contribution to Performance: 11-15	<ul style="list-style-type: none"> Wide range of skills are demonstrated. Skills are deployed confidently and in a mostly effective way. Personal interpretation exhibits a good degree of appropriateness to the play as a whole. Personal interpretation exhibits a good degree of sensitivity to context. Artistic intentions are mostly achieved. 	



DRAMA - YEAR 9 - M2			RAG
11.	Excellent Contribution to Performance: 16-20	<ul style="list-style-type: none"> • An extensive range of skills are demonstrated. • Skills are deployed precisely and in a highly effective way. • Personal interpretation is entirely appropriate to the play as a whole. • Personal interpretation is highly sensitive to context. • Artistic intentions are entirely achieved. 	
Words in Performance			
12.	Delivery of Lines	How an actor says their words to get their point across. They need to consider tone of voice, intonation, speed and volume.	
13.	Juxtaposition	If you juxtapose two contrasting objects, images or ideas, you place (or describe) them together, so that the differences between them are emphasized.	
14.	Duologue	Two actors on stage performing together.	
15.	Motivation	In performance, the actors must move around to stop the piece being still. They must therefore find a reason for their character to move.	
16.	Live Music	Use of a band or singing in a performance, which is not recorded.	
17.	Monologue	A speech made by one actor. It can be directly addressed to the audience (breaking the fourth wall) or spoken to another character on stage.	
18.	Ensemble	An approach to acting that aims for a unified effect achieved by all members of a cast working together on behalf of the play, rather than emphasizing individual performances.	
19.	Flying	Set that comes down from above the stage "flies in".	
20.	Improvisation	Making a performance up on the spot with little or no information.	
Key Words in Performance			
21.	Atmosphere	The atmosphere of a performance is closely linked with everyday feelings such as pity, anger, desire or frustration.	
22.	Audience Response	How the audience react to the play as a whole, certain moments in the play or to specific characters.	
23.	Characterisation	How the actor uses his/her acting skills to show their class/age/gender as well as their emotions.	
24.	Gobo	 <p>This is a sheet inserted on a frame at the front of the light with a design cut into it. It filters the light, creating a picture effect on the stage</p>	



DRAMA - YEAR 9 - M2			RAG
25.	Flood Light	 <p>Produces a clear wide-angled light, but there's little control over the spread of the light. Coloured filters can be used with this lamp.</p>	
26.	Profile Spotlight	 <p>Give a sharply defined image in outline of any object. They are fitted with shutters which can be pushed into the light beam, shaping its appearance on stage.</p>	
27.	Lighting Technician	The lighting designer designs lighting cues. That means they decide when to move from one lighting state to the next.	
28.	Cross-fade	Occurs when one lighting state fades out whilst another is gradually faded in.	
29.	Backlight	The actors are lit from behind. Can be used to create shadows or obscure the audience's view.	



FOOD & COOKERY - YEAR 9 - M2			RAG
1.	Hospitality	The friendly and generous reception and entertainment of guests, visitors or strangers.	
2.	Catering	The provision of food and drink at a social event or other gathering.	
3.	Caterer	A business or person who arranges the preparation, delivery and presentation of food for clients.	
4.	Establishment	A place where a business or organisation operates from.	
5.	Cafeteria	All types of food and drinks on sale are displayed at a long counter.	
6.	Free-flow	Different types of food and drinks are displayed at different counters.	
7.	Multi-point	Different types of food and drinks are displayed and paid for at separate counters.	
8.	Buffet Service	Food is displayed in containers at an open counter or a central serving station. Customers pick up a plate or bowl and help themselves to food and drinks.	
9.	Fast Food	Food and drink is displayed on a menu behind the counter or on an outside screen/poster at a drive-through outlet. The customer places their order and pays at a sales point at the counter.	
10.	Seated Counter Service	Customers sit at the counter on stools and are served their food. Used in places such as sushi bars, stations and airports.	
11.	Carvery Service	Roasted meat joints are displayed on a counter and carved for customers by a chef. Customers help themselves to vegetables, sauces, etc.	
12.	Vending System	Vending machines provide hot and cold drinks, snacks and meals.	
13.	The Commercial Sector	Where a business aims to make a profit from the hospitality and catering services it provides.	
14.	Non-commercial Catering Services Sector	Where an organisation provides catering services, but does not necessarily aim to make a profit from them.	
15.	Client	A person/business/organisation using hospitality and catering services.	
16.	Non-residential	A place that provides catering and hospitality services but not accommodation for people to stay in.	
17.	Residential	A place that provides accommodation for people to stay in, as well as catering and hospitality services.	
18.	Employee	Someone who works in the industry and has an employment contract.	
19.	Employer	Someone who hires staff to work for them.	
20.	Worker	Someone who works in the industry but does not have an employment contract.	
21.	Full-time: Permanent Contract	Hours of work and start/end times are specified. Any shift work is specified. The employee qualifies for sick pay and holiday pay.	



