



BOURNEMOUTH SCHOOL

Year 11

Knowledge Organiser 2

Autumn Term: 2025-26

Name: _____ Master _____

Registration Form: 11.-

✓Hard Work

✓Discipline

✓Smart Appearance

✓Respect

Bournemouth School

Knowledge Organiser: Year 11 Autumn Term 2

'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.

AO1 EXPLORE ANIMATE BEGIN TO LINK A THEME IMAGES TO YOUR CHOSEN ARTISTS WORK WRITTEN ANALYSIS LINK ARTISTS WORK TO IDEAS AND ARTWORK ARTISTS RESEARCH

What are Annotations?

Annotations are written explanations or critical comments added to art or design work that record and communicate your thoughts. ☐

Do's and don'ts of annotation	Tick
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.	

What not to do	
Don't write very lengthy comments. At this stage, the purpose of annotation is to allow you to record your thoughts quickly so you can explore them later	
Don't annotate in a way that distracts attention from the work, e.g. by writing over an area of a drawing in large text.	
Don't use annotations to label obvious things, e.g. 'oil pencil drawing of a bottle.'	

Annotating your work Use these heading to explain each piece of work you have done in your book		Tick
What?	What is it? Explain the piece of work you are annotating Examples: This is a first-hand drawing that I made of a ... This is a series of photographs I took of... This is a collection of visual research about... This is information I gathered about... This is a copy that I made of a piece of artwork by... This is a mood board of... to show ideas relating...	
Why?	Why did you make it? Explain how this piece helped you in your project. Examples: to get ideas about... to get me thinking about... to show what I have learned about... to explore the ideas of... to examine the shape/form/line/texture/pattern of... to analyse the style of... to try out the technique of... to practice... to develop my skills in...	
How?	How did you make it? Explain how you created the piece of work Examples: I drew it using... I painted it with... I constructed it from... I built it up by collaging... I photographed/drew it from life... I drew/painted it from a photography... I gathered the images from the internet... I researched the information on a site called...	
Quality	How good is it? What are you pleased with? What could you improve? Examples: I am pleased with the way I... one good element of the work is... the best feature of this work is... a section of this work that is particularly successful is... I'm not happy with... one area I could improve is... the least successful part of the work is... I wish that I had...	
Learning	What did you learn? What have you found out? What are the next steps? Examples: I improved my skills in... I got better at working in the style of... I have a better idea of... I have a clearer understanding of... I feel more confident about... Next I will try... To follow this up, I will... To build on this piece of work I hope to...	

Vocabulary			Tick
AO1	Critical Understanding	Looking closely at how artists and designers communicate ideas, feeling and beliefs through their work. Your knowledge of the work of others should help you to develop your ideas, and this influence should be clear in your art.	
AO1	Sources	This is what inspires your art. The work of artists, the built environment, the natural world, music, literature, history, religion, traditions, politics etc	

Keyword	Learn	✓
Species	A group of organisms that are able to interbreed and produce fertile offspring.	
Variation	Differences in the characteristics of individuals in a population of a species. This may be due to <ul style="list-style-type: none"> the genes they have inherited (genetic causes) the conditions in which they have developed (environmental causes) a combination of genes and the environment. 	
Evolution	A change in the inherited characteristics of a population over time through a process of natural selection.	
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. This evolution occurs through natural selection of variants that give rise to phenotypes best suited to their environment.	
Selective breeding	The process by which humans breed plants and animals for particular characteristics.	
Genetic engineering	Genes from the chromosomes of humans and other organisms can be 'cut out' and transferred to cells of other organisms.	

Learn the stages of selective breeding. Learn the advantages and disadvantages.

1. Choose parents with the desired characteristic from a mixed population.
2. They are bred together.
3. From the offspring those with the desired characteristic are bred together.
4. This continues over many generations until all the offspring show the desired characteristic.

Advantages of selective breeding.

- Disease resistance in food crops.
- Animals which produce more meat or milk.
- Domestic dogs with a gentle nature.
- Large or unusual flowers.

Disadvantages of selective breeding.

'inbreeding' where some breeds are particularly prone to disease or inherited defects.

Learn the stages of genetic engineering.

