



2024-2025

# Year 10 Cycle 2

# **100% Book**

Name:

Tutor group:

## Your 100% book and knowledge organisers

---

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

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

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

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

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

---



1) Write today's date and the title from the knowledge organiser and underline with a ruler



2) Write out the keywords leaving two lines between each word



3) Cover the definitions apart from the first: read it, cover it, say it in your head, check it



4) If you got it right, move on and quiz yourself on the rest in your head, one by one



5) Cover up all the definitions and write them out from memory



6) Check your answers using green pen

- Tick any definitions which are correct
- Correct any definitions not completely correct



# Correcting spelling, punctuation and grammar

---

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

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



# Year 10 – Cycle 2 – Art – Still Life

1	Chiaroscuro	A technique that uses light and shadow to create a strong contrast and give the illusion of volume and depth
2	Composition	The arrangement of visual elements within a piece of art, which guides the viewer's eye and influences the overall impact of the artwork.
3	Manipulation	The process of using digital tools, such as Adobe Photoshop, to alter or enhance photographic or scanned images.
4	Glazing	A painting technique involving the application of a transparent layer of paint over another, fully dried layer, which adds depth and richness of color.
5	Impasto	A technique where paint is applied thickly to a surface, so that brush or palette knife marks are visible, adding texture and dimension.
6	Layering	The process of building up multiple layers of material, such as paint or mixed media, on a canvas or other surface to create depth and complexity.
7	Masking fluid	A liquid latex used in watercolor painting to cover areas that the artist wishes to keep white; it is removed once the paint has dried.
8	Monochromatic	Using only one colour but in different values and intensities to create a cohesive and harmonious effect.
9	Negative space	The empty space around and between the subjects of an image, which can help to define the boundaries of positive space and enhance the composition.
10	Palette	A range of colors or materials used in an artwork; also refers to the physical board on which artists hold and mix paint.
11	Perspective	A technique used to represent three-dimensional objects on a two-dimensional surface in a way that looks natural and realistic.
12	Stippling	A technique of painting or drawing using small dots or marks to build up shading and texture.
13	Still life	Artwork depicting mostly inanimate subject matter, typically commonplace objects which are either natural (food, flowers, plants, rocks) or man-made.
14	Texture	The perceived surface quality of a work of art, expressed through the physical feel of the material or the visual appearance of brush strokes, layering, or other techniques.
15	Thumbnail sketch	A quick, small sketch that captures the basic layout and composition of an artwork before detailed work begins.
16	Tonal value	The lightness or darkness of a color, which helps to convey depth and volume within an artwork.
17	Wet-on-wet	A watercolor technique where paint is applied onto a wet surface, resulting in colors flowing into one another and creating soft, blurred edges.

## Year 10 – Cycle 2 – GCSE Business – Influences

1	Internal (organic) growth	When a business gets bigger by selling more products
2	External (inorganic) growth	When a business gets bigger by joining other businesses
3	Merger	When two or more businesses join together to form a new business
4	Takeover	When one business buys control of another
5	Horizontal integration	When one firm joins another at the same stage of the production process
6	Vertical integration	When businesses join at different stages of the production process
7	Diversification	When a business takes over a business in a totally different sector
8	Consumers	Individuals who buy goods and services from businesses
9	Economic climate	Describes key performance factors within an economy
10	Interest rates	The cost of borrowing money
11	Employment	The number of people working in an economy
12	Unemployment	The number of people that are able and willing to work that can't find a job
13	Consumer spending	The value of goods and services bought by consumers over a period of time
14	Globalisation	When the world is more interconnected through communication, transport and technology
15	International trade	Selling of goods and services internationally
16	Exports	When goods and services produced by a business in one country are sold in foreign countries
17	Legislation	A set of laws that govern the way a society operates
18	Competition	Exists when more than one business is attempting to attract the same customers

## Year 10 – Cycle 2 – Citizenship

1	Rights	Privileges and freedoms that we should all have
2	Responsibility	A duty we are required to follow
3	Human rights	Freedoms all humans should have simply because they are human
4	Discrimination	Treating a person or group unfairly because of, for example, their gender, race or age
5	International Criminal Court	A court that examines evidence against someone accused of war crimes
6	Anarchy	A total breakdown in society where there is no form of government
7	Barrister	Specialists in law used to represent clients in court
8	Chief constable	Chief police officer within each regional police force
9	Judiciary	System of judges and other legal officials responsible for enforcing the law
10	Magna Carta	Established the rights and powers of the king and the people of England
11	Civil law	Law that deals with disputes between individuals or groups
12	Criminal law	Law which punishes individuals who break the law
13	Common Law	Law based on court decisions by judges over the years
14	Legislation	A law passed by Parliament
15	Magistrates	Part-time community of volunteers that make decisions in Magistrates' Courts
16	Jury service	A duty where 12 random local citizens make a decision in a legal case
17	Tribunal	A court of justice that settles certain types of dispute
18	Trade union	An organisation that represents the rights of workers

