



BOURNEMOUTH SCHOOL

Year 11

Knowledge Organiser 3

Spring Term: 2025-26

Name: Master 11

Registration Form: -

✓ Hard Work

✓ Discipline

✓ Smart Appearance

✓ Respect

Bournemouth School

Knowledge Organiser: Year 11 Spring Term 3

'Knowledge is power' by Francis Bacon

A knowledge organiser provides you with all the most important knowledge you need for each unit of study this half term. Your aim is to transfer all of this information into your long-term memory so you can use it in your lessons and further expand your understanding of this work.

How to use your knowledge organiser (KO):

1. Ensure you have your KO and Homework Learning journal with you at all times in school and when you need to do your homework at home.
2. In lessons when you have covered information that appears on your KO, your teacher will ask you to put a tick next to that section. This means that is now added to what you must learn for homework.
3. Initially, follow your homework timetable to decide what to revise each evening.
4. There are 4 strategies that you can use to revise. They are progressively more challenging so always start with the first in the list.

a. Look Cover Write Check

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. LOOK carefully at the subject and section of your KO you want to revise and try to remember as much as you can. Remember this should be a ticked section.
- iii. Now COVER this information so you can't read it.
- iv. WRITE out what you can remember word for word in your Homework Learning Journal.
- v. CHECK what you have written by comparing it to your KO. Tick each correct word in green pen and correct any errors you have made.
- vi. Repeat this process until you are confident you can remember everything you need.

AIM: You should be able to repeat the information by rote

b. Self or peer quizzing

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. Write out a list of questions you could ask either yourself or a friend about this section of the KO. Write these in your Homework Learning Journal.
- iii. If you are working on your own, cover the KO and write a full answer to each question.
- iv. If you are working with a partner swap books and copy down their questions and have a go at answering them.
- v. Now uncover the KO and with a green pen correct your work.

AIM: You should be able to repeat the information by rote but with a good understanding

c. Playing with words and sentences

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. You now want to check how well you have learnt the information in your KO.
- iii. Definitions – look at words that are used in this section. Can you write a definition in your own words?
- iv. Rephrasing – can you rewrite the sentences or explanations in your own words?

- v. Summary – can you summarise the main points of this section of the KO?
- vi. Synonyms – can you write synonyms for key words and ideas?
- vii. New Sentences – can you write a sentence that includes the key vocabulary or definitions that you have learnt?

AIM: You should be able to use the information in your KO in a flexible and confident way in your writing.

d. Think it, Link it

- i. This is a technique to use towards the end of the half term when you are revising all of the KO.
- ii. Think of the links or connections between different sections of your KO.
- iii. Write these out in your own words in your Homework Learning Journal.
- iv. Think about the links between a particular section of your KO and what you have learnt in your lessons. Can you expand on this section by linking it to your wider knowledge?
- v. Write this out in your Homework Learning Journal.

AIM: You should be able to link your homework and your lessons to show a confident understanding of the work covered.

Homework Learning Journal

1. Always write the subject and the date when you start your homework.
2. Always write the strategy that you are going to use for your homework.
3. Always use a ruler to underline titles and dates.
4. Use a blue or black pen to complete your homework or a pencil if you need to draw.
5. Use a green pen to complete corrections of your work.
6. **You are expected to complete half a side of your Homework Learning Journal each evening as a minimum.**

Success Club

You can attend Success Club every Monday to Thursday in room 53 until 5pm. This is a quiet room where you can complete your homework rather than doing it at home. There are also Sixth form helpers and staff who will be there to help you if you need it. You can also choose to work in the Library on a Monday, Tuesday and Thursday until 4:30 and a Friday until 4.

Checking:

Your teachers will check your Homework Learning Journal at least once a cycle. If they are concerned that you aren't doing your homework properly they will offer support and guidance. If you don't respond to this guidance, you will be added to the afterschool Detention where you will be expected to complete your homework.

You can attend Success Club every Monday to Thursday in room 53 or the library to complete homework. Sixth form helpers and staff will be there to help you if you need it. Your teachers will check your Homework Learning Journal at least once a cycle. If they are concerned that you aren't doing your homework properly, they will offer support and guidance. If you don't respond to this guidance, you will be added to the afterschool Detention where you will be expected to complete your homework.

DO NOW tasks:

At the start of every lesson you should expect a Do Now task. This is a low stakes retrieval quiz on what you have learnt so far. If you have completed your homework this should be easy. The aim is to get 100% in each of these. If you miss this target occasionally, don't worry. If it happens regularly your teacher will have a chat and offer you support.

Maths:

Your teacher will set you tasks to complete on Dr Frost Maths. This will be set every week on a Monday and will be collected in and checked on a Friday. If this has not been completed you will be issued a Detention on a Wednesday Lunchtime.

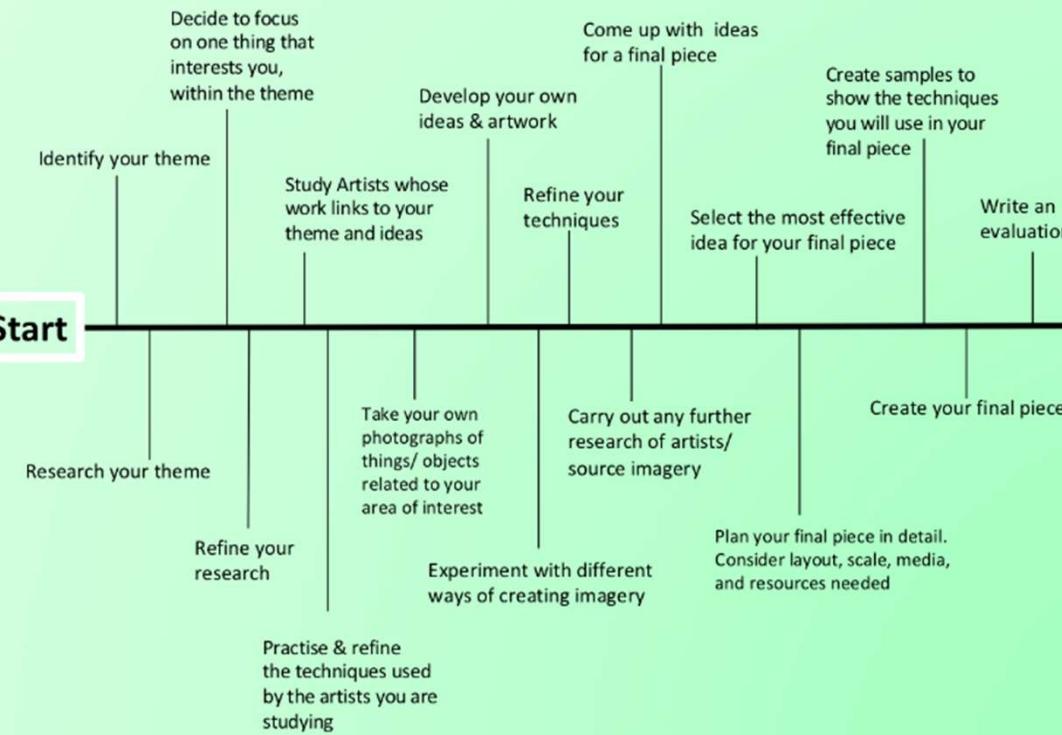
How long should I spend on my homework?

Key Stage 4					
Week 1					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
5 mins	MFL	MFL	Physical Activity	MFL	MFL
10	Maths	English		Maths	English
10	Biology	RS		Chemistry	Physics
10	Option C	Option D		Option A	Option B
55	Reading / Revision	Reading / Revision		Reading / Revision	Reading / Revision
Week 2					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
5 mins	MFL	MFL	Physical Activity	MFL	MFL
10	Maths	English		Maths	English
10	Biology	RS		Chemistry	Physics
10	Option C	Option D		Option A	Option B
55	Reading / Revision	Reading / Revision		Reading / Revision	Reading / Revision

- You should spend about 35 minutes revising your KO each day.
- You should spend 55 minutes either reading or revising each day.
- This timetable is a guide. If you want to spend longer revising one subject that you find more difficult and less time on one you find easy, that is your choice.
- We would like you to spend one evening involved in a physical activity. This might be a sports club, a run, a game of football with friends or just a nice walk with the dog. Ask your PE teacher if you need guidance with this. It doesn't have to be on a Wednesday.



Creative Process...



Do's and don'ts of annotation

What to do

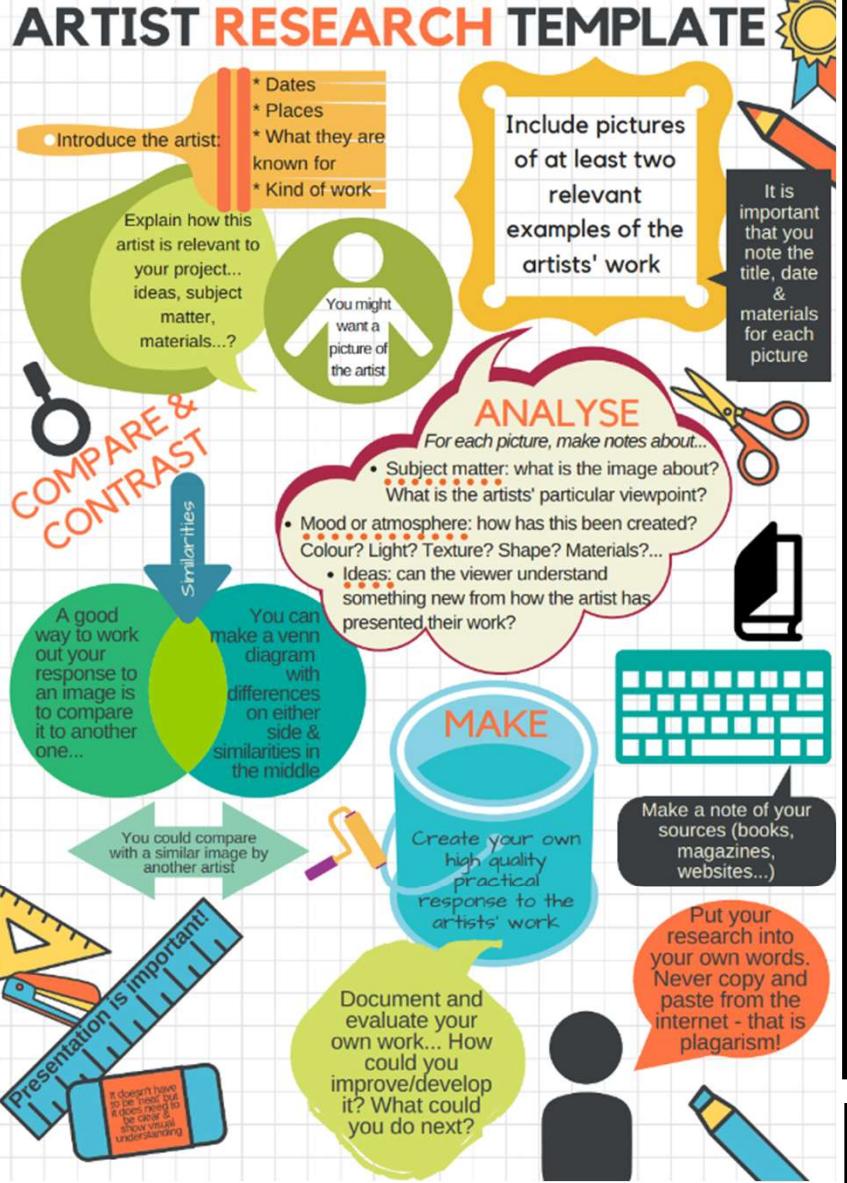
Do add labels which help explain your creative process, e.g. 'Initial Ideas', 'Thumbnail Compositional Studies', 'Exploring Negative Space.'

Do add details on techniques you might forget later, e.g. the stages you went through to achieve a particular print-making or drawing technique.

Do record your thoughts on the success of the work – what worked and what didn't.

Do reflect on the work of artists and designers you are influenced by and how this helped inform your ideas.

Do write down ideas about what you would like to try next, or if there is anything you could change to improve an idea or technique.





Keyword	Learn	✓
The theory of evolution by natural selection	States that all species of living things have evolved from simple life forms that first developed more than three billion years ago.	
Charles Darwin	Published his ideas in a book called "On the Origin of Species" in 1859.	
Alfred Russel Wallace	Independently proposed the theory of evolution by natural selection. He published joint writings with Darwin in 1858.	
Jean-Baptiste Lamarck	An alternative theory, that changes that occur in an organism during its lifetime can be inherited. We now know that in the vast majority of cases this type of inheritance cannot occur.	
Gregor Mendel	Carried out breeding experiments on plants. One of his observations was that the inheritance of each characteristic is determined by 'units' that are passed on to descendants unchanged. The importance of Mendel's discovery was not recognised until after his death.	
Fossils	The 'remains' of organisms from millions of years ago, which are found in rocks.	
Extinction	When there are no remaining individuals of a species still alive.	

Learn the stages of evolution by natural selection.
1. Individual organisms within a particular species show a wide range of variation for a characteristic due to mutations.
2. Individuals with characteristics most suited to the environment are more likely to survive to breed successfully.
3. The characteristics that have enabled these individuals to survive are then passed on to the next generation.

Evidence that Charles Darwin used includes.....	The theory was only gradually accepted because.....
1. Observations from a round the world expedition. 2. Years of experimentation. 3. Developing knowledge of geology and fossils.	1. The theory challenged the idea that God made all the animals and plants that live on Earth. 2. There was insufficient evidence at the time the theory was published to convince many scientists. 3. The mechanism of inheritance and variation was not known until 50 years after the theory was published.

Fossils may be formed ...
1. By parts of organisms that have not decayed because one or more of the conditions needed for decay are absent.
2. When parts of the organism are replaced by minerals as they decay.
3. As preserved traces of organisms, such as footprints, burrows and rootlet traces.

Keyword	Learn	✓
Carl Linnaeus	Developed the Linnaean system to classify organisms into groups depending on their structure and characteristics.	
Binomial system	Organisms are named by the binomial system of genus and species.	
Carl Woese	A 'three domain system' developed from evidence from chemical analysis.	
Evolutionary trees	A method used by scientists to show how they believe organisms are related. They use current classification data for living organisms and fossil data for extinct organisms.	

Evidence for evolution includes..
1. It has been shown that characteristics are passed on to offspring in genes.
2. The fossil record.
3. Knowledge of how resistance to antibiotics evolves in bacteria.