1. The required gene is identified.
2. Enzymes are used to isolate the required gene.
3. This gene is inserted into a vector, usually a bacterial plasmid or a virus
4. The vector is used to insert the gene into the required cells
5. The genes are transferred to the cells of animals, plants or microorganisms at an early stage in their development so that they develop with the desired characteristics.

Uses of genetic engineering.

1. Plant crops - to be resistant to diseases, insect attacks or herbicides.
2. Plant crops to produce bigger or better fruits.
3. Bacterial cells have been genetically engineered to produce useful substances such as human insulin to treat diabetes.

Definitions		<input checked="" type="checkbox"/>
Equality act	Protects people from discrimination in the workplace and in wider society. It sets out the different ways in which it is unlawful to treat someone.	
Health and Safety at Work Act (1974)	Sets out the duties and responsibilities of both employers and employees for health and safety in the workplace.	
National minimum wage	The lowest hourly rate that can legally be paid by an employer to an employee.	
Living wage	A wage that is high enough to maintain a normal standard of living. Paid to over 25 year olds.	
Consumer law	Laws designed to ensure that businesses make products that are safe and of good quality, and that they deal with customers honestly and fairly.	
Employment law	Rulings that relate to the rights and responsibilities of people who work for a business; they affect the recruitment and selection process and how the business deals with its workers.	
Trade descriptions	Protecting customers from false or misleading descriptions about products or their prices.	

Health & Safety in the workplace		<input checked="" type="checkbox"/>
Health and Safety at Work Act impacts: <ol style="list-style-type: none"> 1. All employees and employers take responsibility for H&S 2. Businesses have to carry out a risk assessment to reduce risks 3. All staff must be trained on H&S 4. Fewer accidents – less staff days will be lost due to absence 5. High costs to the business 6. Compensation paid to anyone who's injured 		
Employment and the law		<input checked="" type="checkbox"/>
Businesses have to follow laws including: <ol style="list-style-type: none"> 1. Minimum amount staff are paid (national minimum wage/living wage) 2. No discrimination in recruitment (religion, gender, race, age, sexual orientation, disability) 3. Equality – all employees must be paid the same if they do the same job at a business 		
What is the impact of legislation on businesses?		<input checked="" type="checkbox"/>
<ol style="list-style-type: none"> 1. Increased costs to comply (health and safety) 2. Increased training needs (understand consumer laws) 3. Recruitment policy (ensure there is no discrimination) 4. Consequences of failing to follow legislation (fines, negative image, business closure) 		

Consumer Law		<input checked="" type="checkbox"/>
Consumer Rights Act means all goods have to meet the following criteria: <ul style="list-style-type: none"> - The product should be fit for purpose - The product should match its description - The product should be of satisfactory quality 		

Definitions		
Market	Where those wishing to buy goods/services make contact with those who have them to sell.	
Competition	The rivalry between businesses looking to sell their goods/services in the same market.	
Growth	A business' increase in size. Methods of measurement include: asset value, employees, market share, markets, profits and sales.	
Outsourcing	Contracting another business to carry out some of the business' activities, often to reduce costs.	
Product differentiation	Developing the features that set a product apart from others in the market (such as benefits, style, price) and using that as part of advertising and promotion.	
Profit maximisation	A business' ability to make maximum profit with low operating expenses.	
Risk	The possibility that the return on investment will be lower than expected.	
Competitive market	One where there are a large number of producers selling to a large number of consumers.	
Unique selling point (USP)	The key benefit of a good/service; it differentiates the product from others and will be the focus of advertising and promotion.	