# Year 10 – Cycle 2 – Drama

A: Devising		
1	Devising	Creating your own piece of theatre
2	Stimulus	Starting point for a piece of work
3	Genre	Type of dramatic work, e.g., a comedy
4	Style	Manner in which a piece is performed, e.g., physical style
5	Theme	An idea or topic that runs throughout the show
6	Genre	The type and style of story being told
7	Structure	The order in which the story takes place
8	Theatre company	A group of actors and crew who create theatre
9	Practitioner	A highly skilled person who influences a piece of theatre
10	Linear	When a play's structure is in time order (beginning, middle, end)
11	Episodic	When a play's structure jumps forwards and backwards in time order
12	Verbatim theatre	Style of theatre that takes words and stories from real life scenarios
13	Physical theatre	Style of theatre that uses the body and movement to communicate
14	Epic theatre	Style of theatre that wants to distance the audience from emotional connection and make them think about political or social issues
15	Naturalistic theatre	Style of theatre that is true to real life emotions and actions

B: Theatre methods		
1	Paper Birds Theatre Company	A contemporary theatre company formed in 2003 that creates devised work with a political agenda.
2	Stanislavsky	An acting technique developed by Stanislavski to help actors to create realistic character
3	Frantic Assembly theatre company	Approaching devising as a series of tasks, each broken down into building blocks.

# Year 10 – Cycle 1 – Design & Technology

1	Design brief	A statement describing what you are designing or solving
2	Specification	Design requirements that must be met
3	Ideation	Creating design ideas or solutions
4	User mapping	Visualising the end-to-end user experience
5	Pain points	Areas where a user has experienced difficulty
6	Target market	The most likely customers of a product
7	Prototype	A physical model used to present your final design
8	LCA (Life Cycle Assessment)	A technique to assess environmental impacts at all stages of a product's life
9	Sustainable design	Design that reduces environmental impacts
10	Inclusive design	A design that considers usage to ensure as many people as possible can access it
11	Rapid prototyping	Techniques used to build a scale model of a physical part using 3D CAD, e.g. 3D printing
12	CAD (Computer Aided Design)	Digital software used to create 2D and 3D models and drawings
13	CAM (Computer Aided Manufacture)	The use of software and computer-controlled machinery for manufacture
14	Production line	A set of tasks that come one after the other and result in an identical product
15	Mass production	When the same product is manufactured many times on an assembly line.
16	Batch production	One group of identical products is made at the same time, before moving onto producing the next group
17	Varnish	A shiny coat usually applied to wood to make it more durable
18	Built-in obsolescence	Designing a product with a limited useful life or a purposely weak design



## Year 10 – Cycle 2 – Design & Technology

1	Synthetic polymers	Manmade polymers created from crude oil
2	Biopolymers	Polymers made from natural resources such as plants
3	Carbon fibre reinforced polymer (CFRP)	A thermoforming polymer reinforced with carbon fibre
4	Glass-reinforced plastic (GRP)	A thermoforming polymer reinforced with glass fibres
5	Plasticisers	An additive that gives flexibility to polymers
6	Stabilisers	An additive in polymers that reduces UV degradation and brittleness
7	Extrusion	A length of material with a consistent cross-section
8	Filament	The extruded material that is used in a 3D printer
9	One-off production	One product is made
10	Batch production	Several identical products are made
11	Jigs	A mechanical device to aid production
12	High-volume production	Many products are made, making extensive use of machinery and manufacturing aids
13	Blow moulding	Shaping a thermoforming polymer by heating it and blowing it into shape
14	Vacuum forming	Shaping a thermoforming polymer by heating it and sucking it around a mould
15	Screen printing	A printing process for adding detail or text to polymer products
16	Vinyl	A self-adhesive polymer, available in a range of colours and suitable for CNC knife cutting
17	Anthropometrics	The practice of taking measurements of the human body and providing data that can be used by designers
18	Ergonomics	The relationship between people and the products they use

A: Writer’s methods		
1	Imperative	A verb used to give a command or order
2	Soliloquy	A speech where a character is alone and speaks their thoughts and feelings out loud
3	Aside	A comment by a character that is meant for the audience to hear, but no other characters
4	Paradox	A statement that contradicts itself
5	Foreshadow	A warning or clue about a future event
6	Tragic hero	A great, virtuous character destined for a downfall or defeat
7	Hamartia	A fatal flaw or weakness

B: Context		
1	Divine Right of Kings	The idea that a monarch is chosen by God, not the people
2	The Great Chain of Being	A Christian belief that all beings are ranked in a hierarchy, with God at the top, to maintain natural order
3	Ambition	Strong desire to achieve something
4	Unnatural	Going against natural laws; abnormal
5	Supernatural	Something above and beyond natural laws that cannot be explained
6	Blasphemy	An act against God
7	Hallucination	A vision or image that is not real
8	Regicide	To kill a king or queen
9	Paranoia	Thinking and feeling like you are being threatened in some way, even if there is no evidence
10	Apparition	A ghostly figure

C: Quotations	
1	Captain: 'Unseamed him from the nave to the chops'
2	Macbeth: 'Stars, hide your fires, / Let not light see my black and deep desires'
3	Lady Macbeth: 'Look like the innocent flower, but be the serpent under it'
4	Macbeth: 'Is this a dagger which I see before me... Come, let me clutch thee'
5	Macbeth: 'Will all great Neptune's ocean wash this blood / Clean from my hand?'
6	Macbeth: 'O, full of scorpions is my mind, dear wife!'
7	The witches: 'Be bloody, bold/ none of woman born shall harm Macbeth.'
8	Lady Macbeth: 'Out, damned spot! out, I say!'
9	Lady Macbeth: 'all the perfumes of Arabia will not sweeten this little hand.'
10	Malcolm: 'This dead butcher and his fiend like queen'