FOOD & COOKERY - YEAR 9 - M2			RAG
22.	Part-time: Permanent Contract	Days of the week and hours of work and start/end times are specified. The employee qualifies for reduced sick pay and reduced holiday pay.	
23.	Casual Work	Seasonal or available through an agency, e.g. to cover someone who is away from work due to illness. The worker does not qualify for sick pay or holiday pay.	
24.	Tips and Gratuities	Money given to someone by a customer as a way or saying 'thank you' for good service.	
25.	Service Charges	A percentage added to a customer's bill to reward the employees who have provided the customer with a service.	
26.	Bonus Payments and Rewards	Given by some employers as a way of rewarding their hard work throughout the year and helping to make the business successful.	
27.	Gross Profit	The difference between how much the ingredients cost and how much a menu item is sold for.	
28.	Gross Profit Percentage	The profit made as a percentage of the selling price of a dish.	
29.	Net Profit	What is left from the gross profit after all the costs of running a restaurant (wages, heating, lighting, rent, etc.) have been paid.	
30.	Climate Change	Changes in the Earth's temperature that can lead to unusual and extreme weather conditions.	
31.	Fossil Fuels	Fuels such as coal, oil and gas that were created over millions of years by fossilised plants and animals.	
32.	Greenhouse Gases	These form an insulating layer around the earth's atmosphere, which traps heat and raises the Earth's temperature.	
33.	Non-renewable Energy	Energy provided from fossil fuels that cannot be renewed once they are used up.	
34.	Sustainable Diet	A diet consisting mostly of plant foods, which has a minimal impact on the environment during its production.	
35.	Covers	Customer food orders that are sent to the kitchen.	
36.	FIFO	First in, first out - using food stocks in rotation.	
37.	Workflow	The way food passes through the kitchen from delivery to the dining room.	
38.	Large Equipment	Ovens, cooking ranges, walk in freezers and refrigerators, steamers, grills, floor-standing mixers and processors, deep fat fryers, blast chiller.	
39.	Mechanical Equipment	Mincer, food processor, mixer, vegetable peeler, dough mixer, dishwasher.	
40.	Small Hand-held Utensils and Equipment	Bowls, jugs, pans, whisks, spatulas, knives, chopping boards, sieves, food temperature, probes.	



HEALTH AND SOCIAL CARE - YEAR 9 - M2 Communication			RAG
1.	Interpersonal	Between 2 people.	
2.	Relationships	The way in which two or more people or groups regard and behave towards each other.	
3.	Personal Space	A personal bubble that you carry around you and people invading this could cause stress.	
4.	Respect Cultural Differences	Understanding that people behave differently based on their values and this should be accepted and tolerated.	
5.	Active Listening	Fully concentrating on what is being said rather than just passively 'hearing' the message of the speaker.	
6.	Barriers to Communication	Things that can get in the way of effective communication.	
7.	Patronising Language	To talk (to someone) in a way that shows that you believe you are more intelligent or better than other people.	
8.	Tiredness	When your energy levels affect how you communicate.	
9.	Inappropriate use of Language	Language which is unsuitable to use in certain situations.	
10.	Inappropriate use of Body Language	Body language which is unsuitable to use in certain situations e.g. closed.	
11.	Speech Difficulties	Unable to speak clearly so communication is hindered.	
12.	Disability	A physical or mental condition that limits a person's movements, senses or activities.	
13.	Dementia	A chronic or persistent disorder of the mental processes caused by brain disease or injury. This is marked by memory disorders, personality changes and impaired reasoning.	
14.	Deafness	Unable to hear what is being said so having to use another form of communication.	
15.	Speech and Language Therapy	Many children take longer to develop a range of speech sounds and need some help with their unclear speech.	
16.	Adapting the Environment	Changing the environment to suit an individual's needs.	
17.	Calm Tone	Not displaying worry or fear in your voice.	
18.	Staff Training	To provide staff with the knowledge and necessary skills to complete their tasks effectively.	
19.	Patience	The capacity to accept or tolerate delay, problems or suffering without becoming annoyed or anxious.	
20.	Empathy	To be able to put yourself into another person's situation and understand their feelings.	
21.	Respect	A feeling of deep admiration for someone or something elicited by their abilities, qualities or achievements.	
22.	Willingness	The quality or state of being prepared to do something.	
23.	Cheerfulness	The quality or state of being noticeably happy and optimistic.	