Linnaeus's system of classification



The five kingdoms are

animals (all multicellular animals)

plants (all green plants)

fungi (moulds, mushrooms, yeast)

protists (Amoeba, Chlorella and Plasmodium)

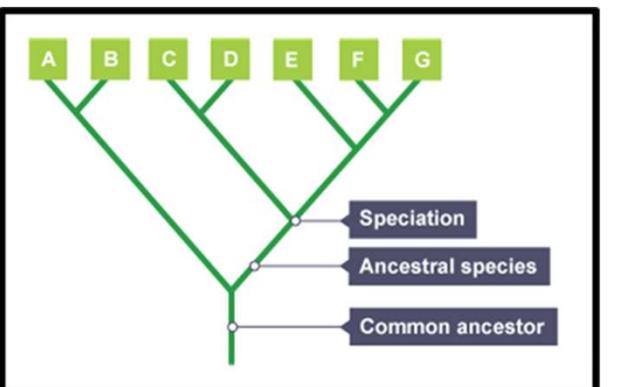
prokaryotes (bacteria, blue-green algae)

Binomial system

Uses Latin words.

Each name has two parts, the genus and the species.

Human beings belong to the genus *Homo*, and our species is *sapiens* - so the scientific name is *Homo sapiens*.



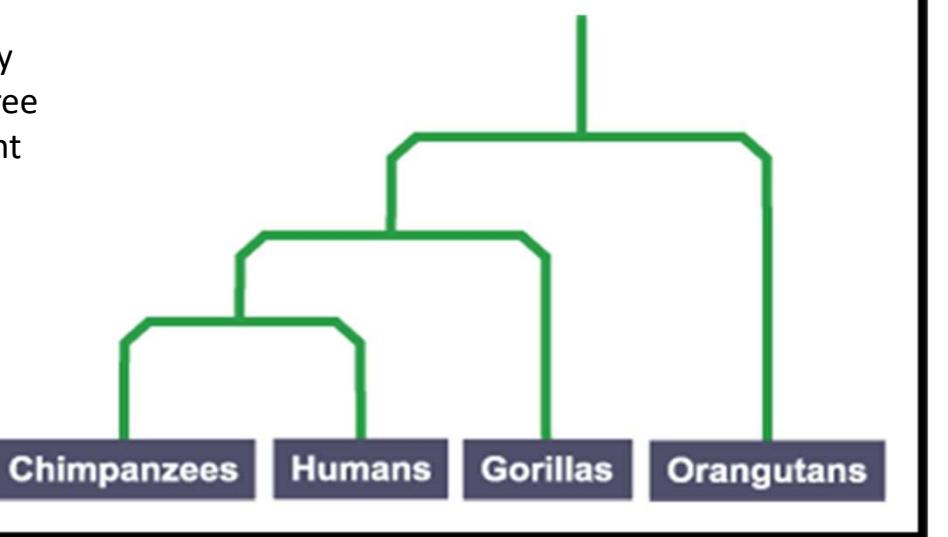
The 'three domain system'

1. archaea (primitive bacteria usually living in extreme environments)

2. bacteria (true bacteria)

3. eukaryota (which includes protists, fungi, plants and animals)

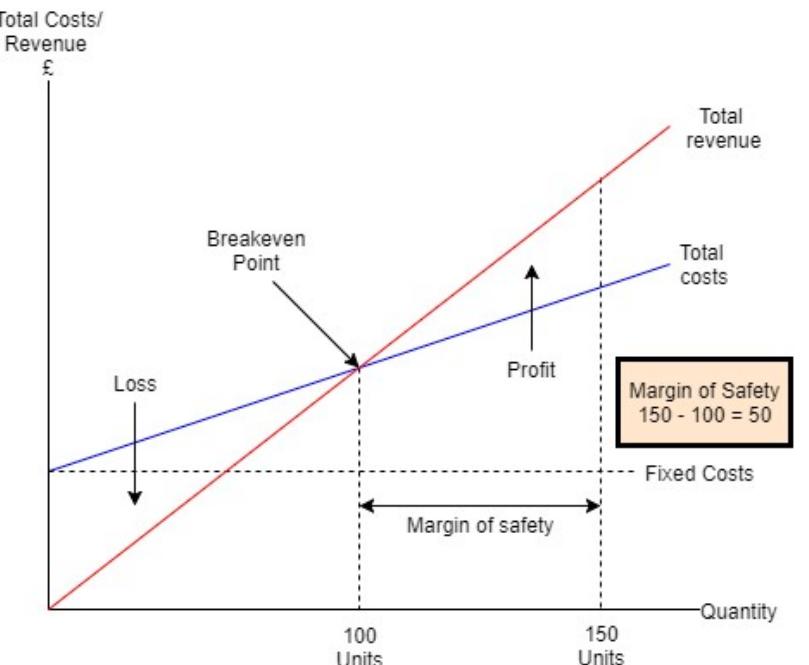
Example of evolutionary trees : The tips of the tree often represent different species and where two branches join, this represents a common ancestor for those two species.





Reasons for raising finance	<input checked="" type="checkbox"/>	Factors affecting the choice of finance	<input checked="" type="checkbox"/>	The suitable source of finance for:	<input checked="" type="checkbox"/>			
1 Start- up capital to set up a business 2 Cover periods of poor cash flow 3 Cover costs of running the business 4 To purchase more machinery and vehicles 5 To help fund expansion		1 Size of business 2 Type of business 3 Amount of money needing to be raised 4 Length of time the money is needed for 5 Cost of the source of finance – current interest rate etc.		New businesses Family and friends Loans/mortgages/overdrafts Trade credit Hire purchase Government grants	Established business Retained profits Sale of unwanted assets New share issues			
Why are cash flow forecasts constructed?	<input checked="" type="checkbox"/>	Definitions						
1. Identify times of cash flow problems (liquidity) 2. Help organise appropriate finance 3. Help manage unexpected cash flows		Cash	Money that the business has in cash or at the bank.					
		Cash flow forecast	A financial planning tool that estimates the money coming into and going out of the business on a month-by-month basis.					
		Cash inflow	Money received by the business from its operations or investments.					
		Cash outflow	Money paid out by the business to fund its operations or investment activities.					
		Opening balance	The amount brought forward from the end of the preceding accounting period so that it is the starting figure for the new one.					
		Closing balance	The amount that remains in the account at the end of an accounting period.					
		Net cash flow	The difference between cash inflows and cash outflows.					
		Profit	The amount of money a business earns after costs have been deducted.					
Reasons for poor cash flow	<input checked="" type="checkbox"/>	Consequences of cash flow problems						
1. Poor sales 2. Overtrading – business buying too much stock or recruiting too many workers 3. Poor business decisions		Working capital issues	Not enough cash to meet its day to day expenses					
		Demotivated staff	Staff might not get paid on time causing resentment and demotivation					
		Missed discounts	Suppliers often give discounts for prompt payment					
		Creditors	If people who are owed money aren't paid on time they may insist on stricter credit terms or take legal action					
Methods to improve cash flow	<input checked="" type="checkbox"/>							
1. Rescheduling payments 2. Reducing cash outflows 3. Arranging an overdraft 4. Finding new sources of finance 5. Increasing cash inflows								

Definitions		<input checked="" type="checkbox"/>
Revenue	The income generated from the sale of goods/services. (selling price x units sold)	
Cost	The money spent by a business on goods and services.	
Profit	The amount of money a business earns after costs have been deducted.	
Variable costs	The costs that change as the business' output changes.	
Fixed costs	The costs that stay largely the same, regardless of the business' output.	
Total costs	All the costs involved in producing goods/services. (Total costs = fixed costs + variable costs)	
Break-even	The point at which the business' total sales equals the total costs. There is neither profit nor loss.	
Margin of safety	The amount by which current sales exceed the break-even level of output.	
Average rate of return (ARR)	The average profit for the year as a percentage of the original investment.	



Break-even Evaluation		<input checked="" type="checkbox"/>
Advantages	Disadvantages	
Allows predictions to be made on how changing costs, prices and sales levels impact break-even	Assumes businesses sell all quantity of the product at the same price	
Helps persuade banks to give the business a loan	Based on predictions and so may not be accurate	
Helps calculate the level of risk of starting the business	Complicated if the business sells more than one product	



Chapter 10 – Using Resources

Key term	Learn	✓
Finite	A resource that will eventually run out.	
Sustainable development	Sustainable development meets the needs of people today without preventing people in the future from meeting theirs.	
Potable water	Water that is safe to drink- contains low levels of dissolved salts and microbes.	
Phytomining	Uses plants to absorb metal compounds. The plants are then harvested and burned to produce ash that contains the metal compounds.	
Bioleaching	Uses bacteria to produce leachate solutions that contain metal compounds.	
Displacement	Uses scrap iron to obtain copper from solutions of copper compounds.	
Electrolysis	Uses an electric current to separate ions.	
Corrosion	The destruction of materials by chemical reactions with substances in the environment.	
Rust	An example of corrosion. Iron rusts when reacted with oxygen from the air and water.	
Barrier protection	A method of preventing corrosion: greasing, painting or electroplating	
Sacrificial protection	Coating a less reactive metal with a more reactive metal, e.g. zinc is used to galvanise iron to prevent iron from rusting	
NPK fertiliser	A formulation containing nitrogen, phosphorus and potassium that are used to improve agricultural productivity.	

Life cycle assessment (LCA)	Carried out to assess the environmental impact of products	✓
Stages of an LCA	<ol style="list-style-type: none"> Extracting and processing raw materials Manufacturing and packaging Use and operation Disposal <p><i>Transportation and distribution at each stage</i></p>	

Useful material	Learn	✓
Alloy	A metal mixed with small amounts of another element to make it harder	
Bronze	Alloy of copper and tin	
Brass	Alloy of copper and zinc	
Steel	Alloy of iron and specific amounts of carbon and other metals	
Soda-lime glass	Made by heating a mixture of sand, sodium carbonate and limestone	
Borosilicate glass	Made from sand and boron trioxide	
Clay ceramics	Made by shaping wet clay and heating in a furnace	
Poly(ethene)	Can exist as low density and high density poly(ethene) by changing the reaction conditions	
Thermosoftening	Polymer that melts when heated	
Thermosetting	Polymer that does not melt when heated. as it has cross-links between polymer chains	
Composite	Made of 2 materials- a matrix and a reinforcement	

Potable water	Water that is safe to drink- contains low levels of dissolved salts and microbes)	✓
Ground water	<ol style="list-style-type: none"> Choose a suitable source of fresh water Pass water through filter beds Sterilise with chlorine, ozone or UV light 	
Waste water	<ol style="list-style-type: none"> Screening and grit removal Sedimentation to produce sewage sludge and effluent Anaerobic digestion of sewage sludge Aerobic biological treatment of effluent 	
Salt water	Desalination by distillation or reverse osmosis.	



2.2.3 SQL

Keyword	Definition / Example	✓
Database	A large store of structured information.	
DBMS	Database Management System – software that manages a database.	
Record	A data structure used to store multiple pieces of data about one entity together.	
Field	One of the items in a record that contains a particular piece of data.	
Table	A collection of related data held in a table format within a database. It consists of columns and rows.	
SQL	Structured Query Language (SQL) - a universal database language	
Query	Questions used to isolate and display a subset of data from a database.	
SQL command structure	SELECT: Selects the fields to display FROM: The table you want to use. WHERE: Defines a condition to be met for the rows to be returned AND/OR: Add two or more conditions to WHERE clause. LIKE: is used in a WHERE clause to search for a pattern in a column *: A wildcard meaning select everything %: A wildcard character used to substitute for any character(s)	

Practise Python coding at home!

- Code online using: <https://vscodeedu.com/>
- Online tutorial 1: <https://www.w3schools.com/python/>
- Online tutorial 2: <https://time2code.today/python-course>

2.5.2 The Integrated Development Environment (IDE)

Keyword	Definition / Example	✓
Low-level language	Programming languages that provide little or no abstraction from a computer's instruction set architecture.	
High-level language	Programming languages that are closer to natural language and can be read by humans.	
Machine code	Instructions in binary.	
Assembly language	Consists of a set of mnemonic instructions, each of which has a machine code equivalent.	
Translator	A program used to convert programming code into machine code for the computer to process.	
Compiler	Software that converts a program written in a high-level language into machine code in one go.	
Interpreter	Software that converts a program written in a high-level language into machine code line-by-line.	
Assembler	Software that converts a program written in assembly language into machine code.	
IDE	Integrated Development Environment - a comprehensive set of tools to develop programs.	
Debugging	The process of finding and resolving bugs (defects or problems that prevent correct operation) within computer programs.	
Debugger	A tool for debugging code to help find errors.	



GCSE Design Technology: CORE 1.09 Papers and boards

Papers

Tick	Type	Uses	Properties
	Copier paper	<ul style="list-style-type: none"> Writing Printing 	<ul style="list-style-type: none"> Takes colour well Available in different colours
	Cartridge paper	<ul style="list-style-type: none"> Drawing Art sketch books 	<ul style="list-style-type: none"> Accepts most types of drawing media Opaque
	Tracing paper	<ul style="list-style-type: none"> Art Envelope windows 	<ul style="list-style-type: none"> Strong Translucent

GCSE Design Technology: CORE 1.10 Polymers

Tick	Thermoforming polymer	Properties	Uses
	Acrylic	<ul style="list-style-type: none"> Brittle Easily cleaned 	<ul style="list-style-type: none"> Car headlights Baths
	HIPS (High Impact Polystyrene)	<ul style="list-style-type: none"> High stiffness Tough 	<ul style="list-style-type: none"> Toys TV parts
	Biopol	<ul style="list-style-type: none"> Degrades in soil Lightweight 	<ul style="list-style-type: none"> Disposable cups, razors and cutlery Packaging

Boards

Tick	Type	Uses	Properties
	Folding boxboard	<ul style="list-style-type: none"> Cereal boxes Food packaging 	<ul style="list-style-type: none"> Excellent for scoring Accepts print well
	Corrugated board	Protective packaging	<ul style="list-style-type: none"> Impact resistant Lightweight
	Solid white board	<ul style="list-style-type: none"> Book covers Cosmetic + medicinal packaging 	<ul style="list-style-type: none"> Strong Rigid

Tick	Thermosetting polymer	Properties	Uses
	Polyester resin	<ul style="list-style-type: none"> Rigid Brittle 	<ul style="list-style-type: none"> Boat hulls Sports car bodies
	Urea formaldehyde	<ul style="list-style-type: none"> Hard Excellent electrical insulation 	<ul style="list-style-type: none"> Plugs, sockets, light switches (electrical fittings)



Tick	Natural fibres	Properties	Uses
	Wool	<ul style="list-style-type: none"> • Warm • Can feel itchy 	<ul style="list-style-type: none"> • Coats • Jumpers • Blankets
	Cotton	<ul style="list-style-type: none"> • Cool • Resists abrasion 	<ul style="list-style-type: none"> • Towels • Bedding • T-shirts

Tick	Synthetic fibres	Properties	Uses
	Polyester	<ul style="list-style-type: none"> • Dries quickly • Crease resistant 	<ul style="list-style-type: none"> • Raincoats • Nightwear • Medical textiles
	Acrylic	<ul style="list-style-type: none"> • Dries quickly • Durable 	<ul style="list-style-type: none"> • Imitation wool and knitwear • Blankets