Actions a business can use to minimise risk		
Business planning – have a 'plan B' in place	Market research – complete regular market research	

Impacts of competition on a business		
Prices have to be competitive	Customer service and after sales service become very important	
Businesses have to spend money to develop new products	Businesses struggle to earn large profits as prices are often driven down	
Businesses spend large amounts promoting their products		

Risks businesses face		
Starting a business	Businesses will often lose money	
Economic Changes	Levels of unemployment, interest rates & exchange rates	
Competitor actions	If a competitor increases promotion or develops a new product	

Situations where businesses face minimal or no competition		
<ul style="list-style-type: none"> Markets where there are high set up costs (e.g. aeroplane manufacturers) Businesses selling very specialist products (e.g. thatched roof) Businesses offering a brand new product 		

Chapter 9 – Chemistry of the Atmosphere


Proportions of gases in current atmosphere		✓
Nitrogen	78 %	
Oxygen	21 %	
Other gases: argon, carbon dioxide, water vapour	1 %	

Earth's early atmosphere	✓
intense volcanic activity released gases, mainly CO ₂ , that formed the early atmosphere and water vapour that condensed to form the oceans.	
Volcanoes produced nitrogen and small proportions of methane and ammonia	
When oceans formed, CO ₂ dissolved in the water and carbonates were precipitated as sediments, reducing CO ₂ in the atmosphere	

How did oxygen increase?	✓
Algae and plants produced the oxygen that is now in the atmosphere by photosynthesis	
$6 \text{ CO}_2 + 6 \text{ H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$ carbon dioxide + water → glucose + oxygen	

How did carbon dioxide decrease?	✓
Algae and plants decreased the percentage of carbon dioxide in the atmosphere by photosynthesis	
Carbon dioxide was decreased by the formation of sedimentary rock and fossil fuels that contain carbon.	

Greenhouse gases		✓
Name	How do humans increase the amount?	
Carbon dioxide (CO ₂)	burning fossil fuels and burning trees as part of deforestation	
Methane (CH ₄)	farming cattle and using landfill sites (methane is released by decaying rubbish)	

The enhanced greenhouse effect		✓
	1. Short wavelength UV radiation from the sun penetrates the atmosphere.	
	2. Earth absorbs energy and re-emits radiation as longer wavelength infrared radiation	
	3. Greenhouse gases absorb infrared radiation.	
	4. Atmosphere maintains more heat; temperature remains higher than it would otherwise be.	

Global climate change			✓
Cause	Increased global temperature		
Effect	Melting ice caps More severe storm Desertification	Rising sea levels Disruption to migrations patterns Spread of tropical diseases	

Common atmospheric pollutants			✓
Name	How is it produced?	Effect	
Carbon dioxide	Complete combustion of fuel	Global warming	
Carbon monoxide	Incomplete combustion of fuel	Toxic	
Sulfur dioxide	Sulfur is an impurity in fuel that reacts with oxygen when fuel is burned	Acid rain	
Particulates	Unburnt hydrocarbons and other solids (soot)	Global dimming	
Nitrogen oxides	Nitrogen in the air reacting with oxygen at high temp	Acid rain, smog, respiratory problems	


1.1 Systems Architecture


Keyword	Definition	Tick
Hardware	The physical components that make up a computer system.	
Software	The computer code, programs and algorithms that give instructions to the hardware.	
Central Processing Unit (CPU)	The CPU's job is execute instructions and perform calculations by performing the FE cycle.	
Control Unit (CU)	Controls the flow of data in and out of the CPU. Manages the fetching, decoding and execution of instructions.	
Arithmetic Logic Unit (ALU)	Performs the calculations and logical operations required by programs.	
Von Neumann Architecture	A design for a computer system where data and instructions are both stored in memory.	
Program Counter (PC)	Stores the memory location (address) of the next instruction in a program to be executed.	
Accumulator (ACC)	Stores the results of calculations made by the ALU.	
Memory Address Register (MAR)	Stores the memory location (address) for data that needs to be fetched from memory or stored into memory.	
Memory Data Register (MDR)	Stores data that has been fetched from or is waiting to be sent to memory.	
Fetch Execute Cycle (FE Cycle)		


1.2.1/1.2.2 Primary & Secondary Storage

Keyword	Definition	✓
Primary storage	Memory that the CPU can access quickly.	
Secondary storage	Non-volatile storage where programs and data are kept permanently.	
Volatile	Power is required for the component to retain data.	
Non-volatile	Retains data without power.	
Random Access Memory (RAM)	Volatile primary storage that holds the programs and data currently running on the computer.	
Read Only Memory (ROM)	Non-volatile, read only primary storage that hold the firmware such as BIOS.	
BIOS	Used to boot up the computer system after it is turned on. Initialises and tests the hardware for error before loading the operating system.	
Magnetic storage	Uses different patterns of magnetisation to store data, e.g., hard disk Drive (HDD).	
Optical storage	User lasers to read/write data from optical disks, e.g., CDs & DVDs.	
Solid State Storage	Contains no moving parts like RAM but is non-volatile. Includes solid-state drives (SSDs) and USB memory sticks.	