John 10:10

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



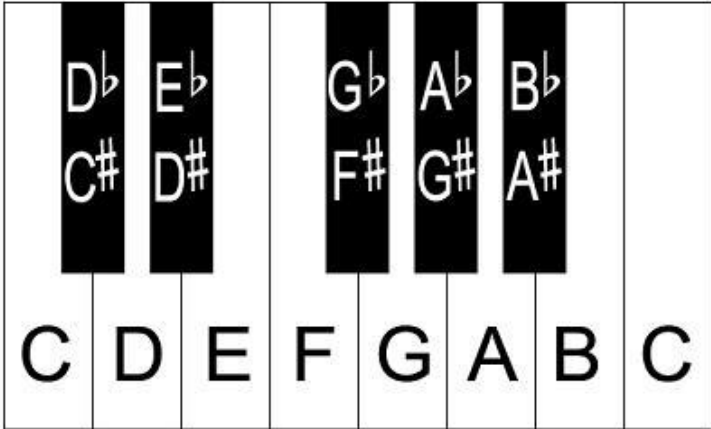
Sapere Aude

MUSIC - YEAR 9 - M2			RAG
1.	Monophonic	Having a single line of melody.	
2.	Homophonic	Having a melody with an accompaniment.	
3.	Polyphonic	Having multiple melodic lines simultaneously.	
4.	Heterophony	The simultaneous variation of a single melodic line.	
5.	Unison	Two or more musical parts sounding the same pitch, usually at the same time.	
6.	Octaves	All voices or instruments are singing or playing the same melodic line.	
7.	Solo	One performer.	
8.	Duet	Two performers.	
9.	Call & response	A form of interaction between a speaker and an audience in which the speaker's statements ("calls") are punctuated by responses from the listeners.	
10.	Imitation	The repetition of a melody in a polyphonic texture shortly after its first appearance in a different voice.	
11.	Ground Bass	A repeated bass pattern especially in baroque music 1750 onwards.	
12.	Rondo Form	ABACADAE etc.	
13.	Variations	Theme played in altered forms.	
14.	Ternary	Aba form.	
15.	12 Bar Blues	Jazz with the chord sequence I I I I IV IV I I V IV I V.	
16.	Minuet and Trio	A common form used in classical music and composition.	
17.	Repetition	Music repeated unchanged.	
18.	Recapitulation	The return of the opening passage towards the end of a piece.	
19.	Decoration	Ornaments and additional notes added to melody.	
20.	Sequence	A phrase repeated higher or lower in pitch.	
21.	Imitation	Voices and instruments copying one another usually after a short gap.	
22.	Strophic form	Verse and chorus ABABABA etc.	
23.	Ritornello	A recurring sequence in baroque music (played tutti).	
24.	Canon	A melody which can be repeated, delayed and layered over itself.	
25.	Ostinato	Repeated pattern in music.	



MUSIC - YEAR 9 - M2			RAG
26.	Riff	An ostinato in jazz and pop.	
27.	Motif	A short musical idea which can be developed.	
28.	Episode	A passage of music which moves away from the main theme.	
29.	Improvised	Made up, without notation, spontaneous.	
30.	Raga	Indian music built over a particular style.	
31.	Alap	The opening section in a raga, usually in free time and improvisatory.	
32.	Jhor	The next section in a raga where the tempo becomes more defined.	
33.	Jhala	The main and final section in a raga. Tempo increases and the table plays.	
34.	Middle Eight	A contrasting section of a pop song.	
35.	Through Composed	Starts and keeps going with little clear structure.	
36.	Grave	Slowly and solemnly	
37.	Lento	Slow	
38.	Largo	Slow and dignified	
39.	Adagio	Slow, but not as slow as largo	
40.	Adante	Moderately slow	
41.	Allegro	Moderately fast	
42.	Vivace	Lively and fast	
43.	Presto	Very fast	
44.	Accelerando	Gradually speeding up	
45.	Rallentando	Gradually slowing down	
46.	Rubato	The temporary disregarding of strict tempo to allow an expressive quickening or slackening, usually without altering the overall pace.	