Tick	Woven textile	Properties	Uses
	Plain weave (calico)	<ul style="list-style-type: none"> • Strong • Prints well 	<ul style="list-style-type: none"> • Shirts • Bags • Beddings
	Twill weave (denim)	<ul style="list-style-type: none"> • Strong • Less stiff 	<ul style="list-style-type: none"> • Jeans • Jackets • Furnishings

Tick	Non-woven textile	Properties	Uses
	Felted wool	<ul style="list-style-type: none"> • Resistant to chemicals • Doesn't fray 	<ul style="list-style-type: none"> • Pool table surface • Hats
	Bonded fibres	<ul style="list-style-type: none"> • Doesn't fray • Not very strong 	<ul style="list-style-type: none"> • Wet wipes • Disposable overalls

Tick	Knit type	Properties	Uses
	Warp knit	<ul style="list-style-type: none"> • Fairly stretchy • Doesn't unravel 	<ul style="list-style-type: none"> • Geotextiles • Lace • Fleece
	Weft knit	<ul style="list-style-type: none"> • Stretchy • Comfortable 	<ul style="list-style-type: none"> • T-shirts • Jumpers • Socks

Tick	Facts	
	Natural fibres	<ul style="list-style-type: none"> • Comes from plants and animals
	Synthetic fibres	<ul style="list-style-type: none"> • Are manmade, made from oil
	Woven textiles	<ul style="list-style-type: none"> • Are formed by weaving threads
	Non-woven textiles	<ul style="list-style-type: none"> • Are formed by using glue, heat and pressure to combine fibres
	Warp knit	<ul style="list-style-type: none"> • Are interlocking yarns – vertically
	Weft knit	<ul style="list-style-type: none"> • Are interlocking yarns - horizontally



Question structure and objectives		Section C – Unseen Poetry	Language
Question One: question analysing the first unseen poem – 24 marks			Assonance: repeated vowel sound.
Question Two: question comparing methods of the first unseen poem with a second – 8 marks Assessment		Structure and form	Extended metaphor: a series of linked metaphors.
Objectives: AO1: Read, understand and respond to texts AO2: Analyse the language, form and structure used by the writer to create meanings/effects, using relevant terminology		Anaphora: repeated first words at start of a line.	Imagery: visually descriptive or figurative language.
Steps to analysing an unseen poem-WILSON		Blank verse: poetry written with a consistent metre (usually iambic pentameter) but unrhymed lines.	Motif: recurring theme or symbol.
First	Read the question carefully and highlight the key words. Read the poem twice. Make sure you understand what it is about (use the question to help you). Poems are usually about a person, a place, event, memory or reflection (thinking of feelings about something). They are often observations of very small details.	Caesura: a break in the middle of a line using punctuation.	Semantic field: group of words related in meaning.
W	What is it about? Who is speaking? Where are they? What happens and why? When is the poem set at a particular time? Analyse: feelings, characters, speaker, your reaction.	Enjambment: a sentence that runs over lines and stanzas.	Useful words for analysis
I	Ideas – what ideas or themes does the poet explore?	Free Verse: Does not use consistent meter patterns, rhyme, or any musical pattern.	Suggests Symbolises alludes to implies highlights signifies conveys embodies connotes
L	Language – are there any specific words or language techniques?	Iambic pentameter: 10 syllables per line, consisting of unstressed/stressed patterns.	Comparatives
S	Structure – how is the poem laid out and organised? Does it flow? Is there a story (narrative)? Does it have a timeline? Are there any structural devices you can pick out?	Juxtaposition: placing contrasting ideas close together in a text.	Moreover In addition Similarly In contrast Conversely Alternatively On the other hand
O	Opinion – why do you think the poet wrote it? Is there a message?	Oxymoron: two opposite words next to another.	
N	Now plan – plan your answer so it is clearly structured.	Quatrain: a stanza of four lines.	
You must write paragraphs which have a clear point, quotations and analysis of how and why methods convey meaning. In your analysis you must consider the effect on the reader and the poet's intention. - For the 24 mark question aim for 4-5 paragraphs. For the 8 mark question aim for 2-3 paragraphs.		Refrain: repeated lines (like a chorus in a song).	
		Sonnet: 14 lines. It usually takes a turn, called a "Volta," about 8 lines in, and then resolves the issue by the end. Shakespearean sonnets-ABAB CDCD EFEF GG	
		Sestet: stanza of 8 lines	
		Volta: the turning point of a poem.	



	Key word	Key quotation	Example sentence	An Inspector Calls – Spring 1	✓
Mr Birling	Chauvinist	'clothes mean something quite different to a woman'	Birling's chauvinist beliefs are evident suggesting that women are more concerned with clothes and their appearance.		
	Avaricious	'They'd soon be asking for the earth.'	When Eva requests a small pay rise, his avaricious nature means he refuses immediately.		
	Ostentatious	'It's exactly the same port your father gets'	As Gerald is from a wealthy, middle class family, Birling becomes more ostentatious around him.		
	Patronising	'What's the matter with that child?'	Whilst Sheila is a young adult, Birling insists on patronising her constantly.		
Mrs Birling	Conceited	'Girls of that class'	Sybil Birling demonstrates her conceited nature when she refers to Eva as a girl 'of that class'.		
	Imperious	'I find that a trifle impertinent, Inspector'	The Inspector taking control riles her, and she shows her imperious attitude.		
	Ignorant	'Surely you don't mean Alderman Meggarty?'	Her ignorance is clearly shown when she struggles to believe that Alderman Meggerty was in the Palace bar.		
	Prejudiced	'As if a girl of that sort would ever refuse money!'	As a wealthy and privileged woman, Mrs Birling is particularly prejudiced against the working class.		
Sheila Birling	Naïve	'Was it an accident?'	At the beginning of the play, Sheila's naïve attitude is shown when she is told that the girl has drank disinfectant.		
	Oppressed	'Nothing to do with you, Sheila. Run along.'	As the daughter of a powerful couple, she is oppressed by them and sheltered from serious issues.		
	Compassionate	'But these girls aren't cheap labour – they're people!'	When she realises how her family treated Eva, she immediately reacts by saying...		
	Perceptive	'Mother – stop – stop!'	Despite being treated as a child, she is far more perceptive than her parents.		
Eric Birling	Bourgeois	'You're squiffy'	Eric is clearly the product of the bourgeois; at the beginning, he is irresponsible and careless.		
	Privileged	'I insisted, it seems'	He used his privilege to force Eva to succumb to him.		
	Culpable	'I'm not likely to forget'	The Inspector showed Eric that he was culpable for Eva's suicide, and Eric accepted this.		
	Penitent	'This girl's still dead, isn't she?'	At the end of the play, Eric is penitent; to him, it doesn't matter that the Inspector was found to be a fake.		
Gerald	Aristocratic	'easy, well-bred young man-about-town'	From the beginning of the play, Gerald is displayed in a way which shows he is aristocratic and privileged.		
	Duplicitous	'I didn't feel about her as she felt about me.'	Gerald is duplicitous, not only in cheating on Sheila, but in convincing Eva he felt more for her than he did.		
	Charming	'nothing less than a cry for help'	His charming and approachable nature can be seen when we hear that Eva seemed to be appealing to him.		
	Static	'Everything's all right now. What about this ring?'	At the end of the play, Gerald is static; he has not changed for the better and refuses to learn his lesson.		
Inspector	Authoritative	'That's the way I like to work.'	Even when questioned by Gerald and Mr Birling, Inspector Goole remains authoritative and in control.		
	Influential	'I often do (have an influence) on the young ones.'	Priestley depicts him as influential, which is evident in the way his words change Sheila and Eric.		
	Magnifying	'It's better to ask for the earth, than to take it.'	The Inspector has a magnifying influence on comments made by the family, even the seemingly small ones.		
	Antithesis	'We don't live alone. We are members of one body.'	Priestley presents the Inspector as the antithesis of Mr Birling; both represent opposing political viewpoints.		
Daisy/Eva	Stoical	'She was – very gallant – about it.'	She is clearly used to being hurt; she is stoical when faced with losing the person who means the most to her.		
	Vulnerable	'She was young and pretty and warm-hearted.'	As a working class girl, she is vulnerable; she has no family or support.		
	Audacious	'She'd had a lot to say – far too much'	Birling seems to feel that Eva was audacious as she spoke out freely and stood up for her rights.		
	Prey	'I threatened to make a row.'	Eric treats her like prey, using her vulnerability to force her into agreeing to let him into her home.		
	Righteous	'She didn't want to take any more money from him.'	She is shown as more moral than Eric when refusing to accept stolen money, exposing the immorality of the upper class.		



Structure of the speaking exam:

Before the Easter holiday, you will be given a choice of 2 themes for the picture card and general conversation. You will decide which theme you prefer and will need to prepare for this.

When you arrive for your speaking exam, the invigilator will give you:

1 x Read aloud card

1 x Role Play card

1 x Picture card

You will have 14 minutes to prepare prior to the exam.

You will not have access to a dictionary or any notes.

You are allowed to annotate the Read Aloud card. You will have lined paper to make notes for the role play and the picture card and you can take your notes with you into the exam.

After the 14 minutes preparation time, you will go into the exam room and the recording will start. You are given 1 minute to practise the read aloud task and this part of the recording will not be marked. During the exam, the teacher is allowed to repeat a question twice (ie you can hear it up to 3 times in total)

Task 1 – Read aloud. The task will contain 4 sentences (50-55 words) from a specific theme, allocated by the exam board. Read the text aloud, using your knowledge of French phonics to help you. This is followed by 2 short-answer questions. Be careful to answer in the correct tense.

Task 2 – the Role Play. There are 5 bullet points and your teacher will speak first. For Higher, you will need to ask two questions and answer 3 questions. There will always be one bullet point in the future tense. Short answers are sufficient but one word answers will not get full marks.

Task 3 has 3 parts.

1 Picture description. There is a choice of 2 photos for you to describe. You must include reference to People/Action/Location.

2 Two unprepared follow-up questions, one of which will be in the perfect tense (ie the past)

3 Broader conversation (5 – 5.5 minutes) on the broader thematic context



Thematic contexts:

- My personal world
- Lifestyle and wellbeing
- My neighbourhood
- Media and technology
- Studying and my future
- Travel and tourism

Role Play settings

Cinema / theatre / concert hall	In town
Café or restaurant	Tourist office
Hotel	Sport / leisure centre
Campsite	Shop / market / shopping centre
Doctor's surgery / hospital	Train station

What do I need to know about the role play?

- It is the **second** part of the speaking exam (after **Read aloud**).
- There are **10** possible settings.
- The teacher speaks first.
- You will say something for each of the **five** numbered items.
- Speak in the present tense, or use a conditional like *je voudrais*.
- You will need to ask **two** questions.
- You can choose between using the informal *tu* form or the formal *vous* form (though you don't have to!) to ask your questions.
- You will answer **one question** about something in the **future**.

Settings	Role-play example numbered items	Example questions
Tourist office	Ask a question about transport	Il y a des bus ici? Où est la gare? À quelle heure part le train?
	Ask a question about other activities	Qu'est-ce qu'on peut faire ici? Il y a un château près d'ici?
Cinema	Ask a question about cost	C'est combien? Ça coûte combien?
	Ask the employee about food/drinks	Est-ce que vous vendez de l'eau? Où est-ce que je peux acheter des fruits?
Shopping centre	Ask a question about something else you want to buy	Vous avez une autre couleur? Vous avez une autre taille?
	Ask a question about places to eat and drink	Il y a un restaurant près d'ici? Où est-ce que je peux manger ici?
Sports centre	Ask the employee about buying a drink	Est-ce que je peux acheter de l'eau ici? C'est combien une bouteille d'eau?
	Ask the employee about opening times	Le centre ouvre quand? À quelle heure est-ce que la piscine ferme?
Doctor's surgery	Ask a question about seeing the doctor	Je peux parler à un docteur? Quand est-ce que je peux voir un médecin?
	Ask a question about opening times	À quelle heure est-ce que vous ouvrez? Quand est-ce que vous fermez?
Hotel	Ask about sport facilities in the hotel	Il y a une piscine ici? On peut jouer au tennis à l'hôtel?
	Ask about other facilities	Il y a un restaurant dans l'hôtel? Est-ce que vous avez un magasin?

Puis-je..?	
Puis-je	Can I ?
Puis-je avoir?	Can I have?
Puis-je voir?	Can I see?
Puis-je changer?	Can I change?
Puis-je aller?	Can I go?

Question words	
Pourquoi?	Why?
Quand?	When?
Où?	Where?
Combien (de)?	How much/many?
C'est combien?	How much is it?
Qui?	Who?
Comment?	What? How?
Qu'est-ce que?	What?
Quoi?	What?
Quel/quelle/ quels/quelles?	What?

Est-ce que..	
This is often the easiest way to ask a question.	
It literally means 'is it that?'	
Use it before the pronoun and verb.	
Est-ce que..	'is it that'
Est-ce que tu aimes..?	Do you like?
Est-ce que tu veux?	Do you want?
Est-ce que tu as?	Do you have?
Est-ce que vous avez?	Do you have?
Est-ce qu'il y a ..?	Is there..?

Répétez s'il vous plaît/ vous pouvez répétez la question

Repeat please

Role plays structures	
Tu aimes..?	Do you like?
Tu fais..?	Do you do?
Tu as..? (Informal)	Do you have?
Avez-vous? (formal)	Do you have?
Où est..?	Where is..?
Où sont..?	Where are..?
C'est combien le ticket?	How much is the ticket?
A quelle heure?	What time?
Le film commence à quelle heure?	What time does the film start?
Le film finit à quelle heure?	What time does the film finish?
Le magasin ouvre à quelle heure?	What times does the shop open?
Le magasin ferme à quelle heure?	What time does the shop close?

Picture Description - Actions	
In French there is only one present tense, which can be translated as 'I do' and 'I am doing'	
Il est/ils sont	He is/they are
Il fait/ils font	He is /they are doing
Il a /ils ont	They have
Il mange/ils mangent	He is/they are eating
Il regarde/ils regardent	He is/they are watching (tv)
Il porte/ils portent	He is/they are wearing
Il travaille/ils travaillent	He is/they are working
Il lit/ils regardent	He is / they are reading
Il est assis/ils sont assis	He is/they are sitting
Elle est assise/elles sont assises	She/they are sitting
Il rit/ils rient	He is/they are laughing
Il parle avec/à	He is talking to
Il parlent avec/à	They are talking
Il a l'air/ils ont l'air	He looks / they look
Il semble/ils semblent	He seems/they seem

Role plays structures	
Je peux vous aider?	Can I help you?
Pouvez-vous..?	Can you ...?
Tu peux..? (inf)	Can you ...?
Comment trouvez-vous..?	How do you find...?
Comment est-ce que tu trouves..? (inf)	How do you find...?
Où est/sont..?	Where is/are ...?
Où puis-je..?	Where can I ...?
Quelle sorte de ...aimes-tu?	What kind of ... do you like?
Pouvez-vous recommander..?	Can you recommend me ...?
Voulez-vous...	Do you want ?
Tu veux ... (inf)	Do you want?
C'est tout?	Anything else?
Je voudrais	I would like ...
Je veux	I want ...
Je cherche	I'm looking for ...