# Year 10 – Cycle 2 – Geography

A: Changing Landscapes			B: Changing Cities		
1	Fetch	Distance the wind pushes the waves	1	Urban areas	Built-up areas like towns and cities
2	Prevailing wind	Main wind direction	2	Urbanisation	Increase in proportion of people living in towns and cities
3	Destructive waves	High-energy waves that remove beach material	3	Rural areas	Countryside with few homes and low population density
4	Constructive waves	Low-energy waves that build up beach material	4	Industrialisation	Shift towards an economy based on manufacturing
5	Coastal recession	Retreat of the coast due to erosion	5	Natural increase	Birth rates are higher than death rates so population goes up
6	Transpiration	Evaporation of water from vegetation	6	Site	Physical characteristics of a place
7	Surface run-off	Flow of water along the surface of the land	7	Situation	Location of a settlement in relation to other settlements and features
8	Infiltration	Filtering of water through soil	8	Suburbs	An area of low-density, semi-detached housing away from the city centre
9	Percolation	Filtering of water through rock	9	Rural-urban fringe	The edge of the city with out-of-town shopping centres and green spaces

# Year 10 – Cycle 2 – History – Elizabethan England

<b>A: Elizabethan government</b>		
1	Patronage	A system used by the monarch to reward loyalty
2	Factions	Rival groups with different political interests
3	JPs (Justices of the peace)	Members of the gentry who enforced law and order in each county
<b>B: Lifestyles of the rich and poor</b>		
4	Vagrant	An unemployed and homeless person that travelled the country in search of work
5	Impotent poor	Poor people who were viewed as being genuinely unable to work and deserving of charity
<b>C: Popular entertainment</b>		
6	Theatre companies	Groups of actors who were supported financially by wealthy noblemen
7	The pit	Area where the poor would stand in a theatre and watch a play
<b>D: The Religious Settlement</b>		
8	Religious settlement / Middle Way	Changes introduced by Elizabeth to provide a religious compromise between Protestants and Catholics
9	Church of England	The official name given to Protestantism in England

10	Royal injunctions	Instructions given to the clergy from the monarch
<b>E: The Catholic Threat</b>		
11	Recusants	Catholics who refused to attend Church of England services
12	Excommunication	Exclusion from the protection of the Catholic Church and entry to heaven
<b>F: The Spanish Armada</b>		
13	Privateers	Sailors that had permission from the monarch to capture goods from enemy ships
14	Beacon	a fire or light set up in a high position as a warning or signal
<b>G: The Puritan Threat</b>		
15	Puritan	Protestant sect that promoted a pure interpretation of the Bible
16	Presbyterians	Puritans that wanted to replace bishops with local elders
17	Prophecyings	Gatherings of Puritans to discuss the Bible and Puritan beliefs
18	Separatists	Extreme Puritans who wanted to break away from the Church of England

# Year 10 – Cycle 2 – Maths (Foundation)

## A: Sequences

1	Arithmetic or linear sequence	Has a constant difference between each term
2	$n$ th term of arithmetic sequence	$an + b$
3	Fibonacci sequence	To find the next term, add the previous two terms together, for example 1, 1, 2, 3, 5, 8, 13, 21
4	Geometric sequence	A sequence made by multiplying by the same value each time

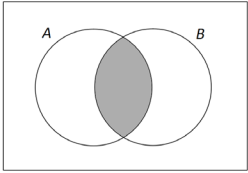
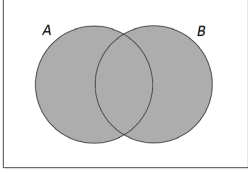
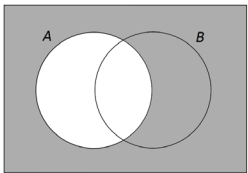
## B: Percentages

1	Multiplier for <b>increase</b> of $n\%$	$100 + n$ , then divide by 100
2	Multiplier for <b>decrease</b> of $n\%$	$100 - n$ , then divide by 100
3	Percentage change	$\frac{\text{New} - \text{Original}}{\text{Original}} \times 100$
4	Compound growth and decay	Final amount = Starting amount $\times$ multiplier <sup><math>n</math></sup> where $n$ is a unit of time

## C: Probability

1	Probability	$\frac{\text{Number of successful outcomes}}{\text{Total number of possible outcomes}}$
2	$P(A)$	Probability of event A
3	$P(\text{not } A)$ or $P(A')$	$1 - P(A)$
4	Predicted number of outcomes	Probability $\times$ number of trials
5	If A and B are independent $P(A \text{ and } B)$	$P(A) \times P(B)$
6	If A and B are mutually exclusive $P(A \text{ or } B)$	$P(A) + P(B)$
7	Experimental probability	$\frac{\text{Frequency of event}}{\text{Total number of trials}}$

## D: Venn diagrams

1	$A \cap B$		A intersect B A and B
2	$A \cup B$		A union B A or B
3	$A'$		Complement of A Not A

**A: Sequences**

1	Arithmetic or linear sequence	Has a constant difference between each term
2	$n$ th term of arithmetic sequence	$an + b$
3	Fibonacci sequence	To find the next term, add the previous two terms together, for example: 1, 1, 2, 3, 5, 8, 13, 21
4	Geometric sequence	A sequence made by multiplying by the same value each time
5	Quadratic sequence	$an^2 + bn + c$ , where the first difference is not equal, but the second difference is equal