2.4.1 Boolean Logic

Logic Gate	NOT	Tick							
Diagram	Input A  Output Q								
Expression	Q = NOT A								
Truth Table	<table><tr><th>Input</th><th>Output</th></tr><tr><td>0</td><td>1</td></tr><tr><td>1</td><td>0</td></tr></table>			Input	Output	0	1	1	0
Input	Output								
0	1								
1	0								

Logic Gate	AND	Tick																
Diagram	Input A  Output Q Input B																	
Expression	Q = A AND B																	
Truth Table	<table><tr><th>Input - A</th><th>Input - B</th><th>Output</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>			Input - A	Input - B	Output	0	0	0	0	1	0	1	0	0	1	1	1
Input - A	Input - B	Output																
0	0	0																
0	1	0																
1	0	0																
1	1	1																

Logic Gate	OR	Tick																
Diagram	Input A  Output Q Input B																	
Expression	Q = A OR B																	
Truth Table	<table><tr><th>Input - A</th><th>Input - B</th><th>Output</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>			Input - A	Input - B	Output	0	0	0	0	1	1	1	0	1	1	1	1
Input - A	Input - B	Output																
0	0	0																
0	1	1																
1	0	1																
1	1	1																

1.2.4 Data Storage

Keyword	Definition	✓
Denary	Base 10 – 0, 1, 2, 3, 4, 5, 6, 7, 8, 9	
Binary	Base 2 – 0, 1	
Hexadecimal	Base 16 - 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F	
Character set	Every character the computer can understand. Each character is represented by a unique number.	
ASCII	Originally used 7 bits to represent each character so could represent 128 different characters (0-127). Later upgraded to use 8 bits to represent 256 characters (0-255)	
Unicode	Uses multiple bytes for each character and can represent millions of characters from every language.	
Bitmap	A type of image made up of lots of tiny dots, called pixels.	
Resolution	The concentration of pixels in an image.	
Colour depth	The number of bits used to represent each pixel. Represents the numbers of unique colours an image can display.	
Metadata	Data about data.	
Sample rate	The number of audio samples taken per second.	
Bit depth	The number of bits used to store each sampled value.	

Tick	Hardwood	Uses	Properties
	Oak	<ul style="list-style-type: none"> High quality furniture Whisky barrels 	<ul style="list-style-type: none"> Compressive strength Hard
	Mahogany	<ul style="list-style-type: none"> Window frames Jewellery boxes 	<ul style="list-style-type: none"> Fairly easy to work with Finishes well
	Beech	<ul style="list-style-type: none"> Toys Tools 	<ul style="list-style-type: none"> Tough Hard
	Balsa	<ul style="list-style-type: none"> Modelling Surf boards 	<ul style="list-style-type: none"> Extremely easy to work with/soft Lightweight

Tick	Manmade board	Uses	Properties
	Plywood	<ul style="list-style-type: none"> Building and construction Flooring 	<ul style="list-style-type: none"> Strong Resistant to warping and cracking
	MDF	<ul style="list-style-type: none"> Inside of cabinets and storage units Insides of flat pack furniture 	<ul style="list-style-type: none"> Very easy to machine and cut Smooth surface (ideal for painting)

Tick	Softwood	Uses	Properties
	Cedar	<ul style="list-style-type: none"> Sheds Boats 	<ul style="list-style-type: none"> Natural oils make it resistant to water and fungal growth Low density
	Pine	<ul style="list-style-type: none"> Construction Inexpensive furniture 	<ul style="list-style-type: none"> Easy to work with Lightweight

Tick	Facts		
	Softwood	<ul style="list-style-type: none"> Originates from coniferous/evergreen trees Trees grow all year round Have needle like leaves Tend to be cheaper than HWs as they grow all year round and are readily available Take around 30-50 years to mature Grow in cooler or temperate climates 	
	Hardwood	<ul style="list-style-type: none"> Originates from deciduous trees Trees grow ½ the year (Summer and Spring) Have broad leaves Tend to be more expensive as they are less available Take 100s of years to mature Grow in temperate or tropical climates 	
	Manmade board	<ul style="list-style-type: none"> A.k.a. manufactured boards Are not naturally grown Made into large sheets/boards Mostly made from scrap/waste wood so can be seen as more environmentally friendly 	

GCSE Design Technology: CORE 1.13 Materials Properties

What is a mechanical property?