Picture description	
Autre chose?	Anything to add?
Sur la photo	On the photo
Je peux voir/on peut voir	I can see/you can see
De plus je peux voir	Also I can see
À gauche/à droite	On the left/on the right
À l'arrière plan	In the background
Au gros plan	In the foreground
Il y a	There is/there are
Il est en train de ...	He is in the middle of
Ils sont en train de ...	They are in the middle of
La photo a été prise	The photo was taken
J'imagine que	I image that
Ils se trouve/ils se trouvent	It/they are located
Il fait beau/froid/gris	It is nice/cold/grey
Il y a du soleil/des nuages	It is sunny/cloudy
Il neige/il pleut	It's snowing/raining





7.1 Biome distribution

- The biosphere contains all living organisms and is the layer of the Earth's surface between the lithosphere and the atmosphere.
- The biosphere is divided into nine major biomes such as tropical rainforest and taiga. Biomes are large scale ecosystems.
- The location and characteristics of these biomes are influenced by temperature, precipitation and sunshine, all are controlled by **latitude**.

Local factors can alter the biome distribution:

- Rock and soil type – acidity and nutrients affect plant growth.
- Water availability and drainage – some plants prefer wet soil, others dry soil.
- Altitude – temperature decreases with height, rainfall increases.

Biomes consist of:

- The **biotic** (living) part – plant and animal life
- The **abiotic** (non-living) part – the atmosphere, water, rock and soil.

7.2 Services provided by biomes

The importance of **ecosystem services** varies – they can be important to locally and globally important:

- Provisioning services (goods) – food, fuelwood, timber, and chemical materials.
- Supporting services – nutrient cycling, photosynthesis, and soil formation.
- Regulating services – carbon storage and the hydrological cycle.
- Cultural services – tourism, education, science, and well-being.

7.2 Threats to biomes

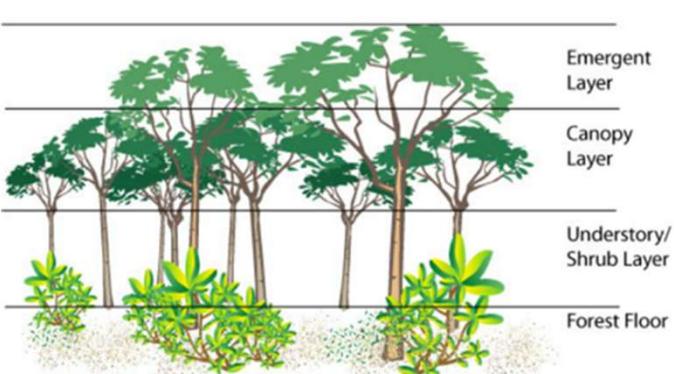
Ecosystem services are being exploited commercially.

Large areas of biomes are cleared for:

- commercial farming
- mining metal ores
- timber
- construction of dams for HEP and water supply.

Population growth, **industrialisation**, **urbanisation** and rising wealth has led to an increase in demand for **natural resources**. As a result, biomes are destroyed for farming, species are threatened, and rivers and the atmosphere are polluted.

- Pessimistic view (**Malthus**) – population will grow, and the planet will run out of resources, leading to 'positive checks' (war, famine) or **preventative** checks (fewer children).
- Optimistic view (**Boserup**) – humans will invent new ways to allow more resources to be supplied (e.g. technology such as farm machinery, GM crops and irrigation).



8.1 Rainforest characteristics

Biodiversity in tropical rainforests is high because of the **equatorial climate** (hot and wet all year around) species have evolved over millions of years they have multiple layers of vegetation.

Adaptations to the climate include:

- Hardwood trees** such as mahogany have large buttress roots to support the weight of trees and leaves and branches are only found at the top.
- Lianas** that use the tree to climb up to the sunlight in the canopy.
- Birds** such as macaws that have strong beaks to break open nuts.
- Primates** such as monkeys use their tails for balance and live in the canopy where most food is found.

In the tropical rainforest nutrient cycling is rapid because it has:

- a **large biomass store** (dense vegetation)
- a **small litter store** (rapid decay).
- a **large take-up of nutrients** (rapid plant growth)
- a **larger supply of nutrients** (**weathering**)
- a **larger loss of nutrient** (**throughflow**).

8.2 Taiga characteristics

The taiga has long, cold winters (January average -10°C), short, wet summers (July average 15-20°C), and low levels of precipitation (380-650mm annually). As a result, productivity in the taiga is relatively low. There is only one layer of vegetation – trees with mosses and lichens growing on the trees.

Adaptations include:

- Needle-shaped and waxy leaves reduces water loss (transpiration) and frost damage
- Wide, shallow roots avoid the frozen ground but are wide to support the trees and anchor them in strong winds.



8.3 Threats to rainforests

- **Deforestation** is the main **direct threat** to the tropical rainforest.
- **Cattle ranching** – an increasing global demand for beef (and the need to grow soya to feed cattle).
- **Poverty** – local people cut down trees for subsistence farming and fuelwood.
- **Debt** – countries export timber and grow cash crops to pay off debts.
- **Development** – urbanisation, HEP stations and palm oil plantations.
- **Demand** – the need for timber, oil, gas, iron ore and gold.

Climate change is the main **indirect threat** to tropical rainforests. Droughts in the Amazon rainforest are becoming more common. Dry leaf litter reduces decomposition and dying leaves in the canopy reduces food supply, affecting food webs. During droughts the Amazon can switch from absorbing CO₂ to emitting it.

8.4 Taiga threats

The taiga is under threat from:

- **Deforestation** is greatest in countries with taiga forests. Causes include paper, construction, mining, fossil fuels and HEP.
- **Forest fires** – hot and dry summers make the forest prone to fires from lightning strikes.
- **Pests and diseases** – warmer temperatures increase insect infection and diseases in coniferous trees.
- **Acid rain** – burning of fossils releases sulphur dioxide into the air – the acid rain weakens trees by reducing photosynthesis and damaging the soil.

8.5 Rainforest management

- Two of the main global actions to protect rainforests are **CITES** (The Convention on International Trade in Endangered Species) and **REDD** (Reducing Emissions from Deforestation and forest Degradation).
- **CITES** – is an international treaty adopted by 180 countries that protects species e.g. African elephants and the banning of the ivory trade. However, protecting species does not prevent deforestation and global warming.
 - ✓ Large international influence
 - ✓ Targeting the right problem – trade in endangered species is international.
 - ✗ Illegal trade in rainforest projects is increasing
 - ✗ CITES cannot possibly monitor all 180 countries at the same time.
- **REDD** – is a UN project that aims to stop deforestation with governments and TNCs funding projects to conserve forests in development countries. However, it is difficult to police so illegal logging often takes place.
 - ✓ REDD provides international expertise to develop the best approaches
 - ✓ Funding is attractive to governments
 - ✗ Deforestation remains very rapid in South Asia, despite countries signing up to the REDD scheme
 - ✗ Vague as to what counts as forests for replacing



Sustainable management of tropical rainforests has economic, social and environmental benefits.

- **Ecotourism** provides jobs for local people and educates tourists whilst
- **Agroforestry** maintains biodiversity allowing crops to grow between trees.
- Population growth may increase deforestation

8.6 Taiga management

There are pressures to develop the taiga for oil, gas and mineral extraction, and HEP.

- **Wilderness areas and national parks** are ways of protecting the taiga such as those in the USA.
- **RAMSAR** is an example of conservation that adds an additional level of protection for wetlands
- **Boreal Forest Platform (BFP)**: is an example of industry (IKEA) together with NGOs such as WWF working together to ensure logging can continue without the loss of biodiversity or intact forests.
- **Sustainable forestry**: where in areas of logging the area is replanted with native species (afforestation) and natural forests are not converted into tree plantations.
- **Selective logging (or cutting)** is a timber-harvesting method to fell the chosen trees. The method implies removing only the best timber and leaving the rest in the stand.
- The main conflicting views regarding the taiga are people and organisations who:
 - Believe it should be conserved and protected
 - Believe it should be exploited for its resources: wood, oil and gas
- National governments must try and balance these views which can lead to **conflict** (e.g. indigenous people versus oil and gas companies).
- The economy versus the environment debate is common in all biomes but is especially notable in the Taiga and Tropical Rainforest.



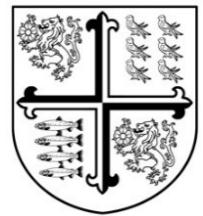
Equipment



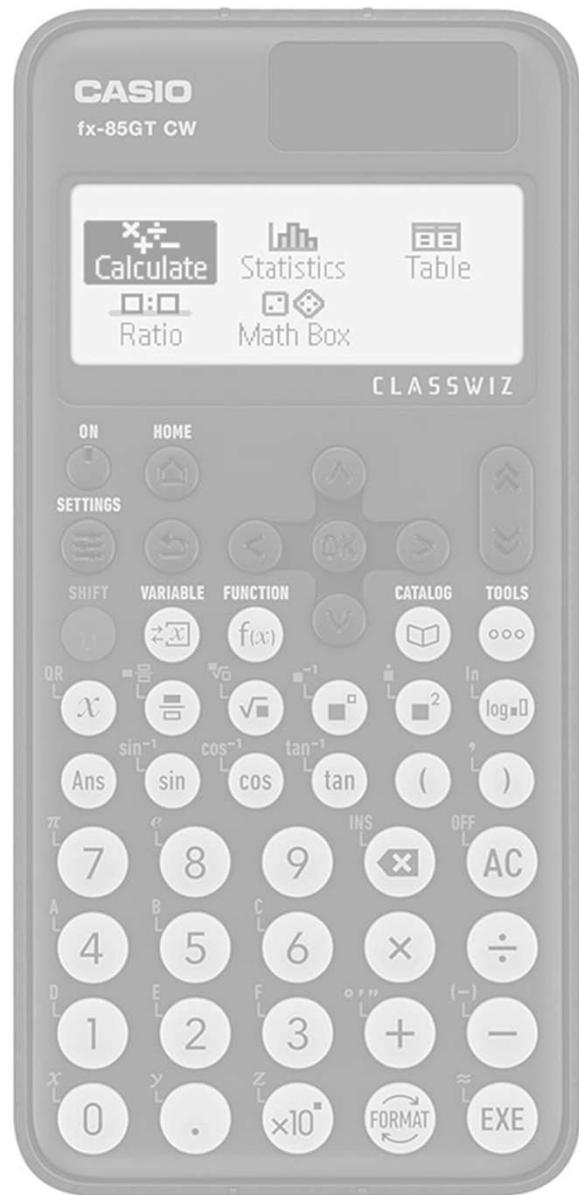
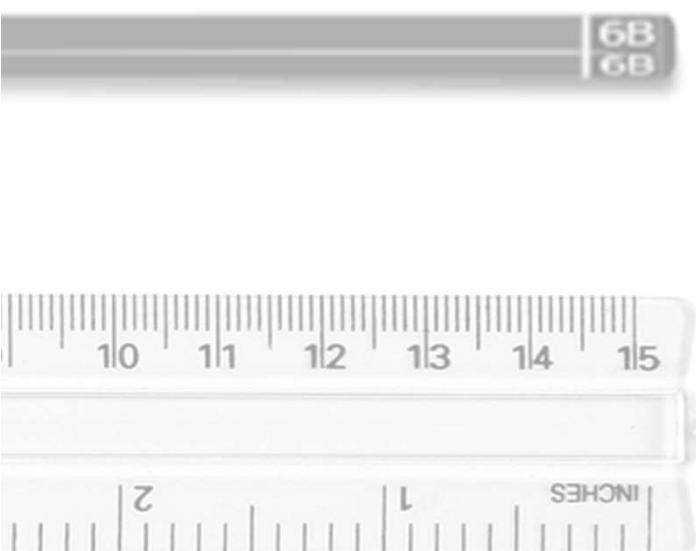
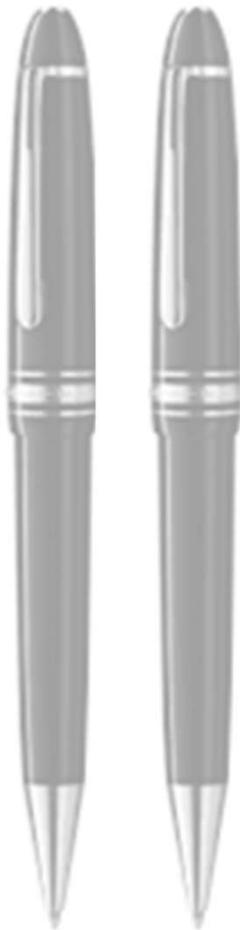
ID Card



Check



- ID card
- Green and purple pens
- Whiteboard pens
- Black/blue pens
- Glue stick
- Pencil
- Ruler
- Calculator





Structure of the speaking exam:

Before the Easter holiday, you will be given a choice of 2 themes for the picture card and general conversation. You will decide which theme you prefer and will need to prepare for this.

hen you arrive for your speaking exam, the invigilator will give you:

1 x read aloud card

1 x Role Play card

1 x Picture card

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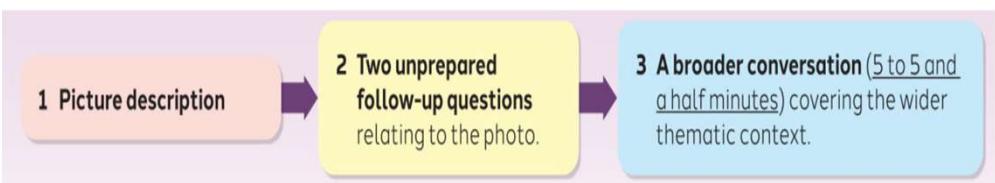
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Task 3 has 3 parts.

1 Picture description. There is a choice of 2 photos for you to describe. You must include reference to People/Action/Location.

2 two unprepared follow-up questions, one of which will be in the perfect tense (ie the past)

3 broader conversation (5 – 5.5 minutes) on the broader thematic context



Thematic contexts:

- My personal world
- Lifestyle and wellbeing
- My neighbourhood
- Media and technology
- Studying and my future
- Travel and tourism

Role Play settings

Cinema / theatre / concert hall	In town
Café or restaurant	Tourist office
Hotel	Sport / leisure centre
Campsite	Shop / market / shopping centre
Doctor's surgery / hospital	Train station

What do I need to know about the role-play?