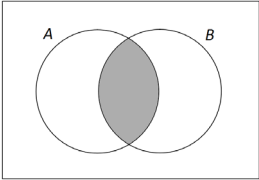
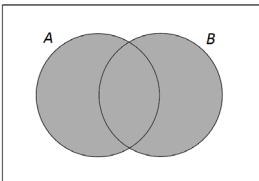
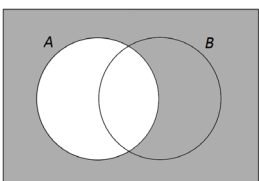
**B: Percentages**

1	Multiplier for <b>increase</b> of $n\%$	$100 + n$ , then divide by 100
2	Multiplier for <b>decrease</b> of $n\%$	$100 - n$ , then divide by 100
3	Percentage change	$\frac{\text{New} - \text{Original}}{\text{Original}} \times 100$
4	Compound growth and decay	Final amount = starting amount $\times$ multiplier <sup><math>n</math></sup> where $n$ is a unit of time

**C: Probability**

1	Probability	$\frac{\text{Number of successful outcomes}}{\text{Total number of possible outcomes}}$
2	$P(A)$	Probability of event A
3	$P(\text{not } A)$ or $P(A')$	$1 - P(A)$
4	Predicted number of outcomes	Probability $\times$ number of trials
5	If A and B are independent $P(A \text{ and } B)$	$P(A) \times P(B)$
6	If A and B are mutually exclusive $P(A \text{ or } B)$	$P(A) + P(B)$

**D: Venn diagrams**

1	$A \cap B$		$A$ intersect $B$ $A$ and $B$
2	$A \cup B$		$A$ union $B$ $A$ or $B$
3	$A'$		Complement of $A$ Not $A$

# Year 10 French – Cycle 2 – Foundation

Family and relationships		
1	Best	meilleur
2	Better	mieux
3	Worse	pire
4	Less...than	moins...que
5	More...than	plus...que
6	Happy	heureux/heureuse
7	Crazy	fou/folle
8	Hardworking	travailleur/travailleuse
9	To wear	porter
10	Glasses	les lunettes
11	Tie	une cravate
12	A son/a daughter	un fils/une fille
13	Young	jeune
	Old	vieux/vieille
14	I know	je connais
15	I get on	je m'entends
16	I see	je vois
17	To rest	se reposer
18	To be called	s'appeler
19	To have fun	s'amuser
20	When	quand
21	To drink	boire
22	To believe	croire
23	To leave	partir
24	To take	prendre
25	To receive	recevoir
26	To open	ouvrir
27	To be able to	pouvoir
28	To say	dire
29	Game	jeu
30	Tiring	fatigant
31	To depend on	dépendre de
32	To try to	essayer de
33	Student	élève
34	I used to have	j'avais
35	I used to be	j'étais
36	I miss him/her	il/elle me manque
37	To remember, recall, remind	se rappeler
38	Dead	mort
39	5 years ago	il y a cinq ans
40	To cut, switch off	couper
41	To work	travailler
42	Right	droit
43	Unfair	injuste
44	To treat	traiter
45	To hope	espérer
46	Someone	quelqu'un
47	Well-paid	bien-payé
48	Some people say that	certains disent que
49	To have the right to	avoir le droit de
50	Money	argent
51	without	sans
52	To stay	rester
53	Thanks to	grâce à
54	Neighbour	voisin

# Year 10 French – Cycle 2 – Higher

Family and relationships		
1	Best	meilleur
2	Better	mieux
3	Worse	pire
4	Less...than	moins...que
5	More...than	plus...que
6	Loyal	fidèle
7	Proud	fier/fière
8	Hardworking	travailleur/travailleuse
9	Twins	jumeaux
10	Glasses	les lunettes
11	Tie	une cravate
12	A son/a daughter	un fils/une fille
13	Medium sized	de taille moyenne
14	I know	je connais
15	I get on	je m'entends
16	I see	je vois
17	To tell	raconter
18	To reply on	se fier à
19	To show concern for	se soucier
20	To fear	se sentir
21	Similar	pareil/pareille
22	I have just done	je viens de faire
23	To leave	partir
24	To take	prendre
25	To receive	recevoir
26	To open	ouvrir
27	To be able to	pouvoir
28	To say	dire
29	To act	agir
30	To avoid to	éviter de
31	To threaten	menacer
32	To try to	essayer de
33	After having done	après avoir fait
34	To remember	se souvenir
35	I used to have	j'avais
36	I used to be	j'étais
37	I miss him/her	il/elle me manque
38	To remember, recall, remind	se rappeler
39	To keep	garder
40	The home	le foyer
41	Right	droit
42	When I am	quand je serai
43	When I have	quand j'aurai
44	Someone	quelqu'un
45	As far as I'm concerned	en ce qui me concerne
46	It seems to me that	il me semble que
47	It's better	il vaut mieux
48	Some people say that	certains disent que
49	To have the right to	avoir le droit de
50	without	sans
51	Previously, before, formerly	auparavant
52	When	lorsque
53	Thanks to	grâce à
54	Neighbour	voisin