Elements of a material that resist deformation from external forces in a particular way.

Tick	Property	Definition
	Strength	Withstands forces by squashing (compressive strength) or stretching (tensile strength).
	Elasticity	Can return to its original shape once the deforming force has been removed.
	Plasticity	(plastics only) Ability to permanently deform without breaking when heated.
	Malleability	(metals only) Ability to deform in all directions without fracture.
	Ductility	To be drawn out, bent or twisted without fracture.
	Hardness	Resists deformation, indentation or penetration.
	Toughness	Withstands sudden shock or stress.
	Brittleness	Inability to withstand sudden shock or stress.
	Durability	Withstands deterioration over a long period of time.
	Stability	Resists changes in shape over time.
	Stiffness	Resists bending.

GCSE Design Technology: CORE 1.14 Influences in designing and making

Tick	Criteria	Definition/ description
	Fairtrade Foundation	Tackles poverty and injustice across the world. It ensures farmers are paid a fair price and has better working conditions and tries to prevent child labour.
	Carbon Offsetting scheme	When companies or individuals reduce their carbon footprint through ways such as planting trees, encouraging staff to cycle to work, car sharing etc.
	Product disassembly	When a product can be taken apart so that individual parts can be recycled or reused.
	Disposal of waste	This is governed by laws at international, European, national and local levels to ensure that collection, transportation and disposal of waste has the least amount of impact on the environment.
	Human capabilities	When a design meets the needs of the user and operates within their capabilities.
	Cost of materials	Refers to all aspects i.e. the initial cost of the raw material, the costs of maintenance, transportation, recycling and disposal.
	Manufacturing capability	Considers the machinery/equipment available to manufacture and then the costings available to actually make the product.
	Modular	A design featuring parts of standard sizes so that they can be constructed in different ways.
	Consideration of 'green designs'	Global warming and rising energy costs have led to designers thinking about environmental factors when designing products without compromising function, quality or performance.



Format and timings: This exam is 1 hour 45 minutes. Section A: Requires you to read an extract and answer four questions based on the extract in 45 minutes. Section B asks you to complete some creative writing. You will have two options, one which will give you an image to help you write. You will have 45 minutes.