- It is the second part of the speaking exam (after **read aloud**).
- It is worth **ten** marks.
- There are **ten** possible settings.
- The teacher speaks first.
- You will say something for each of the **five** numbered items.
- Speak in the present tense, or use a conditional like *ich möchte* (where appropriate).
- You will need to ask **two** questions.
- You do not need to use *Sie*. You can use the informal *du* (you).
- You will answer **one** question about something in the future.

Settings	Role-play example bullet points	Example questions
Tourist office / In town	Ask a question about transport.	Gibt es hier einen Bahnhof in der Nähe? Um wie viel Uhr fährt der Bus nach Zürich?
	Ask a question about other activities.	Gibt es ein Theater hier in der Nähe? Kann man hier schwimmen gehen?
Cinema / theatre / concert hall	Ask a question about cost.	Was kostet eine Karte, bitte?
	Ask the employee about food/drinks.	Was für Getränke gibt es? Was für Essen gibt es?
	Ask a question about the film.	Wer spielt im Film? Wie lange dauert der Film?
Shop / market / shopping centre	Ask a question about something else you want to buy.	Haben Sie andere T-shirts? Wo kann man Geschenke kaufen?
	Ask a question about places to eat and drink.	Wo liegt das Café? Was für Restaurants gibt es?
Leisure centre	Ask the employee about buying a drink.	Kann man hier Getränke kaufen? Was kostet eine Flasche Wasser?
	Ask the employee about opening times.	Um wie viel Uhr öffnet/schließt das Sportzentrum?
Doctor's surgery / hospital	Ask a question about seeing the doctor.	Wann kann ich einen Arzt sehen? Was sind die Öffnungszeiten?
	Ask a question about opening times.	
Hotel / campsite	Ask about sport facilities in the hotel.	Gibt es ein Fitnessstudio? Kann man hier schwimmen?
	Ask about other facilities.	Gibt es ein Restaurant im Hotel? Was darf man im Hotel (nicht) machen?
Café / restaurant	Ask a question about the menu.	Gibt es etwas für Vegetarier? Was empfehlen Sie?
	Ask about the price of something on the menu.	Was kostet das Eis, bitte?
Train station	Ask a question about the next train.	Wann fährt der nächste Zug nach Berlin, bitte? Wann kommt der nächste Zug an?
	Ask a question about the cost of a ticket.	Was kostet eine Fahrkarte nach Wien, bitte?

Puis-je..?	
Ich möchte	I would like
Ich will	I want
Ich werde	I will
Ich würde	I would
Ich könnte	I could

Question words	
Warum?	Why?
Wann?	When?
Wo?	Where?
Wie viel(e)?	How much/many?
Warum?	Why?
Wer?	Who?
Wie?	How?
Was für?	What kind of?
Wie lange?	How long?
Welch?	Which?

Est-ce que..	
Common phrases	
Bitte	Please
Bitte	You are welcome
Danke	Thank you
Es tut mir leid	I'm sorry
Kein Problem	No problem
Entschuldigung	Sorry

Können Sie bitte die Frage wiederholen?

Repeat the question please?

Role plays structures	
Magst du..?	Do you like?
Machst du..?	Do you do?
Hast du..? (Informal)	Do you have...?
Haben Sie...? (formal)	Do you have...?
Wo ist...?	Where is..?
Wo sind...?	Where are..?
Wie lange dauert der Film?	How long does the film last?
Was darf man...?	What may we....?
Wann beginnt der Film?	What time does the film start?
Wer spielt im Film?	Who plays in the film?
Um wie viel Uhr öffnet das Schwimmbad?	What times does the swimming pool open?
Um wieviel Uhr schliesst das Geschäft?	What time does the shop close?

Picture Description - Actions	
In German there is only one present tense, which can be translated as 'I do' and 'I am doing'	
Er ist/sie sind	He is/they are
Er macht/sie macht	He is/they are doing
Er hat / sie haben	He has / They have
He isst/ sie essen	He is/they are eating
Er sieht/ sie sehen	He is/they are watching
Er trägt / sie tragen	He is/they are wearing
Er arbeitet / sie arbeiten	He is/they are working
Er liest / sie lesen	He is / they are reading
Er sitzt / sie setzen	He is/they are sitting
Er lacht / sie lachen	He is/they are laughing
Er plaudert / sie plaudern	He is chatting to/ they are chatting
Sie sprechen mit	They are talking with
Er sieht aus / sie sehen aus	He looks/ they look
Ich denke, dass	I think that

Role plays structures	
Gibt es...?	Is there...?
Um wie viel Uhr....?	At what time...?
Kann man...?	Can you ...?
Wie findest du...?	How do you find...?
Was sind..?	What are...?
Wo ist/sind..?	Where is/are ...?
Was für....?	What kind of ...?
Was für Musik magst du?	What kind of ... do you like?
Haben Sie noch eine Frage?	Do you have another question...?
Haben Sie...?	Do you have.... ?
Möchtest du ... (inf)	Would you like...?
Was kostet...?	How much is...?
Ich möchte...	I would like ...
Ich will...(inf)	I want ... (inf)
Was empfehlen Sie?	Was do you recommend?

Picture description	
Ist es Alles?	Anything to add?
Auf dem Bild	On the photo
Das Foto zeigt	The photo shows
Ich kann auch....sehen	Also I can see
Wie war es?	What was it like?
Im Hintergrund	In the background
Im, Vordergrund	In the foreground
He gibt	There is/there are
He gibt keine...	There isn't any...
In der Ecke	In the corner
Auf der rechten Seite	On the right side
Auf der linken Seite	On the left side
In der Mitte	In the middle



- AO1: Develop ideas through investigations, demonstrating critical understanding of sources.
- AO2: Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.
- AO3: Record ideas, observations and insights relevant to intentions as work progresses.
- AO4: Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

Keyword	Description - key terms associated with the AQA assessment objectives	Tick
Acknowledge	To give credit for, recognise, and highlight something, such as a selected source or the work of others.	
Analyse	To examine in depth, study thoroughly, question, investigate and consider your own opinion or visual investigation of something.	
Apply	To use knowledge, skills and understanding and to employ appropriate techniques when developing and progressing ideas.	
Appropriate	Suitable, relevant, applicable to intention.	
Consider	To think through, review, reflect on and respond to information or a theme, subject or starting point.	
Create	To conceive, make, craft or design something new or invent something.	
Demonstrate	To show, exhibit, prove or express such things as subject specific knowledge, understanding and skills through visual and written work.	
Develop	To take forward, change, improve or build on an idea, theme or starting point.	
Discuss	To deliberate, consider, talk over, debate or examine something, this can be through annotations.	
Explore	To investigate and examine with an open mind about what might be found and developed.	
Evidence	To show, prove, support and make clear or verify something.	
Identify	To recognise links and associations between things such as sources and connections with personal work, accounting for choices and decisions made.	
Investigate	To enquire into, examine in depth, and/or analyse the relevance of a chosen subject and associated sources .	
Present	To give a response to an idea, theme or starting point that shows a personal, meaningful and organised fulfilment of intentions.	
Realise	To achieve, attain and/or accomplish your intentions.	
Record	To document ideas, thoughts, insights and responses to starting points in visual and written annotated form.	
Refine	To improve, enhance and change elements of your work for the better.	
Research	To study in detail, discover and find information about.	
Response	To produce personal work generated by a subject, theme, starting point, or design brief.	
Select	To make an informed choice of what to develop.	

Graphic communication GCSE Y11 NEA 2



1. Housing in Whitechapel	✓	2. Why did residents fear crime?	✓	3. The Metropolitan Police	✓
<p>1. Rookeries' – overcrowded lodging houses e.g. Flower and Dean Street.</p> <p>2. Peabody Estate – 1879 – failed attempt to renovate slum housing.</p> <p>3. Whitechapel Workhouse – board for work (picking Oakum). Medium term, strict discipline.</p> <p>4. Casual Ward – board for work, usually a night at a time.</p> <p>5. Flower and Dean Street: had a terrible reputation as a haunt of thieves, drunks and prostitutes. 1871 census revealed 902 lodgers staying in 31 'doss houses'; some of these buildings originating from 1600's.</p>		<p>1. Fear of criminal underclass – afraid of "natural criminals"</p> <p>2. Lodging Houses and pubs – centres of criminal activity: e.g. prostitution, crime</p> <p>3. Drink – Alcohol causing crime / making people victims of crime</p> <p>4. Immigration – Irish and Jewish immigration. Fear of "Fenian Terrorism", Socialist and Anarchist ideas fuelled fear.</p> <p>5. Failure of Reform – e.g. Peabody Estate moved the problem further along.</p>		<p>1. Set up in 1829 – Met Police Act.</p> <p>2. Detective Branch established in 1842.</p> <p>3. 1866 – Criticised over Hyde Park Riots.</p> <p>4. 1867 – Criticised over Fenian bombings.</p> <p>5. 1870 – Commissioner Henderson (1870-1886) standardised recruitment.</p> <p>6. 1877 – 'Trial of the Detectives': corruption.</p> <p>7. 1886 – Trafalgar Square Riots.</p> <p>8. 1886-7 Commissioner Warren appointed/fired.</p> <p>9. 1888-9 Criticism over Ripper Murders.</p>	
4. Organisation of the Whitechapel Policing	✓	5. Role of the Police	✓	6. Why was Whitechapel difficult to police?	✓
<p>1. The Whitechapel area came under the responsibility of 'H' division who was run by a superintendent constable, and a hierarchy of policemen below him.</p> <p>2. New recruits needed good 'discipline' and to be prepared to take orders. It offered a good career.</p> <p>3. In 1885, Whitechapel possessed 19 inspectors, 44 sergeants 441 constables. This meant that there were 505 policemen in an area whose population was 176,000.</p> <p>4. H Division's main police station was on Leman Street.</p> <p>5. Most of Whitechapel's criminal cases were at the Thames Police Court, only the most serious crimes were heard at the Old Bailey.</p>		<p>1. Policing in Whitechapel was most visibly seen due to the 'Beat Constable'.</p> <p>2. The Beat Constable had: woollen trousers, a jacket, a truncheon to defend himself, cuffs, mall oil fired lamp.</p> <p>3. Each constable had a specific route around Whitechapel. During the day each 'beat' would take about half an hour, an hour at night.</p> <p>4. Policemen usually completed their beat alone and were expected to quickly get to know the route, its main features, possible crime hotspots etc.</p> <p>5. CID – set up in 1842 - Detectives trying to catch criminal gangs.</p>		<p>1. Geography – Overcrowded slums enabled criminals to easily hide from the police.</p> <p>2. Alcohol – Pub licences etc.</p> <p>3. Organised Gangs – difficulty finding evidence. Gangs ran protection rackets threatening Jewish businesses.</p> <p>4. Prostitution – Brothels illegal after 1885.</p> <p>5. Immigrant communities – Jews, Irish often would not cooperate with the Police. Suspicion and anti-Semitism added problems for Jews in Whitechapel. The police had language lessons in Yiddish to try to overcome feelings of suspicion towards Jews.</p>	
7. The Crimes of Jack the Ripper	✓	8. How did they try to catch Jack the Ripper?	✓	9. How did Press hinder the investigation?	✓
<p>From 31st August – 9th November 1888 Jack the Ripper murdered 5 people in Whitechapel.</p> <p>1. Mary Nichols 31st August</p> <p>2. Annie Chapman 8th September</p> <p>3./4. Elizabeth Stride and Catherine Eddowes</p> <p>30th September – The 'Double Event'</p> <p>5. Mary Kelly 9th November</p>		<p>1. Observation – Of the crime scene, sketches.</p> <p>2. Photography</p> <p>3. Coroner's Reports – cause of death from Autopsy.</p> <p>4. Interviews and following up clues – witness statements.</p> <p>5. Criminal Profiles – developing a profile of the killer.</p>		<ul style="list-style-type: none"> • Hinder - printing sensationalist and dramatic stories about current crimes being investigated. e.g. The bunch of grapes. • Anonymous letters claiming to be the Ripper, this only made the police's job more difficult. • The Whitechapel Vigilance Committee set up by George Lusk: it hired two private detectives to investigate the killings, they offered a reward. 	

**Weimar/Nazi Germany 1918-39: Key events:**Topic 1: Weimar Republic: 1918-29:

Nov. 1918: Armistice signed
 Dec 1918/Jan 1919: Spartacist Uprising
 June 1919: Treaty of Versailles signed
 Aug. 1919: Weimar Constitution established
 March 1920: Kapp Putsch
 January 1923: French troops invade Ruhr
 Jan. - Nov. 1923: Hyperinflation
 August 1923: Stresemann becomes Chancellor
 August 1924: Dawes Plan: US loan Germany 800 million marks to Germany
 Oct. 1925: Locarno Pact: Britain, France, Germany & Italy agree existing borders
 Sept 1926: League of Nations set up
 July 1927: Unemployment Act introduced to provide benefits for the unemployed
 Aug. 1929: Young Plan reduces reparations to £1,850 million
 Oct. 1929: Wall Street Crash

Topic 2: Hitler's rise to power: 1919-33:

Sept. 1919: Anton Drexler founds DAP
 Feb. 1920: 25 Point Programme written declaring the main policies of the Nazi Party
 Nov. 1923: The Munich Putsch
 April 1924: Hitler sentenced to 5 years in Landsberg Prison (released after only 9 months)
 1924: Ban on Nazi Party lifted
 1926: Bamberg Conference
 1928 Election: Nazis win 12 seats
 Sept 1930 Election: Nazis win 107 seats
 1932: Presidential Election: Hindenburg wins, but Hitler polls 13.4m votes
 July 1932 Election: Nazis win 230 seats
 Nov. 1932 Election: Nazis win 196 seats
 30th January 1933: Hitler appointed Chancellor of Germany by Hindenburg

Weimar/Nazi Germany 1918-39: Key events:Topic 3: Nazi control/ dictatorship: 1933-39:

27th February 1933: Reichstag Fire: Marinus van der Lubbe charged with arson,
 28th February 1933: Hitler persuades Hindenburg to sign the Decree for the Protection of People and State,
 5th March 1933: General Elections: NSDAP wins 288 seats in the German Parliament
 24th March 1933: Enabling Act passed: NSDAP able to pass laws without going through Parliament
 2nd May 1933: All trade unions banned
 30th June 1933: Night of the Long Knives
 14th July 1933: Law against the Formation of Parties: only NSDAP allowed
 20th July 1933: Concordat with Catholic Church
 2nd August 1933: Hindenburg dies: Hitler becomes Führer of Germany

Topic 4: Life in Nazi Germany: 1933-39:

1st April 1933: Boycott of Jewish Shops
 June 1933: Law for the Encouragement of Marriage
 October 1933: First concentration camp for women opened at Moringen
 1935: Reich Labour Service became compulsory
 1935: Nuremberg Laws – Citizenship removed for Jews, marriage between Jews and non-Jews made illegal
 1936: Jews forbidden from professional jobs
 1936: Membership of Hitler Youth became compulsory
 1938: Jewish children expelled from schools
 1938: Kristallnacht – Pogrom against the Jews – 100 killed, 20,000 temporarily sent to camps, 20,000 businesses destroyed. Jews fined for the damage, 250,000 Jews leave

Exam format:

Question 1: 'Give two things you can infer from source A about...' (4 marks): What I can infer... Details from the source that tell me this... What I can infer... Details from the source that tell me this...