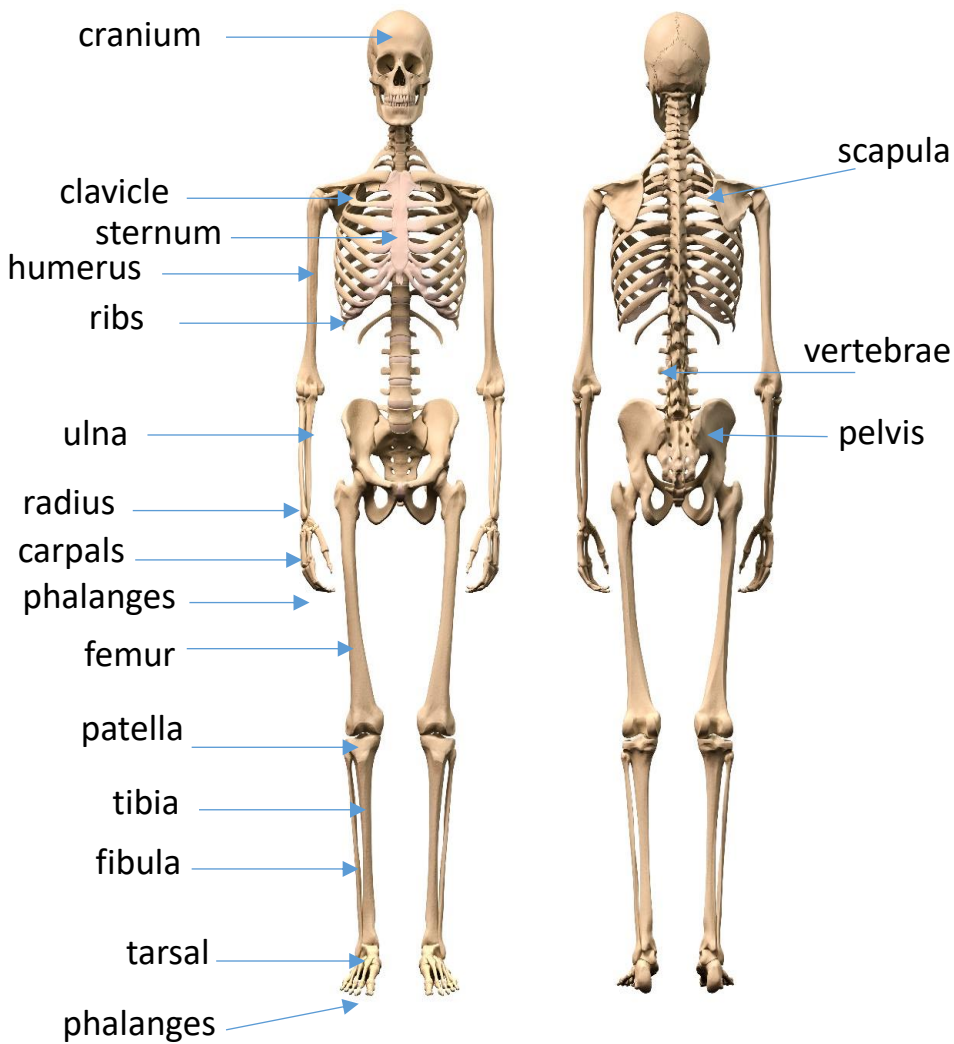


MUSIC TECH - YEAR 9 - M2 Logic Pro X			RAG
1.	MIDI	Musical Instrument Digital Interface. A standard for connecting and remotely operating electronic instruments and related devices such as computers and effects units.	
2.	Keyboard Layout		
3.	DAW	Digital Audio Workstation. Software that allows you to record, mix and produce your own music.	
4.	Plugin	A computer program designed to extend your sequencer package with extra effects, audio processing or instrumentation.	
5.	Mono	Mono or Monophonic is a signal carried on a single channel. On a stereo system the signal would be duplicated.	
6.	Panning	Placing a sound in the stereo field e.g. in the left or right speaker.	
7.	Track	In software, tracks generally contain audio and MIDI layers. There are many kinds of tracking devices e.g. multi-track software/hardware, stereo (2 track), 4 track, 8 track..., MIDI sequencing etc. Tracks are nothing more than an organising tool commonly, most sequencers allow an unlimited number of tracks within each song.	
8.	Reverb	Reverb or reverberation is the natural reflection of sounds from surfaces giving the impression of space. This can be produced electronically by reverb units emulating aspects of natural reverb.	
9.	Stereo	Stereophonic is a signal carried on two channels, left and right to represent a sound image for the human ears.	
10.	Tempo	How fast or slow a piece of music is. 60bpm (beats per minute) is a tempo of 1 beat per second.	
11.	Loop	A repeated passage. Often used to refer to samples that are imported into a sequence and repeated.	
12.	Mixing	The process of combining sounds. A master mix is the final result of the combination of all the component signals after they have been processed and combined.	
13.	FX	Short for 'effects'. Processes applied to a signal to alter its sound quality in some way, or the devices used to do so. Common effects include reverb, delay, chorus, distortion, flange and phasing.	
14.	Synthesizer	A synthesizer is a device driven by a microprocessor which contains a programmable chip. Originally, a synthesizer produced an audio signal by the direct manipulation of electrical signals.	