# Year 10 – French – Key Structures

A: Opinion phrases			D: Positive reasons – present tense			G: Negative Adjectives			J: Connectives		
1	I believe that	je crois que	1	It makes me laugh	ça me fait rire	1	Boring	monotone	1	Given than	Étant donné que
2	I would say that	je dirais que	2	It relaxes me	ça me détend	2	Annoying	pénible	2	Despite the fact that	malgré le fait que
3	I think that	je pense que	3	It pleases me	ça me plaît	3	Unpleasant	désagréable	3	On the contrary	au contraire
4	According to me	selon moi	4	It helps me to relax	ça m'aide à me reposer	4	Annoying	énervant	4	On the one hand	d'un côté
5	In my opinion	quant à moi	5	It helps me to forget everything	ça m'aide à tout oublier	5	Ridiculous	ridicule	5	On the other hand	de l'autre côté
6	Frankly	franchement	6	It's worth doing	ça vaut la peine de faire	6	Awful	affreux	6	Therefore	du coup
B: Negative opinions			7	I have fun	je m'amuse	7	Worrying	inquiétant	7	So	donc
1	It gets on my nerves	ça m'énerve	E: Negative reasons – present tense			8	Tiring	fatigant	8	Due to	à cause de
2	I'm fed up with	j'en ai marre de	1	It makes me scared	ça me fait peur	H: Infinitive structures			9	In fact	en fait
3	I have some worries regarding	j'ai des soucis par rapport à	2	It's not worth it	ça ne vaut pas la peine	1	I want	je veux	10	Since, because	puisque
4	What scares me	ce qui me fait peur	3	It worries me	ça m'inquiète	2	I hope	j'espère	K: Small but important words		
5	What worries me is	ce qui m'inquiète est	5	I get bored	je m'ennuie	3	I want	j'ai envie de	1	Even	même
6	I can't stand	je ne supporte pas	6	It tires me	ça me fatigue	4	I would like	j'aimerais	2	If	si
7	I can't stand	j'ai horreur de	7	It irritates me	ça m'embête	5	I have the intention of	j'ai l'intention de	3	Except	sauf
C: Positive opinions			F: Positive adjectives			6	I feel like	ça me dit de	4	Without	sans
1	I quite like	j'aime bien	1	Marvellous	merveilleux	7	I need	j'ai besoin de	5	Especially	surtout
2	I'm a fan of	je suis fan de	2	Wonderful	formidable	I: Negatives			6	Everywhere	partout
3	I am passionate about	je suis passionné par	3	Unbelievable	incroyable	1	I don't do	je <b>ne</b> fais <b>pas</b>	7	The majority	la plupart
4	What I like the most is	ce que j'aime le plus est	4	Entertaining	divertissant	2	I no-longer do	je <b>ne</b> fais <b>plus</b>	8	Instead of	au lieu de
5	What I love is	ce que j'adore est	5	Fascinating	fascinant	3	I don't do anything	je <b>ne</b> fais <b>rien</b>	9	Few / not many	peu
			6	Exciting	passionnant	4	I only do	je <b>ne</b> fais <b>que</b>	L: Time phrases		
			7	Unforgettable	inoubliable	5	I never do	je <b>ne</b> fais <b>jamais</b>	1	This evening	ce soir
			8	Pleasant	agréable	6	There isn't any	il n'y a <b>aucun</b>	2	Usually	d'habitude
						7	There isn't anybody	il n'y a <b>personne</b>	3	Sometimes	parfois
						8	It is not yet	Ce <b>n'est pas encore</b>	4	Two years ago	il y a deux ans
									5	The next day	le lendemain
									6	Always	toujours

# Year 10 Spanish – Cycle 2 – Foundation

## A: Sports and free time

1	To have hobbies	tener pasatiempos
2	To watch a film	ver una película
3	To buy clothes	comprar ropa
4	Disability	Discapacidad
5	A team	un equipo
6	Fight	la lucha
7	A wheelchair	una silla de ruedas
8	To read	leer revistas
9	A fan	un aficionado
10	A young person	un/una joven
11	An entry ticket	una entrada
12	To stay at home	Quedarse en casa

## B: Technology

1	To turn off the computer	apagar el ordenador
2	To download an application	bajar una aplicación
3	To charge the phone	cargar el móvil
4	A web page	una página web
5	A watch/clock	un reloj
6	To upload a photo	subir una foto
7	To create an account	crear una cuenta
8	Safety/security	seguridad
9	To help	ayudar

## C: Music and entertainment

1	Happiness	alegría
2	The end/ending	el final
3	The song	la canción
4	The singer	el/la cantante
5	The lyrics	la letra
6	A show	un espectáculo
7	The News	las noticias
8	A horror film	una película de terror
9	It is fashionable	está de moda

## D: Family and relationships

1	To know/to meet	conocer
2	To recognize/to admit	reconocer
3	Role model	modelo de conducta
4	To argue	discutir
5	To get on well/badly	llevarse bien/mal
6	It is worth it	vale la pena
7	Our	nuestro/a
8	Confidence/ trust	confianza
9	Nice/ pleasant	agradable
10	Affection	cariño
11	Together	juntos/as
12	To have been + __ing + for	desde hace (+ present)
13	To laugh	reír (se)
14	To ask for forgiveness	pedir perdón

# Year 10 Spanish – Cycle 2 – Higher

## A: Sports and free time

1	To have hobbies	tener pasatiempos
2	Disability	discapacidad
3	A team	un equipo
4	Fight	la lucha
5	A wheelchair	una silla de ruedas
6	A fan	un aficionado
7	A young person	un/una joven
8	An entry ticket	una entrada
9	To stay at home	quedarse en casa
10	To walk	andar / caminar
11	To jump	saltar
12	To catch/take	coger