Question 2: 'Explain why...' (12 marks) Three PEE points on causation. Slight amendment to examination format to give a choice on this question now.

Question 3 a): 'How useful are sources B and C for an enquiry into...' (8 marks) Nature, Origin or Purpose and Knowledge. Not realistic to do it all on both sources, but need to have one aspect of provenance and some knowledge on each source.

Question 3 b): 'Study interpretations 1 and 2... What is the main difference between their views?' (4 marks) Keep this answer brief and clear and use quotations from the interpretations to prove your point.

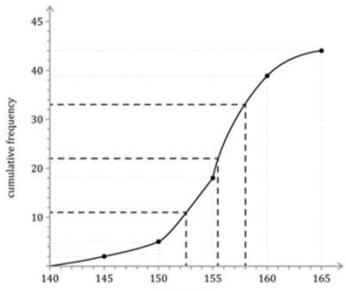
Question 3 c): 'Suggest one reason why interpretations 1 and 2 give different views on... You may use sources B and C to help explain your answer.' (4 marks) Keep focus on the question: why the interpretations differ and use the sources to suggest material which they may have based their interpretations on.

Question 3 d): 'How far do you agree with interpretation 2 about...?' (16 marks + 4 SPaG marks) Step 1: State the view in interpretation 2, Step 2: Agree with the view in interpretation 2 using own knowledge, Step 3: Disagree with the view in interpretation 2 using interpretation 1, Step 4: Disagree with the view in interpretation 2 using own knowledge, Step 5: final judgement. Be sure to use both interpretations and your factual knowledge.



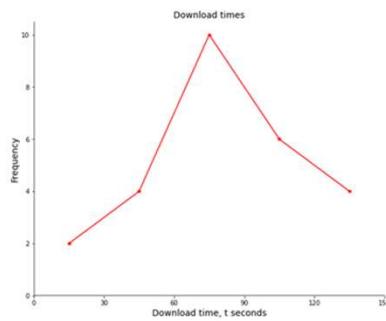
Statistical Diagrams

Cumulative Frequency Graph



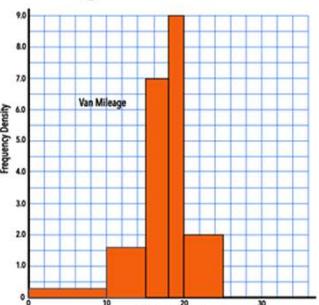
Plot Cumulative Frequency against End Point of each class. Can be used to find Quartiles and Median

Frequency Polygon



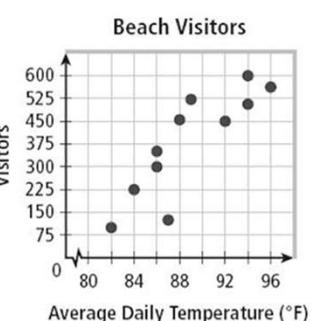
Plot Frequency against Midpoint. Shows the trend in data

Histogram



Plot Frequency Density against the class. The area represents Frequency. Can be used to find the Median

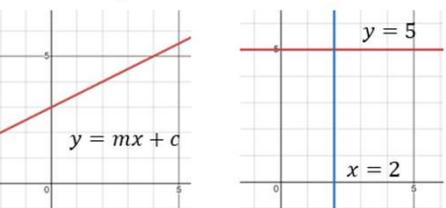
Scatter Graph



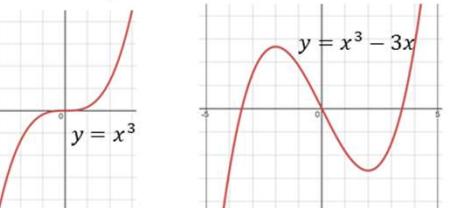
Plot Bivariate data. Can be used to show correlation. Take readings using a Line of Best Fit.

Standard Graphs – Learn and recognise the shapes

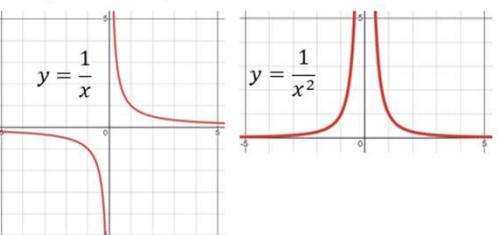
Linear Graphs



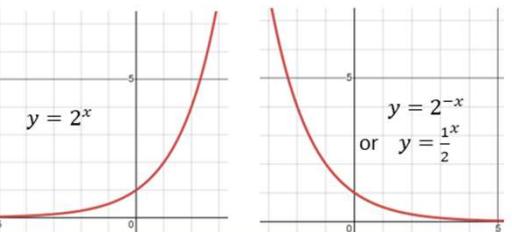
Cubic Graphs



Reciprocal Graphs



Exponential Graphs



Quadratics

Completing the square

Writing $x^2 + bx + c$
in the form $\left(x + \frac{b}{2}\right)^2 - \frac{b^2}{4} + c$

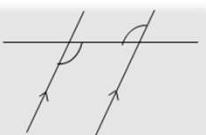
Difference of Two Squares

$$a^2 - b^2 = (a + b)(a - b)$$

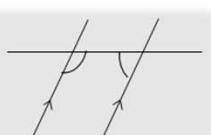
The Discriminant - $b^2 - 4ac$

If $b^2 - 4ac > 0 \rightarrow$ 2 real solutions
If $b^2 - 4ac = 0 \rightarrow$ 1 real solution
If $b^2 - 4ac < 0 \rightarrow$ No real solutions

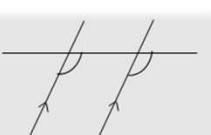
Angle Rules



Alternate angles are equal



Co-interior angles sum to 180°



Corresponding angles are equal

Exact Angles for Trig

	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
tan	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	



Key Formula to learn and apply

Name	Formula	Use when...	Name	Formula	Use when...
Pythagoras	$a^2 + b^2 = c^2$	Right angled triangle with 2 known lengths	Volume of a cuboid	$V = bhl$	All 3 perpendicular lengths are known
SOH CAH TOA	$\sin \theta = \frac{\text{opp}}{\text{hyp}}$, $\cos \theta = \frac{\text{adj}}{\text{hyp}}$, $\tan \theta = \frac{\text{opp}}{\text{adj}}$	Right angled triangle with 2 known pieces of information	Volume of a prism	$V = (\text{cross section area}) \times l$	The cross section area is constant
Sine Rule	$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$	2 lengths and the opposite sides, one of which is unknown	Volume of a pyramid/cone	$V = \frac{1}{3}(\text{base area}) \times h$	The perpendicular distance from base to vertex is known
Cosine Rule	$a^2 = b^2 + c^2 - 2bc \cos A$	3 lengths and 1 side, one of which is unknown	Volume of a sphere	$V = \frac{4}{3}\pi r^3$	The radius is known
Sine Rule for Area	$\text{Area} = \frac{1}{2}ab \sin C$	2 lengths and the enclosed angle	Surface area of cone	$SA = \pi r^2 + \pi rl$	The slant height is known
Area of rectangle	$A = bh$	2 adjacent sides of a rectangle are known	Surface area of sphere	$SA = 4\pi r^2$	The radius is known
Area of triangle	$A = \frac{1}{2}bh$	A length and the perpendicular distance are known	Frequency Density	$\text{Frequency Density} = \frac{\text{Frequency}}{\text{Class width}}$	Drawing a histogram
Area of parallelogram	$A = bh$	A length and its perpendicular distance are known	Speed	$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$	Units must match up
Area of trapezium	$A = \frac{1}{2}(a + b)h$	The 2 parallel sides and distance between them are known	Density	$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$	Units must match up
Area of a circle	$A = \pi r^2$	The radius is known	Pressure	$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$	Units must match up
Area of a sector	$A = \frac{\theta}{360}\pi r^2$	The radius and angle at the centre are known	Mutually Exclusive events	$P(A \text{ or } B) = P(A) + P(B)$	Finding the probability of outcomes A or B
Arc length	$A = \frac{\theta}{360}2\pi r$	The radius and angle at the centre are known	Combined events	$P(A \text{ and } B) = P(A) \times P(B)$	Finding the probability of outcomes A and B both happening
Area of a segment	$A = \frac{\theta}{360}\pi r^2 - \frac{1}{2}r^2 \sin \theta$	The radius and angle at the centre are known	Sum of Interior angles	$S_n = (n - 2) \times 180$	Finding the sum of interior angles of a polygon with n sides
			Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	Solving a Quadratic equations when asked to give answers to 3 s.f

**Context**

Affect The prevailing mood in a Baroque movement or piece

Baroque the dominant style of Western classical music composed from about 1600 to 1750.

Concerto grosso a concerto for more than one soloist

Cover version of an existing song performed by a different artist

Cue a self-contained section of music in a film

Dance suite A Baroque collection of movements in dance rhythms.

Diegetic music contained within the action of the film and included in the story—for example, music played in a bar. If a character in the story can hear the music, it is diegetic. Most film music is non-diegetic.

Fanfare a celebratory piece for brass instruments (and sometimes percussion) often marking the opening of an important event or ceremony. The music is short and loud and often features arpeggios and broken chords

Fusion the blending of two or more musical styles, usually from different cultures

Solo concerto A concerto for a single instrument accompanied by orchestra

Trio sonata A Baroque piece for two melody instruments and continuo

Underscore (or background) music non-diegetic music adding to the mood of a scene, reinforcing character developments and aspects of character.

Dynamics

Crescendo gradually getting louder

Diminuendo gradually getting quieter

Terraced Dynamics When the dynamics are either forte or piano, with no gradual changes. Common in Baroque music.

Year 11 Spring Term 1**Rhythm**

Clave the rhythm closely associated with the claves

Compound time signature the beat subdivides into 3 rather than 2

Cross rhythms rhythms that cross the usual pattern of accented and unaccented beats, creating irregular accents and syncopation

Groove rhythmic feel

Triplets Three notes in the space of two

Homorhythmic all the parts play the same rhythm at the same time

Syncopation rhythm which emphasises the off beat

Texture

Antiphonal Music performed alternately by two groups which are often physically separated.

Basso continuo accompaniment played by a melodic bass instrument, often cello, and a chordal instrument such as harpsichord, lute or organ.

Broken chord when the notes of a chord are played one at a time rather than sounding together

Canon parts copy each other in exact intervals, often at the fifth or octave.

Chord voicing how the notes in a chord are spaced out

Contrapuntal When two melodies are played at the same time and interweave—almost the same as polyphonic

Counterpoint the combination of two or more melodies with independent

Dialoguing Instruments in dialogue—playing one after the other, swapping ideas

Independent parts Instruments or voices doing different things—not doubling or simply harmonising

Monophonic A musical texture with a single line

Ostinato a persistent phrase or motif repeated over several bars or more

Imitation when one part copies or imitates another at a short time distance.

Passagework a constantly moving passage, often in patterns of quick notes and including sequences and scales

Polyphonic More than one melody at once, or entering at different times so that they overlap

Stretto entries of the subject closer together than before in a fugal recapitulation

Tutti All parts playing at the same time

Structure

Fugal exposition The initial statements of subject and answer in a fugue

Fugue Contrapuntal piece with exposition, development and recapitulation

Outro a concluding section, like a coda in classical music

Solo an extended, often improvised, melodic line played by a single instrument over a given chord sequence, usually as an instrumental interlude in the middle of a song

Ternary form Simple ABA structure



This QR code will take you to a Spotify playlist with audio examples of many of the concepts covered on this sheet and in lessons. You will find it helpful to listen to these as you learn.

**Melody**

Answer In a fugue, the subject repeated in response to its original appearance, usually a fourth or fifth lower or higher. If it is an exact transposition of the subject it is a real answer; if not it is a tonal answer.

Appoggiatura Ornament often called a 'leaning' note.

Articulation the manner in which a note or sequence of notes is played (e.g. staccato, legato)

Augmentation increasing the duration of the original notes

Conjunct movement by step

Disjunct movement by leap

Countersubject the melody played after the subject or answer

Lower auxiliary a melody note which goes to the note below and then back to the original note again

Motif a short melodic phrase

Ornament notes that decorate a melody

Sequence repetition of a musical idea at a higher or lower pitch

Syllabic one note sung per syllable

Subject the main theme of a fugue

Variant A phrase whose shape resembles the original

Leitmotif a recurring musical idea which is associated with a particular theme, character or place

Instrumentation

Acoustic guitar does not require amplification

Capo a clamp fastened around the neck of a string instrument, holding down all the strings and raising their pitch

Claves Latin percussion instrument – two sticks struck together

Concertino the smaller group of soloists in a concerto grosso

Glissando playing all the pitches between two points in rapid succession

Year 11 Spring Term 1**Harmony**

Added notes notes added to a basic triad, such as 7th or 9th

Added sixth chord a triad with an added 6th, common in jazz and popular music

Altered notes notes in a chord that have been sharpened or flattened, e.g. a flattened fifth

Block triads major or minor triads in root position, built up in thirds

Cadential A progression of chords forming a cadence

Circle of fifths A series of chords or keys in which the root or tonic moves down a 5th or up a 4th.

Consonant Intervals or chords that sound pleasant together

Dissonant sounds that clash. Dissonant intervals are maj/min second and seventh, and tritone (aug. 4th/dim. 5th)

Dominant preparation A passage focused on the dominant chord to create expectation of a return to the tonic.