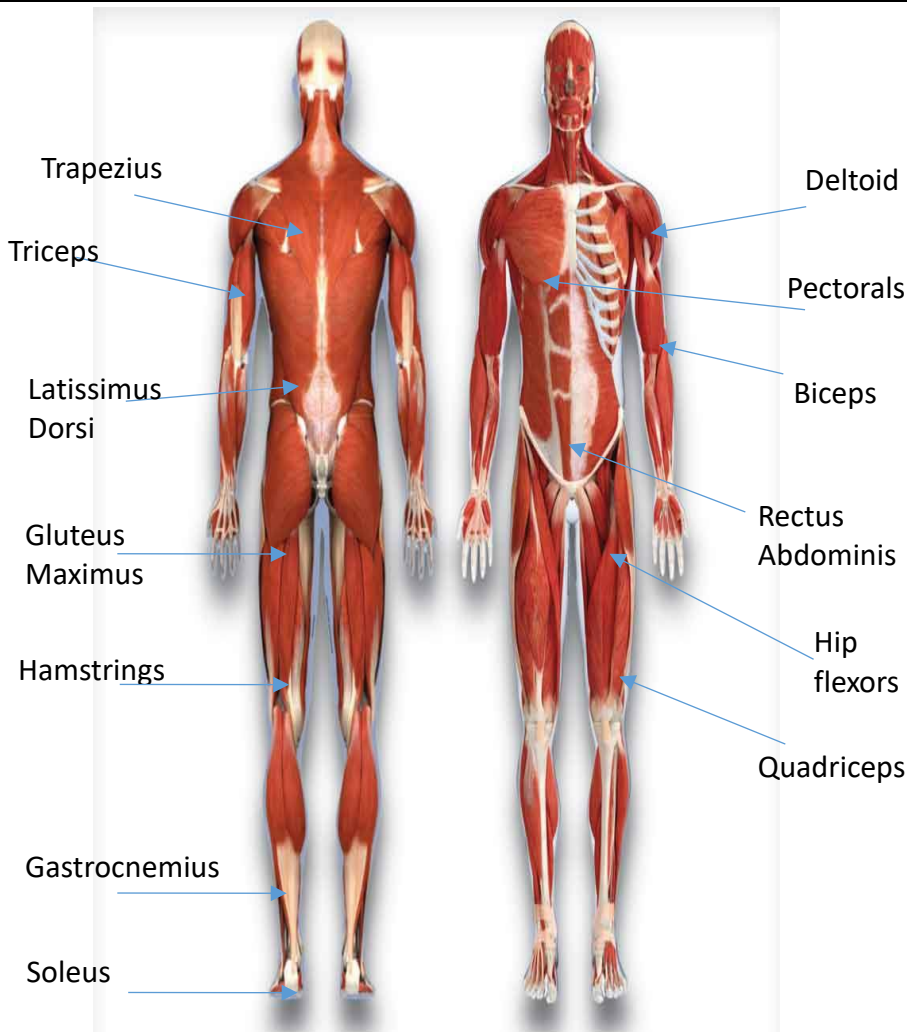


MUSIC TECH - YEAR 9 - M2 Logic Pro X			RAG
15.	Software Synthesizer	MIDI sound-generating circuitry utilises mathematical functions which alter a stream of digital numbers.	
16.	Waveform	A sound signal which has a particular shape when displayed on an oscilloscope.	
17.	WAV File	A commonly used file for storing digital audio information. More common on PC-based computers.	
18.	Sample	A sample is a short pre-recorded sound. A digital recording of a naturally occurring sound.	
19.	Sampling	Sampling is actually emulating the sound of an acoustical instrument by digitizing (converting to digital sound) the waveforms produced by the instrument. There are hardware samplers and software samplers.	
20.	Timbre	The quality of a sound that distinguishes it from other sounds of the same pitch and volume. It is the distinctive tone colour of an instrument or a singing voice.	
21.	Texture	The sound quality of a piece, dependent on features like the number of parts, the tone quality of the instruments and or voices, and the spacing between the parts.	
22.	Rhythm	The combination and patterns of different note lengths around a beat.	
23.	Metre	The patterns of the beats. Can be regular or irregular.	
24.	Silence	No sound, or pauses within the music.	
25.	Melody	The tune. A mixture of pitches and rhythms.	
26.	Harmony	The use of chords. These can either be major, minor, diminished, augmented.	
27.	Chord Progression	The basis for many songs. These are a succession of chords that follow each other that accompany the main melody or tune.	