## B: Technology

1	To turn off the computer	apagar el ordenador
2	To download an application	bajar una aplicación
3	To charge the phone	cargar el móvil
4	To post on a web page	colgar en una página web
5	A watch/clock	un reloj
6	To create an account	crear una cuenta
7	To record / film a video	grabar un video
8	Headphones, earbuds	auriculares
9	A search	una búsqueda
10	Behaviour	comportamiento
11	To take advantage of, to make the most of	aprovechar
12	To dare	atreverse
13	The best / worst thing	lo mejor/peor

## C: Music and entertainment

1	Happiness / joy	alegría
2	The lyrics of the song	la letra de la canción
3	The singer	el/la cantante
4	A show	un espectáculo
5	The News	las noticias
6	To delay / to take long	tardar
7	Full/filled	lleno
8	Disappointing	decepcionante
9	Stage	escenario
10	Sound	sonido
11	Chain/channel	cadena
12	Season (TV/Series)	temporada
13	To charge (money)	cobrar
14	The film is about	la película se trata de
15	It is fashionable	está de moda

## D: Family and relationships

1	To know/to meet	conocer
2	To recognize/to admit	reconocer
3	Role model	modelo de conducta
4	To support	apoyar
5	To acquire, obtain, get	conseguir
6	To look after	cuidar
7	To meet up/ to get together	juntarse
8	In your place	yo en tu lugar/ yo que tú
9	Disappointing	decepcionante
10	To answer	contestar
11	To keep / to save/ to store	guardar
12	Lack (of) / shortage	falta (de)
13	Full (of)	lleno/a (de)

# Year 10 – Spanish – Key Structures – Higher and Foundation

A: Verbos Importantes <i>Important Verbs</i>			B: Estructuras con Infinitive <i>Infinitive Structures</i>			D: Verbos Comunes <i>Common Verbs</i>			F: Palabras Pequeñas <i>Small but Important Words</i>		
1	To say	decir	1	To have just	acabar de + inf	1	<b>To do</b>	<b>hacer</b>	1	More and more	cada vez más
2	To give	dar	2	It is necessary	hay que + inf	2	I do	hago	2	Less and less	cada vez menos
3	To arrive	llegar	3	To have to	tener que + inf	3	They do	hacen	3	Unless	a no ser que
4	To start / begin	empezar	4	To start	empezar a + inf	4	You do	haces	4	Even	incluso
5	To realise	darse cuenta de	5	We should	deberíamos + inf	5	<b>To have</b>	<b>tener</b>	5	Instead of	en lugar de / en vez de
6	To enjoy	disfrutar	6	To learn to	aprender a + inf	6	I have	tengo	6	Despite	a pesar de
7	To get / catch	coger	7	Before/After + verb	antes de / Después de + inf	7	He / she / it has	tiene	7	Neither / nor	tampoco
8	To know	saber	8	To try	tratar de + inf	8	They have	tienen	8	Still / yet	todavía
9	To learn	aprender	9	I hope	espero + inf	9	<b>To be*</b>	<b>ser*</b>	9	If	si
10	To teach	enseñar	10	I want	quiero + inf	10	I am	soy	10	Already	ya
11	To need	necesitar	11	To stop	dejar de + inf	11	He / she / it is	es	11	Without	sin
12	To return	volver	12	To be able to	poder + inf	12	They are	son	12	Almost	casi
13	To continue / follow	seguir	13	You must	se debe + inf	13	<b>To be*</b>	<b>estar*</b>	13	Nobody	nadie
14	To want / to love	querer	14	You can	se puede + inf	14	I am	estoy	14	Little/ no	poco
15	To hear	oir	15	I want	tengo ganas de + inf	15	He / she / it is	está	15	The same	el mismo
16	To look	mirar	<b>C: Preguntas <i>Question Words</i></b>			16	They are	están	16	Too / too much	demasiado
17	To come	venir	1	What	qué	17	<b>To go</b>	<b>ir</b>	17	Whereas / while	mientras que
18	To open	abrir	2	When	cuándo	18	I go / I'm going	voy	18	Less	menos
19	To go down	bajar	3	How	cómo	19	You go	vas	19	More	más
20	To fall	caer	4	Which	cuál	20	They go	van	20	Apart from	aparte de
21	To enter / to go in	entrar	5	Where	dónde	<b>E: Verbos en el Pasado <i>Verbs in the Past</i></b>			21	Every	cada
22	To start/to begin	comenzar	6	Who	quién	1	I went	fui	22	Neither... nor	ni... ni
23	To sit	sentarse	7	Why	por qué	2	He / she / it was	fue	23	However	en cambio/no obstante
24	To record	grabar	8	How much	cuánto	3	He / she / it was	era	24	Quite	bastante
25	To shout / scream	gritar	9	How many	cuántos	4	There was / there were	había	25	No longer	ya no
			10	At what time	a qué hora	5	He / she / it had	tenía	26	No/not any/not a	ningún
						6	I saw / I watched	vi			

# Year 10 – Cycle 2 – GCSE Sport Science

A: Terminology		
1	Health	A state of complete emotional, physical and social wellbeing and not merely the absence of disease
2	Fitness	The ability to meet the demands of the environment
3	Exercise	A form of physical activity to maintain or improve health and/or physical fitness. It is not competitive sport
4	Performance	How well a task is completed
5	PARQ	Physical Activity Readiness Questionnaire