Dominant seventh Chord V with added minor 7th

Extended chord a chord with at least one added note

Figured bass The numbers that show chords in basso continuo

Harmonic rhythm the rate at which the chords change

Harmonic sequence When a chord sequence is immediately repeated at a higher or lower pitch

Imperfect cadence An incomplete sounding cadence ending on chord V

Interrupted cadence V-VI—sounds like it's going to be a perfect cadence, but gets interrupted

Inversions chords with a note other than tonic in the bass

Pedal a sustained or repeated note in the bass

Perfect cadence V-I

Suspension Prolonging a note to create dissonance with the next chord

Turnaround a set of faster moving chords to get the music back to a repeated section – most common in jazz

Neapolitan chord a chord built on the flattened supertonic

Quartal Harmony chords made up of notes a 4th apart rather than the usual 3rd apart



Keyword	Learn	✓
Conflict	An active disagreement between people with opposing opinions or principles	
Commitment	A willingness to give your time and energy to something or someone that you believe in	
Marriage	A social and legal bond between two people that gives them rights and duties as spouses and parents	
Civil Partnership	A legal bond entered into by two people, it has the same responsibilities as marriage but the difference is that it is entered into by signing a document while marriage is confirmed by vows.	
Fertility	The ability to produce offspring.	
Infertility	When a couple cannot get pregnant (conceive) despite having regular unprotected sex.	
In vitro fertilisation (IVF)	A medical procedure whereby an egg is fertilized by sperm in a test tube or elsewhere outside the body and then implanted in the womb.	
Surrogacy	When a woman carries a baby for someone who is unable to conceive or carry a child themselves.	
Fostering	Looking after a child who is not your own on a temporary basis	
Adoption	the act of legally taking another's child and bringing it up as one's own	
Abortion/termination	the deliberate termination of a human pregnancy, most often performed during the first 28 weeks of pregnancy:	
Pro-life	The belief that all humans, including unborn humans, have the right to life and that abortion is morally wrong.	
Pro-choice	The belief that women should have the right to choose abortion or birth.	

Further support:	<input type="checkbox"/>
Domestic abuse:	
BCP domestic abuse support: BCP Support	
Brook: www.brook.org.uk 0808 802 1234	
Childline: www.childline.org.uk 0800 1111	
Fertility:	
NHS: www.nhs.uk/conditions/infertility	
Forced marriage:	
The Forced Marriage Unit (FMU) fmu@fco.gov.uk 020 7008 0151	
Freedom Charity www.freedomcharity.org.uk 0845 607 0133	
Report a crime by calling 999 (for an emergency or as a crime is taking place) or 111 (to make a non-urgent report).	
Seek medical support from your GP or NHS 101	
OR speak to a teacher....	

Conflict strategies:	<input type="checkbox"/>
<p>Avoidance Might be useful if someone is feeling threatened, but it will not make a problem go away.</p>	<p>Diffusion Staying calm, allowing time to be able to think and to try to resolve the problem.</p>
<p>Negotiation Compromising with each other - nobody gets everything they want, but everyone gets something.</p>	<p>Confrontation One person might use power over the other person in order to win. This might be physical force, using threats or another type of abuse - some types of confrontation are a criminal offence.</p>



Key words:

- Good- Morally right, beneficial and to our advantage.
- Evil-Extremely immoral, wicked and wrong.
- Forgiveness- To grant a pardon for a wrongdoing, give up the desire to seek revenge.
- Freewill- The ability to make choices independently. Belief nothing is predetermined.
- Justice-Fairness, where everyone has equal provisions and opportunity.
- Morality-Principles and standards determining which actions are right or wrong.
- Punishment- Sin A penalty given to someone for a crime or wrong they have done.
- Sin- Deliberate immoral action, breaking a religious or moral law.
- Suffering- Pain or distress caused by injury, illness or loss.

Aims of punishment:

- Retribution- revenge
- Reparation- pay through community service
- Reform- hope they change for better
- Protection- criminal/future victims and families
- Vindication- shows law should be upheld
- Deterrence- deter/put people off

What can influence a sense of morality or right/wrong?

- Parents
- Conscience
- Peers
- Laws
- Faith
- Holy books
- Past experience
- Faith leader

Different types of Morality.

- Absolute- morality is when you stick to your morals in all circumstances.
- Relative- morality is when you hold a moral, but adapt it to certain situations.

How to help those suffering:

- Charity- provide money, shelter, food, medicine, teach skills
- Pray for them
- Counsel
- Teach them about faith-hope
- Love them
- Forgive

Death Penalty/punishment

- Forgiveness- Jesus as example
- Compassion not revenge
- Use some euthanasia or abortion teachings
- Historically faiths have had death penalty
- Not legal in several countries
- Homosexuality/adultery have been seen as crimes
- No opportunity for reform

What is the problem of evil and suffering?

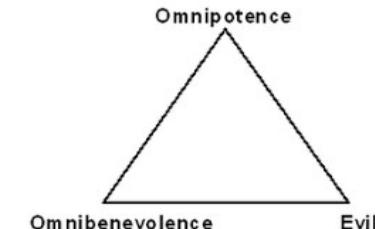
- God is Omnibenevolent (All Loving)
- God is Omnipotent (All Powerful)
- God is Omniscient (Knows All)
- Evil exists in the world.
- Can they all be true?**

Irenaeus Theodicy:

- God did not create a perfect world, but could have (omnipotence).
- God is responsible for evil.
- Everyone goes to heaven (because of the magnitude and disproportion of suffering. (omnibenevolence)).
- Jesus was a perfect role model.

Christians and Forgiveness:

- Freewill
- Did God forgive Adam and Eve
- Compassion not revenge
- Confession allowed
- Jesus forgave 'Father forgive them.'
- Key figures like Pope and Martin Luther King Jnr also forgave
- Lord's prayer
- God is judge
- Cannot expect God's forgiveness if you do not forgive
- Can help restore relationships
- Help spiritual growth
- Atone



JL Mackie inconsistent triad

Augustine Theodicy

- God created a perfect world, thus maintains God's omnipotence.
- Humans are responsible for evil.
- Only believers go to heaven (The sacrificial atonement of Jesus guarantees this (omnibenevolence)).
- Jesus is the only means by which anyone can be reconciled to God.

Jews and Forgiveness

- Mitzvah/commandment
- Duty
- Teshuvah- seek forgiveness and grow
- Repair damage
- Rosh Hashanah and Yom Kippur are time when Jews think out and seek forgiveness
- Prayer
- Seek advice from the Torah/Rabbi
- Holocaust survivors- God is Judge and law giver; he should decide

Other ways to defend God (theodicy).

- Devil
- Freewill
- Original sin-passed on
- Punishment for not following instructions
- Justice for victims
- Test
- Appreciate good/reward in afterlife
- God is in charge- omnipotent
- John Hick- soul making

Jewish terms

- Yetzer ha ra**-Hebrew for human tendency to do evil.
- Yetzer Ha tov**- Hebrew for human inclination for good

Prison reformers- John Howard and Elizabeth Fry:

- Allow prisoners to have human rights
- Made them single sex
- Provided basic needs

Prison Chaplains:

- Counsel
- Contact family
- Forgiveness
- Teach skills
- Give opportunity to reform
- Teach about faith
- Can help multiple faiths
- Read holy books/scripture to them



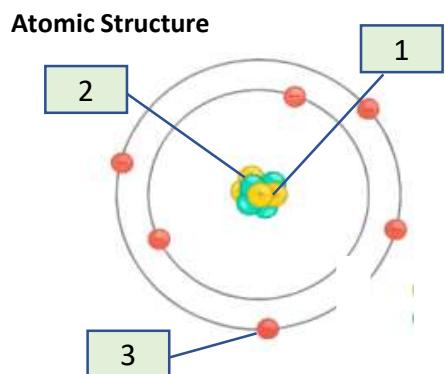
3.2.3 Health, Fitness and Wellbeing

Health, Fitness & Well-Being	Physical Health and well-being	Social Health and well-being	Mental Health and well-being	Sedentary Lifestyle
<p>Health State of complete mental, physical and social wellbeing and not merely the absence of disease.</p> <p>Well-being A mix of physical, social and mental factors that gives a sense of being comfortable, healthy and happy.</p> <p>Fitness Ability to meet the demands of the environment</p> <p>Improvements in fitness will: Improve your ability to cope with the demands of your daily environment Reduce the chances of you suffering injuries</p>	<ul style="list-style-type: none"> - Relates to the bodies systems and how well they are working. Exercising positively affects physical health and well-being as it can: <ul style="list-style-type: none"> - Improve your heart function Improve the efficiency of cardiorespiratory and musculoskeletal systems - <u>Reduce</u> the risk of illness e.g. diabetes 	<ul style="list-style-type: none"> - Relates to basic human needs being met (food, shelter) as well as being able to socially interact with others in society. - Provide opportunities to socialise and make friends - Encourages co-operation and team work 	<ul style="list-style-type: none"> - Relates to a persons emotions and state of mind. - Exercise positively affects mental health and well-being as it can: <ul style="list-style-type: none"> ----Reduce stress / tension levels. ----Release feel-good hormones in the body such as <u>serotonin</u>. 	<p>A person's choice to engage in little or no physical activity.</p> <p>Consequences of choosing a sedentary lifestyle are:</p> <ul style="list-style-type: none"> Weight Gain / become obese Suffering from heart disease Suffering from diabetes Suffering from poor self-esteem / confidence
Diet				
<p>What is a balanced diet? Ideal average intake of main nutrients –</p> <p>Carbohydrates = 55 – 60%, Fat = 25 – 30%, Protein = 15 – 20%</p> <p>Why should we strive to have a balanced diet? The human body needs nutrients for energy, growth and hydration.</p>	<p>Factors that affect calorie intake: Age, Gender, Height, Energy Expenditure, Basal Metabolic Rate</p>	<p>Water Water is vital to maintain hydration levels (water balance) as it assists in how the body functions.</p> <p>Key terms</p> <ul style="list-style-type: none"> - Hydration – having enough water (water balance) to enable normal functioning of the body. - Dehydration – excessive loss of body water interrupting the function of the body. - Rehydration – consuming water to restore hydration. <p>Negative effects of dehydration:</p> <ul style="list-style-type: none"> - The blood thickens (increased viscosity), which slows blood flow down. - The heart rate increases which means that the heart has to work harder. - The body temperature is likely to increase, meaning that the body may overheat. - Reaction time increases (it gets slower) which has a negative effect on decision making. <p>An individual may suffer muscle fatigue and muscle cramps.</p>		
Somatotypes (body shapes)				
<p>Ectomorph:</p> <ul style="list-style-type: none"> • Very thin, lean and usually tall • Narrow shoulders, hips and chest • Not much fat / muscle • Long arms and legs <p>Activities that suit ectomorphs:</p> <ul style="list-style-type: none"> • High Jump / Pole Vault – lighter so less weight to lift in the air over the bar. • Marathon runner / Long distance runners – Lighter so less weight to carry 	<p>Mesomorph:</p> <ul style="list-style-type: none"> • Broad shoulders and thin waist (narrow hips) • Large amount of muscle • Strong arms and thighs • Little body fat <p>Activities that suit mesomorphs:</p> <ul style="list-style-type: none"> • Sprinting – large arms and legs to help produce more power resulting in them running quicker. 	<p>Endomorph:</p> <ul style="list-style-type: none"> • High content of fat • Fat round middle, thighs and upper arms <p>Activities that suit endomorphs:</p> <ul style="list-style-type: none"> • Shot Putter – Extra bulk allows for a more powerful release of shot. 		



Physics Topic 4 – Atomic Structure

Keyword	Learn	Tick
Atom	The smallest part of an element that can exist. Have a radius of about 1×10^{-10} m,	
Nucleus	Positively charged, most of the mass and contains protons and neutrons. 10 000 times smaller than a whole atom.	
Isotope	Atoms of the same element; different numbers of neutrons but the same number of protons.	
Radioactive decay	Random process where an unstable atomic nucleus gives out radiation to become more stable.	
Activity	The rate at which a source of unstable nuclei decays. Measured in becquerel (Bq).	
Count rate	The number of decays recorded each second by a detector.	
Alpha particle (α)	Two neutrons and two protons, same as a helium nucleus.	
Beta particle (β)	A high speed electron ejected from the nucleus as a neutron turns into a proton.	
Gamma ray (γ)	Electromagnetic radiation from the nucleus.	
Ionising	Most : Alpha, Least : Gamma	
Penetrating	Most : Gamma, Least : Alpha	
Half-life (Learn both definitions)	The time it takes for the number of nuclei of the isotope in a sample to halve OR the time it takes for the count rate (or activity) from a sample to fall to half its initial level.	
Radioactive contamination	The unwanted presence of materials containing radioactive atoms.	
Irradiation	The process of exposing an object to nuclear radiation. The irradiated object does not become radioactive.	
Background radiation	Around us all of the time. It comes from natural sources and man-made sources. Radiation dose measured in sieverts (Sv)	
Fission	The splitting of a large and unstable nucleus	
Fusion	The joining of two light nuclei to form a heavier nucleus. Some of the mass is converted into energy.	



Particle	Relative Mass	Charge
proton	1	+1
neutron	1	0
electron	Very small	-1

Atomic number = Number of protons

Atoms are neutral, same number of protons and electrons.

Positive ions, less electrons than protons.

Negative ions, more electrons than protons.

Mass number = Number of protons and neutrons

Learn models in the correct order

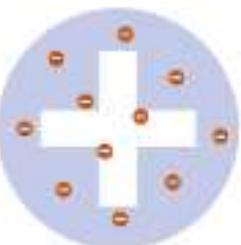
SOLID SPHERE MODEL



JOHN DALTON

A solid sphere that cannot be divided.

PLUM PUDDING MODEL

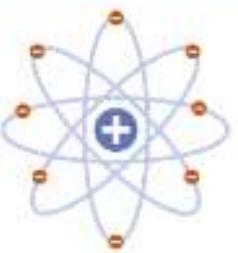


J. J. THOMSON

A ball of positive charge with negative electrons embedded in it.

The alpha scattering experiment.

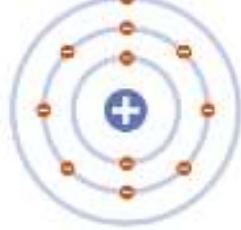
NUCLEAR MODEL



ERNEST RUTHERFORD

Mass and positive charge concentrated in nucleus.
Electrons orbit nucleus.
Mostly empty space.

PLANETARY MODEL



NIELS BOHR

Electrons orbit at fixed distances from the nucleus.

Learn the experimental evidence that caused the scientific models to change.

1. 1911 - Alpha scattering experiment proved that the plum pudding model was wrong.
2. Neils Bohr's calculations agreed with experimental observations.
3. 1920 - Later experimental evidence showed that the nucleus contained smaller particles with the same amount of charge. These are protons.
4. 1932 - James Chadwick produced evidence to show the existence of neutrons.