PE - YEAR 9 - M2 Anatomy and Physiology - Skeletal and Muscular Systems			RAG
1.	Location of Bones	 <p>Diagram illustrating the location of bones in the human skeleton. The skeleton is shown from the front and back views. Labels point to the following bones:</p> <ul style="list-style-type: none"> cranium clavicle sternum humerus ribs ulna radius carpals phalanges femur patella tibia fibula tarsal phalanges scapula vertebrae pelvis 	
2.	Function of the Skeletal System	<ul style="list-style-type: none"> • Gives shape and support to the body • Allows movement • Protects vital organs • Produces blood cells • Stores minerals 	
3.	Synovial Joint	<p>Freely moveable joint</p> <p>Hinge Joint - allows flexion and extension at the knee and elbow.</p> <p>Ball and Socket - allows wide range of movement at the shoulder and hip.</p>	



PE - YEAR 9 - M2 Anatomy and Physiology - Skeletal and Muscular Systems			RAG
4.	Types of Movement at Joints	<p>Flexion - decrease in angle around a joint - preparing to pass a ball in netball/football.</p> <p>Extension - increasing the angle around a joint - execution phase of passing a netball/football.</p> <p>Abduction - movement of the body away from the middle of the body - block in volleyball.</p> <p>Adduction - movement towards the middle of the body - tackle in rugby.</p> <p>Rotation - bone turns about its longitudinal axis - pirouette in dance.</p> <p>Circumduction - is a combination of abduction and adduction (circular motion) - bowling in cricket.</p>	
5.	Components of a Joint	<p>Ligaments - attach bone to bone (tissue), assist with stability.</p> <p>Cartilage - connective tissue reduces friction and acts as a shock absorber.</p> <p>Tendons - connect muscle to bone allow movement.</p>	
6.	Location of Muscles	 <p>The image displays two anatomical diagrams of a human figure, one from the front (anterior) and one from the back (posterior), showing the muscular system. Labels with arrows point to specific muscles on both views.</p> <p>Back View Labels: Trapezius, Triceps, Latissimus Dorsi, Gluteus Maximus, Hamstrings, Gastrocnemius, Soleus.</p> <p>Front View Labels: Deltoid, Pectorals, Biceps, Rectus Abdominis, Hip flexors, Quadriceps.</p>	
7.	Function of the Muscular System	<ul style="list-style-type: none"> • Produces movement • Either shorten, lengthen or remain the same length 	



PE - YEAR 9 - M2			RAG
Anatomy and Physiology - Skeletal and Muscular Systems			
8.	Antagonistic Pairs	Muscles that work together to contract and relax. Bicep curl - bicep and tricep Agonist - working muscle that contracts to produce movement (bicep) Antagonist - working muscle that relaxes, opposite to the agonist (tricep) Fixator - Muscle that stabilises the agonist muscle (scapular)	
9.	Short Term Effects on Muscular System	Increase in muscle temperature Build-up of lactic acid	
10.	Long Term Effects on the Muscular System	Muscular hypertrophy Increase in muscular endurance Increase in muscular strength Increase in flexibility Increase in tolerance of lactic acid Muscles can work harder for longer	
11.	Synergist	Muscle which actively helps the agonist to produce movement. It also prevents any undesired movements.	
12.	Origin	The end of a muscle that is attached to a bone that is stable. E.g. the scapula when performing a bicep curl.	
13.	Insertion	The end of a muscle that is attached to a bone that actively moves. E.g. the biceps insertion is on the radius.	
14.	Types of Muscle	Involuntary muscle: Found in the internal organs and is not under our conscious control. Cardiac muscle: This is found in the heart and is again not under our conscious control. Voluntary muscle: Used for movement and is under our own conscious control.	
15.	Muscle Contractions	Isometric: involving muscular contraction against a resistance in which the length of the muscle remains the same. Isotonic: involving muscular contraction against a resistance in which the length of a muscle changes.	



PSYCHOLOGY - YEAR 9 - M2 Research Methods Paper 1 The Brain and Neuropsychology Paper 2			RAG
1.	Plasticity	The brain can change shape and develop.	
2.	Adaptation	Brain changes in response to new experiences.	
3.	Engram	Learning leaves a trace (like a trace from a firework).	
4.	Cell Assembly	Groups of neurons that fire together will help learning.	
5.	Hippocampus	Area of the brain responsible for spatial navigation.	
6.	Scatter Diagram	To display a correlation. One co-variable on the x axis and the other on the y axis. A dot is placed where the co-variables meet.	
7.	Frequency	The number of times something happens.	
8.	Frequency Table	A systematic way to organise data in rows and columns.	
9.	Histogram	Continuous categories; no spaces between bars.	
10.	Bar Chart	Bars can be in any order.	
11.	Hebb's Theory of Learning and Neuronal growth	Learning causes synaptic connections between groups of neurons to become stronger. The groups of neurons are called cell assemblies, and the neuronal growth that occurs between these will create more efficient learning in the brain.	
12.	Objective	Based on factual evidence.	
13.	Hemispheres	Brain is divided into two halves, these are known as hemispheres (left and right hemispheres).	
14.	Cerebral Cortex	Top surface layer of the brain.	
15.	Frontal Lobe	Controls thinking, planning and also includes the motor area.	
16.	Experiment	Looks at a measureable change in the DV, caused by a change to the IV.	
17.	Laboratory Experiment	Experimenter has high control over what happens.	
18.	Field Experiment	Takes place in a natural setting. IV manipulated by the experimenter.	
19.	Natural Experiment	Takes place in a natural or lab setting. IV is not changed by the experimenter. It varies naturally.	
20.	IV and DV	Independent variable and dependent variable.	
21.	Cerebral Cortex	Thin outer layer of brain tissue that gives the brain its pinky-grey appearance. Main centre of brain's conscious awareness.	
22.	Localisation	Refers to the theory that different brain areas are responsible for specific functions and behaviours.	
23.	Broca's Area	Region of the left frontal lobe that controls the production of speech.	
24.	Wernicke's Area	In the left temporal lobe, involved in speech and understanding of language.	
25.	Interpretative Cortex	Area of the temporal lobe of the brain where interpretations of memories are stored, i.e. the emotional components of memory.	