B: Principles of training		
1	F.I.T.T	<ul style="list-style-type: none"> <li>• <u>Frequency</u> – how often you train</li> <li>• <u>Intensity</u> – how hard you train</li> <li>• <u>Time</u> – how long you train for</li> <li>• <u>Type</u> – what training method you use</li> </ul>
2	Individual needs	Matching the training to the requirements of the individual
3	Reversibility	Any changes that take place will be reversed when you stop training
4	Specificity	Matching the training to the requirements of an activity
5	Thresholds of training	To maximise the chance of fitness adaptations taking place, train within your target zone
6	Overtraining	Too much training, which can lead to injury and prevent improvement
7	Progressive overload	Making training steadily harder to gradually improve fitness

C: Components of fitness		
1	Muscular endurance	The ability to use voluntary muscles repeatedly without getting tired
2	Muscular strength	The amount of force a muscle can generate when it contracts to overcome resistance
3	Body composition	The ratio of fat to fat free mass, e.g. vital organs, muscle, bone
4	Flexibility	The range of movement possible at a joint
5	Cardiovascular fitness	The ability to exercise the body for long periods of time without getting tired
6	Speed	How quickly a movement can be performed or a distance can be covered
7	Balance	The ability to maintain centre of mass over a base of support
8	Coordination	The ability to use two or more body parts at the same time
9	Power	Strength × speed
10	Agility	How quickly you can change the position of your body while keeping it under control
11	Reaction time	The time it takes to respond to a stimulus

## Year 10 – Cycle 2 – Religious Studies – Beliefs and Practices (Islam & Christianity)

1	Tawhid [2]	The belief in the oneness of God
2	Prophethood / Risalah [2]	Messengers of God, beginning with Adam and ending with Prophet Muhammad
3	Angels / Malaikah	The belief in angels of Islam, e.g. Jibril, Israfil, Mika'il
4	Halal [2]	Anything which is permitted in Islam, e.g. eating permitted foods
5	Haram [2]	Anything which is forbidden in Islam, e.g. eating forbidden foods
6	Jihad [2]	To strive or struggle – there are two forms of jihad: greater and lesser
7	Mosque [2]	A place of prostration for Muslims, a communal place of worship
8	Shari'ah [2]	The straight path; Shari'ah Law is the set of moral and religious principles set out by the Qur'an and Hadith
9	Ummah [2]	Worldwide Muslim community who share a common religious identity
10	Trinity [2]	The three persons of God: Father, Son and Holy Spirit
11	Incarnation [2]	God becoming human in the form of Jesus
12	Atonement [2]	The belief that Jesus' death on the cross healed the rift between humans and God
13	Resurrection [2]	The belief that Jesus rose from the dead on Easter Sunday, conquering death
14	Liturgical worship	When worship follows a set structure or pattern
15	Salvation	Saving from sin and its consequences
16	Sacraments	An outward sign of an invisible blessing from God
17	Evangelism [2]	Preaching the gospel to others to convert them to Christianity

# Year 10 – Cycle 2 - Science

## Biology Topic 3: Diseases and Infections (Paper 1)

1	Salmonella	Caught by eating food that contains bacteria; symptoms are fever, stomach cramps and vomiting
2	Measles	A virus that spreads in the droplets released when a person coughs or sneezes, causes fever and a red rash
3	HIV	A virus that spreads through unprotected sex and drug use, attacks the immune system, leading to AIDS, treated with antiretroviral drugs
4	Malaria	Caused by a protist, which is spread by mosquitoes, causes potentially fatal fever
5	Immune	If infected by the same pathogen again, the body quickly produces antibodies to kill the pathogen before it makes you ill
6	Preclinical trials	Drugs are tested on human cells and animals in the lab to check if they are toxic
7	Phase 1 clinical trials	Test low doses on healthy volunteers to check for side effects
8	Phase 2 clinical trials	Test on patients with the disease, comparing the effect of a placebo versus the drug

## Biology Topic 4: Bioenergetics (Paper 1)

1	Uses of glucose in plants	Respiration, making cellulose for cell walls, making amino acids and making lipids or starch for energy storage
2	Limiting factor	A factor that affects the rate of photosynthesis when in short supply
3	Sodium hydrogen carbonate	Used to increase the amount of carbon dioxide dissolved in water when investigating photosynthesis
4	Uses of energy	Chemical reactions, movement, maintaining constant body temperature
5	Exercise	More muscle contraction, more energy needed and greater rate of respiration
6	Oxygen debt	The amount of oxygen needed to break down the lactic acid that has built up during anaerobic respiration
7	Metabolism	The rate of all the chemical reactions in a cell or the body

# Year 10 – Cycle 2 - Science

Chemistry Topic 2: Structure and Bonding (Paper 1)		
1	High melting points in ionic compounds	This is because a large amount of energy is needed to break the strong electrostatic attraction between the ions
2	Ionic compounds conducting electricity	Ionic compounds conduct electricity when melted or dissolved in water, because the ions are free to move to carry a current
3	Low melting points in small molecule covalent compounds	This is because little energy is needed to overcome the weak intermolecular forces between the molecules
4	Diamond	Each carbon atom covalently bonded to four others; hard, very high melting point, does not conduct electricity
5	Structure of graphite	Each carbon atom covalently bonded to three others and forms layers of hexagonal rings
6	Properties of graphite	Weak forces between the layers, allowing them to slide over each other and has delocalised electrons, which allow it to conduct electricity
7	Metallic bonding	Rows of positive metal ions, surrounded by delocalised electrons which move through the structure
8	Properties of alloys	Harder than pure metals as different sized atoms distort the layers of atoms preventing the layers from sliding