**Preparation time (14 + 1 minutes)**

- You will have 14 minutes to prepare the read aloud, role play and photo description cards in the preparation room & 1 minute to practise the read aloud in the exam room
- You **can** write on the read aloud card
- You **cannot** write on the role play card / photo card
- Choose one photo to describe
- Use notes and abbreviations as much as possible

Task 1 – Read aloud & follow-up questions (12 marks)

- You will need to read a text aloud in Spanish (8 marks)
- Read through each word slowly and carefully
- If you make a mistake, you can go back and correct it
- If there is an accent on a word (e.g. también), remember you need to stress that syllable
- After the read aloud, hand in your card
- You will then answer two follow-up questions in the present tense (2 marks each)
- Give a short answer for each one, taking care with accuracy

Task 2 – Roleplay (10 marks)

- Instructions are in English
- There are five bullet points (2 marks each)
- You will need to answer three questions and ask two questions
- One bullet point is in the future tense
- Write one short sentence for each prompt (but not a single-word answer)
- Don't over-complicate your answer - focus on accuracy

Possible role play settings

Cinema / theatre / concert hall

Café or restaurant

Hotel

Campsite

Doctor's surgery / hospital

in town

Tourist office

Sport / leisure centre

Shop / market / shopping centre

Train station

Task 3 – Photo description & follow-up questions (12 marks)

- Describe one of the two photos
- You must describe people (who they are, what they are wearing), action (what they are doing – use present continuous) and location (including the weather)
- **Check:** indefinite articles (un / una / unos / unas) – a / some
- Definite articles (el / la / los / los) – the
- Adjective agreements

- After the photo description, you will answer two follow-up questions, one past tense and one present tense (2 marks each)
- Give a short answer for each one, taking care with accuracy

Task 4 – Broader conversation (16 marks)

- You will have a longer conversation (5 – 5.5 minutes) on the same theme as the photo description
- You will need to give as much detail as you can for this and be as accurate as you can

Key phonics for read aloud

Spanish	English
e	like "e" in <i>met</i>
i	like "ee" in <i>see</i>
o	like "o" in <i>dot</i>
u	like "oo" in <i>boot</i>
c + e/i	like "th" in <i>think</i>
c + a/o/u	like "k" in <i>cat</i>
g + e/i	a throaty 'h' sound
g + a/o/u	like "g" in <i>go</i>
h	silent
j	a throaty 'h' sound
ll	like "y" in <i>yes</i>
ñ	like "ny" in <i>canyon</i>
qu	like "k" in <i>kite</i>
v	like "b" in <i>bat</i>
z	like "th" in <i>thin</i>
que / qui	like 'ke' and 'ki'

Role play structures

¿Tienes...?	Do you have...?
¿Puedes...?	Can you ...?
¿Dónde está / están?	Where is/are ...?
¿Dónde se puede...?	Where can you ...?
¿Cuánto cuesta(n)...?	How much does ... cost?
¿Cuándo empieza(n)...?	When do/es ... start?
¿Cuándo termina(n)...?	When do/es ... end?
Me gustaría...	I would like ...
Quiero...	I want ...

Question words

¿Cuándo?	When?
¿Qué?	What?
¿Cómo?	How?
¿Cuánto?	How much?
¿A qué hora abre...?	What time does ...open?
¿A qué hora cierra...?	What time does ...close?
¿Hay?	Is/Are there?
¿Dónde?	Where?
¿Quién?	Who?

Photo description phrases

En la foto	In the photo
En la imagen	In the image
Puedo ver / se puede ver	I can see/you can see
A la izquierda / a la derecha	On the left/on the right
En el fondo	In the background
En primer plano	In the foreground
La foto muestra	The photo shows
Hay	There is/There are

Opinion phrases

Me gustaría + inf.	I would like to...
Lo mejor fue cuando	The best thing was when
Lo peor fue cuando	The worst thing was when
Diría que	I would say that
Mi madre diría que	My mum would say that
Pienso que / creo que	I think that
Piensa que / cree que	He / she thinks that
Me gustó / me gustaron	I liked
A mi amigo le gusta(n)	My friend likes
Me mola(n) / Me chifla(n)	I love

**The present tense**

Take off the 'ar', 'er' or 'ir' from the infinitive and add the endings below

-ar verb endings present

-o	-amos
-as	-áis
-a	-an

-er verb endings present

-o	-emos
-es	-éis
-e	-en

-ir verb endings present

-o	-imos
-es	-ís
-e	-en

Common irregular verbs

Voy	I go
Hago	I do
Juego	I play
Salgo	I eat
Es	It is
Son	They are
Tengo	I have
Soy	I am
Suelo + infinitive	I usually _____

Present continuous

Use the present continuous to say what someone is doing in a photo.

Use *está / están + present participle (-ando / -iendo)*

For -ar verbs, take off the -ar and add **-ando**

For -er / -ir verbs, take off the -er / ir and add **-iendo**

Está... He / she is

Están... They are

The preterite (past) tense

Take off the 'ar', 'er' or 'ir' from the infinitive and add the endings below

The endings for 'er' and 'ir' verbs are the same

-ar verb endings preterite

é	amos
aste	asteis
ó	aron

-er / ir verb endings preterite

í	imos
iste	isteis
ió	ieron

Common irregular verbs (preterite)

jugué	I played
fui	I went
fue	it was

The imperfect tense

The imperfect tense is used to talk about habits in the past and to describe things in the past.

Take off the 'ar', 'er' or 'ir' from the infinitive and add the endings below (the endings for 'er' and 'ir' verbs are the same)

-ar verb endings imperfect

-aba	-ábamos
-abas	-ábais
-aba	-aban

-ir / -ir verb endings imperfect

-ía	-íamos
-ías	-íais
-ía	-ían

Irregular verbs

era	I was / he / she/ it was
iba	I / he / she it used to go
veía	I / he / she used to watch

The future tense

The future tense is formed by taking the infinitive and adding the endings seen below.

The endings are the same for AR, ER and IR verbs

Infinitive + ending = future tense

comer + é = comeré (I will eat)

comer	to eat
comeré	I will eat
comerás	you will eat
comerá	he/she will eat
comeremos	we will eat
comeréis	you all will eat
comerán	they will eat

There are some irregular stems which are not the infinitive. Here are some examples:

haré	I will do
tendré	I will have
podré	I will be able to
saldré	I will go out

The conditional tense

The conditional tense is formed by taking the infinitive and adding the endings seen below.

The endings are the same for AR, ER and IR verbs

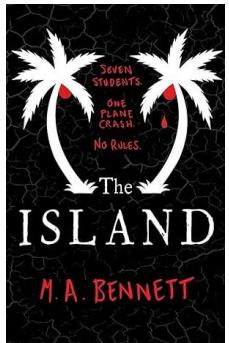
Infinitive + ending = conditional tense

ir + ía = iría (I would go)

ir	to go
iría	I would go
irías	you would go
iría	he/she would go
iríamos	we would go
iríais	you all would go
irían	they would go

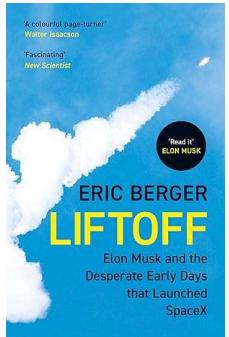
Wow phrases

Cuando sea mayor	When I am older
Cuando era joven	When I was young
Si fuera posible	If it were possible
Lo pasé bomba	I had a great time
Estaba lloviendo	It was raining



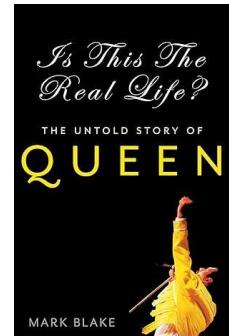
The Island by M. A. Bennett

This contemporary take on *Lord Of The Flies* transports a group of mismatched contemporary teenagers to a desert island, the most innocent of whom is Link - a new arrival in America who struggles to fit in, and faces ridicule at his prestigious school because of his difficulty with sports. When oppressive heat, hunger and thirst start to bite, everyone's true colours will be revealed. Let the battle commence . . .



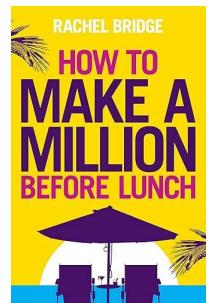
Liftoff by Eric Berger

The dramatic inside story of the first four historic flights that launched SpaceX - and Elon Musk - from a shaky startup into the world's leading edge rocket company.



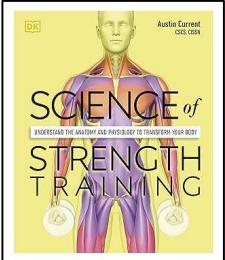
Is This the Real Life? The Untold Story of Queen by Mark Blake

Queen are unique among the great rock bands. It's been over 20 years since frontman Freddie Mercury's death brought the band to an end, yet their fanbase remains huge. This is a definitive history of the band.



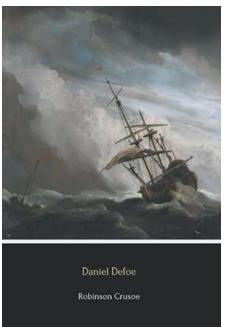
How to Make a Million Before Lunch by Rachel Bridge

An entertaining and informative guide to how to make a fortune in the shortest possible time. Rachel Bridge has interviewed hundreds of successful entrepreneurs and in this book, she weaves practical advice with real life stories of those who got it right, and those who got it wrong.



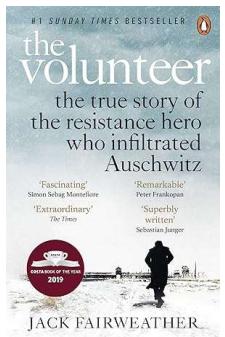
The Science of Strength Training by Austin Current

Packed with research and exercises that support you to build your strongest body - at home or in the gym. Is it time to lose weight, tone and sculpt, gain muscle and speed up your metabolism? This book gives you practical advice on how to do just that. It also gives you valuable insight into how nutrition and exercise can improve your health.



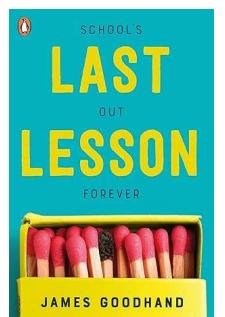
Robinson Crusoe by Daniel Defoe

This adventure story begins as Crusoe leaves the English coast for Africa and finds himself the sole survivor of a shipwreck. On a desert island, he finds another human footprint on the shore, encounters cannibals, and befriends a native.



The Volunteer by Jack Fairweather

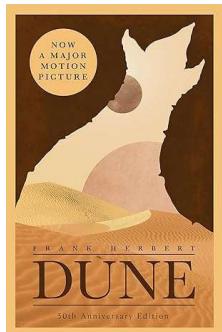
In the Summer of 1940, after the Nazi occupation of Poland, an underground operative called Witold Pilecki accepted a mission to uncover the fate of thousands of people being interred at a new concentration camp on the border of the Reich. His mission was to report on Nazi crimes and raise a secret army to stage an uprising. The name of the detention centre - Auschwitz.



Last Lesson by James Goodhand

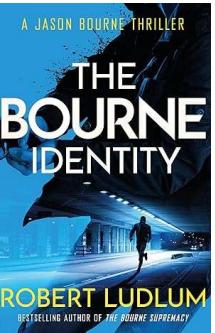
After a life-changing incident, Ollie Morcombe's life spirals from being a star pupil to a prime target for the school bullies. He's had enough and wants revenge. So when it comes to the end of the school year, Ollie decides to go out with a bang. This unforgettable novel explores teenage mental health, toxic masculinity and bullying.





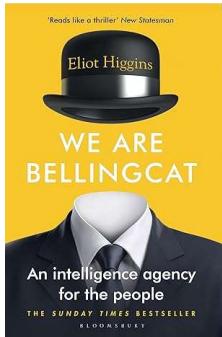
Dune by Frank Herbert

This epic tale is set on the desert planet Arrakis, the focus for a complex political and military struggle with galaxy-wide repercussions. When Duke Atreides and his family take up court there they fall into a trap set by his rival.



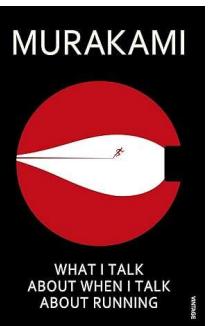
The Bourne Identity by Robert Ludlum

Who is Jason Bourne? And why does he have \$4 million in a Swiss bank account? This thriller centres on a man who has lost his memory, and his search to find out why someone wants him dead.



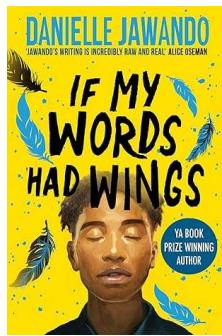
We Are Bellingcat by Eliot Higgins

A collective of self-taught sleuths is using the internet to solve some of the biggest crimes of our time. Here, the founder of Bellingcat tells the story of the home-grown investigative unit that is redefining news, politics and the digital future.



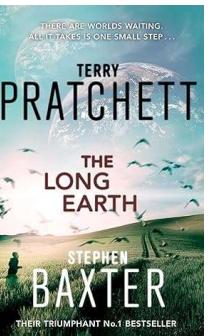
What I Talk About When I Talk About Running by Haruki Murakami

In 1982, having sold his jazz bar to devote himself to writing, Murakami began running to keep fit. A year later, he completed a solo course from Athens to Marathon, and now, after dozens of races, he reflects upon the influence the sport has had on his life and on his writing.



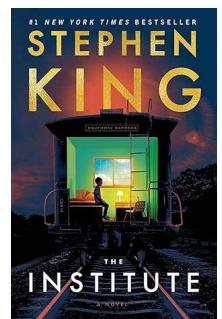
If My Words Had Wings by Danielle Jawando

When fifteen-year-old Tyrell Forrester gets caught up in a high-profile armed robbery, he's sentenced to eighteen months in a young offenders' prison. Now he's getting out, and he's determined to turn his life around. Despite his release, systemic discrimination makes it difficult for Ty to truly be free. Will society ever see him as anything other than a criminal?



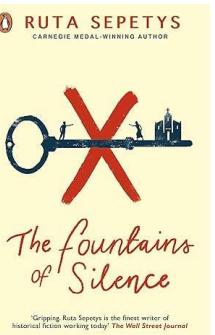
The Long Earth by Terry Pratchett & Stephen Baxter

2015: Madison, Wisconsin. Cop Monica Jansson is exploring the burned-out home of a reclusive (some said mad, others dangerous) scientist when she finds a curious gadget - a box containing some wiring, a three-way switch and a...potato. It is the prototype of an invention that will change the way Mankind views his world for ever.



The Institute by Stephen King

Deep in the woods of Maine, there is a dark state facility for kids. In the Institute they are subjected to a series of tests and procedures meant to combine their exceptional gifts - telepathy, telekinesis - for concentrated effect. Luke Ellis is the latest recruit. He's just a regular 12-year-old, except he's not just smart, he's super-smart. And he has another gift which the Institute wants to use...



The Fountains of Silence by Ruta Sepetys

Madrid, 1957. Tourists and foreign businessmen flood into Spain under the welcoming guise of sunshine and wine while Spanish citizens are gripped by a dark secret. Daniel Matheson, the son of an oil tycoon, hopes to connect with the country of his mother's birth - and fate - introduce him to Ana, a hotel maid, whose family is suffering under the fascist dictatorship of General Franco.



Timeable