PSYCHOLOGY - YEAR 9 - M2 Research Methods Paper 1 The Brain and Neuropsychology Paper 2			RAG
26.	Control	In an experiment, a control is used to establish a baseline to compare the results of the main experiment to.	
27.	Extraneous Variable	Any factor or variable that causes an effect (or potential effects) other than the variable being studied is considered an extraneous variable.	
28.	Hypothesis	A prediction of an outcome, i.e. there will be a difference between...	
29.	Null Hypothesis	A prediction that any difference found is due to chance, i.e. there will be no difference between...	
30.	Design	This is based around who does each condition of an experiment.	
31.	Montreal Procedure	The Montreal Procedure is a method of epilepsy surgery developed in the 1950s by Dr. Wilder Penfield. This method of surgery involves keeping the patient awake to pinpoint the source of epilepsy.	
32.	Epilepsy	Epilepsy is a common condition that affects the brain and causes frequent seizures. Seizures are bursts of electrical activity in the brain that temporarily affect how it works.	
33.	Independent Measures Design	When participants only do one condition of an experiment.	
34.	Repeated Measures Design	When participants do all conditions of an experiment.	
35.	Matched Pairs Design	When each participant is paired with someone similar and each does a different condition.	
36.	Cognitive Neuroscience	Scientific study of how biological structures, such as areas of the brain, influence or control mental processes.	
37.	Neurological Damage	Any event, such as injury or illness, which can result in neuron damage in the brain may lead to a loss of function or change in behaviour.	
38.	Order Effects	These can be practice or fatigue effects - the order that you do each condition will affect the results.	
39.	Participant Variables	Differing individual characteristics of participants in an experiment.	
40.	Counter-Balancing	If you have two groups of participants (group 1 and group 2) and two levels of an independent variable (level 1 and level 2), you would present one possible order (group 1 gets level 1 while group 2 gets level 2) first and then present the opposite order (group 1 gets level 2 while group 2 gets level 1).	



SPANISH – YEAR 9 – M2 ¡Desconéctate!			RAG
1.	Quisiera reservar...	I would like to book...	
2.	¿Hay...	Is/Are there...	
3.	wifi gratis...	free wifi...	
4.	aire acondicionado	air conditioning...	
5.	en el hotel /las habitaciones?	In the hotel/the rooms?	
6.	¿Cuánto cuesta una habitación?	How much does a room cost?	
7.	¿A qué hora se sirve el desayuno?	What time is breakfast served?	
8.	¿Cuándo está abierto(a) el/la...?	When is the...open?	
9.	¿Cuánto es el suplemento por...?	How much is the extra charged for...?	
10.	¿Se admiten perros?	Are dogs allowed?	
11.	quisiera reservar...	I would like to book...	
12.	una habitación individual/doble	a single/double room	
13.	con/sin balcón	with/without balcony	
14.	con bañera/ ducha	with a bath/shower	
15.	con cama de matrimonio	with a double bed	
16.	con desayuno incluido	with breakfast included	
17.	con media pensión	with half board	
18.	con pensión complete	with full board	
19.	con vistas al mar	with sea view	
20.	¿Para cuántas noches?	For how many nights?	
21.	Para... noches	For...nights	
22.	de viernes hasta el lunes	from Friday to Monday	
23.	¿Puede repetir, por favor?	Can you repeat please?	
24.	Puede hablar más despacio?	Can you speak more slowly?	
25.	Quiero quejarme	I want to complain	
26.	Quiero hablar con el director.	I want to talk with the manager.	
27.	Quiero cambiar de cuarto.	I want to change rooms.	
28.	el aire acondicionado...	the air conditioning...	
29.	el ascensor...	the lift...	