Chemistry Topics 3 & 5: Calculations and Energy Change (Paper 1))		
1	Endothermic reaction	A reaction that takes in energy from the surroundings; temperature decreases
2	Exothermic reaction	A reaction that transfers energy to the surroundings, temperature increases
3	Activation energy	The minimum amount of energy that particles must have to react
4	Conservation of mass	Atoms can never be created or destroyed; the total mass of reactants always equals the total mass of products
5	Uncertainty of a measuring instrument	Plus or minus ( $\pm$ ) half the smallest scale division; for a thermometer with a mark at every $1.0^{\circ}\text{C}$ , the uncertainty is $\pm 0.5^{\circ}\text{C}$
6	Concentration	The mass of a substance in a volume of solution, measured in $\text{g}/\text{dm}^3$
7	Calculating concentration	$\frac{\text{mass of solute (g)}}{\text{volume of solvent (dm}^3\text{)}}$



# Year 10 – Cycle 2 - Science

Chemistry Topic 4: Reactions (Paper 1)		
1	Acid	A substance which forms H <sup>+</sup> ions when aqueous, pH of 0-6
2	Alkali	A soluble base which forms OH <sup>-</sup> ions when aqueous, pH of 8-14
3	Base	An insoluble substance that neutralises an acid to make a salt and water
4	Acids with metal oxides	Acid + metal oxide → salt + water
5	Acids with metal hydroxides	Acid + metal hydroxide → salt + water
6	Acids with metal carbonates	Acid + metal carbonate → salt + water + carbon dioxide
7	Acids with metals	Metal + acid → salt + hydrogen
8	Electrolysis	Splitting up an ionic compound using electricity, used to extract metals more reactive than carbon from their ores

Physics Topic 2: Electricity (Paper 1)		
1	Current (Amps)	The rate of flow of electric charge, measured using an ammeter connected in series
2	Potential difference (Volts)	Energy transferred per coulomb of charge, measured using a voltmeter connected in parallel
3	Ohm's law	Current through a resistor at a constant temperature is directly proportional to the potential difference across a resistor
4	LDR	The resistance of a light dependent resistor decreases if light intensity increases
5	Thermistor	The resistance of a thermistor decreases if temperature increases
6	Series circuit rules	Potential difference is shared according to resistances, current is the same everywhere in the circuit
7	Parallel circuit rules	The potential difference across each component is the same, current is shared according to resistance
8	National Grid	A nationwide network of cables and transformers transferring electricity from power stations to homes

# Year 10 – Cycle 2 - Science

Physics Topic 4: Atomic Structure & Radioactivity (Paper 1)		
1	Random decay	We cannot predict which nuclei will decay and when a specific nucleus will decay
2	Activity	Number of unstable atoms that decay per second (measured in Becquerels)
3	Half-life	Average time it takes for half of the radioactive atoms in a sample to decay
4	Alpha particle	Made of two protons and two neutrons, with a charge of +2
5	Beta particle	Made of one electron, with a charge of -1
6	Penetrating power	How easily the type of radiation can pass through materials – the most penetrating is gamma
7	Irradiated	When an object is exposed to ionising radiation but does not become radioactive
8	Contaminated	When unwanted radioactive atoms get onto an object they release radiation and may cause harm

Physics Topic 5: Forces (Paper 2)		
1	Weight equation	Weight = mass × gravitational field strength
2	Work done equation	Work done = force × distance
3	Hooke's law equation	Force = spring constant × extension
5	Acceleration equation	Acceleration = $\frac{\text{Change in velocity}}{\text{Time taken}}$
6	Newton's first law	A resultant force is needed to change the velocity of an object
7	Newton's second law	The acceleration of an object is proportional to the resultant force on it and inversely proportional to its mass. Resultant force = mass × acceleration
8	Newton's third law	When two objects interact, the forces they exert on each other are equal and opposite
	Conservation of momentum	In a closed system, the total momentum before an event is the same as after the event

# Year 10 – Cycle 2 – BTEC Sport – Component 1

## A: Terminology

1	Sport	Competitive activities that involve physical exertion, have rules and regulations and a National Governing Body
2	National Governing Bodies (NGBs)	Organisations that oversee a sport's rules within a country
3	Outdoor activities	Activities that are carried out outdoors or in recreational areas that are adventurous
4	Provision	Providing an opportunity to take part in something
5	Sector	A group of people connected by what they do
6	Barrier	Something that prevents you from carrying out a task
7	Pulse raiser	An activity that increases the pulse rate
8	Mobilise	Move the main joints of the body such as knees, hips, shoulders, ankles and wrists
9	Stretching	Loosening of the muscles to prepare the body for exercise

## B: Body systems

1	Cardiorespiratory system	The heart and blood vessels which work with the respiratory system
2	Musculoskeletal system	The muscular and skeletal systems working together, including the bones, muscles, tendons and ligaments
3	Thermoregulation	Regulating your own body temperature
4	Pliability	How flexible something is, like your muscles
5	Erector spinae	A group of muscles that are attached to the length of the spine, from the base of the skull to the hips
6	Ligaments	Join bone to bone
7	Tendons	Join muscles to bone
8	Cardiac muscle	A muscle that is unconsciously controlled where we don't have to think to make it contract
9	Voluntary muscle	Muscles under our conscious control and we move them when we want to