SPANISH – YEAR 9 – M2 ¡Desconéctate!			RAG
30.	la ducha...	the shower...	
31.	la habitación...	the room...	
32.	está sucio(a)	is dirty	
33.	la luz no funciona	the light doesn't work	
34.	Hay ratas en la cama.	There are rats in the bed.	
35.	No hay...	There is no...	
36.	necesito...	I need...	
37.	papel higiénico	toilet paper	
38.	jambón/champú	soap/shampoo	
39.	toallas/(un) secador	towels/ a hairdryer	
40.	¡Socorro!	Help!	
41.	Es inaceptable	It's unacceptable.	
42.	Lo siento/Perdone.	I'm sorry/ pardon	
43.	El hotel está completo.	The hotel is full.	
44.	¿Dónde está... ?	Where is...?	
45.	¿Cuándo..?	When...?	
46.	¿Quién..?	Who...?	
47.	¿Qué..?	What...?	
48.	¿Por qué... ?	Why...?	
49.	¿Cómo..?	How....?	
50.	¿Quieres...?	Do you want..?	
51.	¿En qué puedo ayudarle?	How can I help you?	
52.	Me gustaría	I would like...	
53.	¿Qué opina de nuestra ciudad?	What do you think about our city?	
54.	pienso que...	I think that...	
55.	encuentro que...	I find that...	
56.	para mí...	For me...	
57.	prefiero...	I prefer...	
58.	¿A qué hora quiere el desayuno?	At what time to you want breakfast?	



SPANISH – YEAR 9 – M2 ¡Desconéctate!			RAG
59.	¿Y dónde quiere el desayuno?	And where would you like breakfast?	
60.	En la foto hay...	In the picture there is/ there are...	
61.	A la izquierda hay...	On the left there is...	
62.	A la derecha hay...	On the right there is...	
63.	En el centro hay...	In the centre there is...	
64.	En la parte encima hay...	On the top part there is...	
65.	En el parte debajo hay...	On the bottom part there is...	
66.	Al lado de....	Next to...	
67.	Detrás de....	Behind...	
68.	A la izquierda hay una familia.	On the left, there is a family.	
69.	A la derecha hay una playa.	On the right, there is a beach.	
70.	En el centro puedo ver una tienda.	In the centre, I can see a shop.	
71.	El clima es soleado.	The climate is sunny.	
72.	Al lado de la familia hay un perro.	Next to the family, there's a dog.	
73.	Detrás del grupo, hay un colegio.	Behind the group, there's a school.	
74.	Está ...	He/she is ...-ing	
75.comiendo	He/she is eating	
76.	..bebiendo	He/she is drinking	
77.	.. tocando	He/she is playing	
78.	.. celebrando	He/she is celebrating	
79.	.. haciendo	He/she is doing/making	
80.	.. hablando	He/she is talking	
81.	Está sacando una foto.	He/she is taking a photo.	
82.	Está comiendo el desayuno.	He/she is eating breakfast.	
83.	Está bebiendo una limonada.	He/she is drinking lemonade.	
84.	Está tocando el piano.	He/she is playing the piano.	
85.	Está celebrando su cumpleaños.	He/she is celebrating his/her birthday.	
86.	Está haciendo sus deberes.	He/she is doing his homework.	



SPANISH – YEAR 9 – M2 ¡Desconéctate!			RAG
87.	Está hablando con sus amigos.	He/she is talking to his friends.	
88.	Está sacando una foto.	He/she is taking a photo.	
89.	Está comiendo el desayuno.	He/she is eating breakfast.	
90.	Lleva..	He/she is wearing...	
91.	Llevan..	They are wearing...	
92.	unos pantalones	trousers	
93.	una camiseta	a shirt	
94.	un vestido	a dress	
95.	Lleva gafas de sol.	He/ she is wearing sunglasses.	
96.	Llevan gorras.	They are wearing caps.	
97.	Lleva los pantalones negros.	He/she is wearing black trousers.	
98.	Llevan las camisetas blancas.	They're wearing white shirts.	
99.	La mujer lleva un vestido bonito.	The woman wears a beautiful dress.	
100.	El hombre lleva un traje elegante.	The groom wears a smart suit.	
101.	tiene	He/she has...	
102.	tienen	They have...	
103.	es/está	He/she is...	
104.	son/están	They are...	
105.	lleva	He/ she is carrying...	
106.	llevan	They're carrying...	
107.	parece	He seems...	
108.	feliz	happy	
109.	triste	sad	
110.	Me parece que está feliz.	He/she seems to be happy.	
111.	Me parece que está triste.	He/she seems to be sad.	