<p>Question 1- List four things from the text [5 mins-4 marks]</p> <p>✓ Only use the lines indicated</p> <p>✓ Stick to the question and -include quotations where appropriate</p>	<p>Question 2-“How has the writer used language?” This question asks you to analyse how language is used for effect. [10 mins-8 marks]</p> <p>✓ Select the correct area of the source.</p> <p>✓ Structure of paragraphs: Technique, quotation, explanation of how/why the method create effect. At least 3 interesting quotations to analyse. 3 paragraphs - multiple methods in each.</p> <p>✓ Identify language techniques being used in quotations. e.g. metaphor, simile, personification, onomatopoeia, semantic fields, imagery, sensory language etc.</p> <p>✓ Write about what you infer (the impression you get) from quotations, making link back to key word(s) in the Q. Draw more than 1 inference for more marks.</p>	<p>Q5: Produce a piece of creative writing using narrative and descriptive features. 45 minutes to plan and answer. 40 marks (24 marks for content and organisation -16 marks for technical accuracy)</p> <p>You will be given a choice of questions-to describe an image or write a narrative. Try to make sure that your answer has a sense of a narrative. One of the questions will include a picture stimulus which should be used as a ‘stringboard’ for ideas.</p>																					
<p>Q3 - “How has the writer structured the text?” This question asks you to analyse how structure is used to influence the reader 3 paragraph response - track the beginning/middle/end of text [10 mins- 8 marks]</p> <p>✓ Make sure you select structural devices from across the whole source. Use What? How? Why? x 3-4 to answer this Q.</p> <p>✓ Find 3 interesting moments that use structural devices effectively from the beginning, middle and end of the source that link back to the key idea in the Q.</p> <p>✓ Identify structural techniques being used in those moments: contrast, cyclical, dialogue, lists, tense, narrative, chronology, flashbacks, focus shift, character shift, zoom in/out, location shift, foreshadowing, withheld information etc.</p> <p>✓ Write about what you infer (the impression you get) from quotations, making the link back to the key word(s) in the Q.</p> <p>✓ Avoid empty phrases such as: ‘It makes the reader want to read on...’ Consider how it makes the reader feel/think... What’s happening? Why is it happening? How is this effective? What’s the impact on the reader.</p> <p>✓ Draw more than one inference if you want more marks.</p>	<p>Q4 - “How far do you agree?” Essay response to a statement relating to the text and you have to evaluate the text to decide if you agree or disagree with the statement. 4-6 paragraphs [25 mins-20 marks]</p> <p>✓ Evaluate critically and support this with appropriate textual references</p> <p>✓ Use OMQAR (opinion about statement, methods, quotation, analysis of method, effect on reader) to structure your response</p> <p>✓ Use the section indicated and stick to the question – highlight 4-6 important words/phrases/moments that relate to the statement and the question</p> <p>✓ Start with an evaluative comment: do you agree, partially agree or disagree?</p> <p>✓ Select references for language and structure points judiciously. Remember WHAT? language and structure methods are being used WHERE? And WHY?</p> <p>✓ Use technical terminology (see above for language and structure terminology)</p> <p>✓ Address all parts of the statement. There are often two.</p> <p>✓ Start with paragraphs outlining why you agree (or partially agree) and then introduce paragraphs about why you could also modify it if this is the case.</p> <p>✓ Ideal sentence starters: I agree/disagree/partially agree with the statement because..., The writer states...which creates the impression.... This reinforces the idea..., The reader feels..., I get the impression..., This seems to indicate...The statement could be modified if you consider...</p>	<table><tr><th>Include</th><th>How to structure your writing</th></tr><tr><td>engaging opening and thought-provoking ending.</td><td>1: Drop the reader into the scene. Describe settings in detail-colours, sensory language, imagery, pathetic fallacy</td></tr><tr><td>Paragraphs organised in a deliberate sequence</td><td>2: Character-describe your character in detail- what are they doing there? how are they feeling?</td></tr><tr><td>Imagery and description</td><td>3: ZOOM-in an important detail of your story and describe in vivid detail- how does your character interact with it?</td></tr><tr><td>Variety of sentence structures</td><td>4: Shift- use a shift in time as a powerful structural technique- flashforward of flashback.</td></tr><tr><td>Discourse markers to add cohesion</td><td>5: Powerful ending- end your piece in an exciting, mysterious or ambiguous way. Do you use a cyclical structure? You could start and end with the same focus on the weather or an object/motif.</td></tr><tr><td>Range of punctuation (colon, semi-colon) and ambitious vocabulary</td><td>Paragraphing: Separate paragraphs . You could try using a one line paragraph for effect</td></tr><tr><td>Repeated motif or symbolism</td><td>Characters: Only one/two. Concentrate on saying a lot about a little. Fuller descriptions of one character is best. Minimal speech/dialogue is most effective. Description over speech</td></tr><tr><td>Varied sentence openers</td><td>Show don’t tell: Don’tTELL the reader information - e.g. “he was scared” SHOW them e.g. “sweat formed on his brow” rather than saying “it was summer” SHOW it.</td></tr><tr><td>Accurate SPAG</td><td></td></tr></table>	Include	How to structure your writing	engaging opening and thought-provoking ending.	1: Drop the reader into the scene. Describe settings in detail-colours, sensory language, imagery, pathetic fallacy	Paragraphs organised in a deliberate sequence	2: Character -describe your character in detail- what are they doing there? how are they feeling?	Imagery and description	3: ZOOM -in an important detail of your story and describe in vivid detail- how does your character interact with it?	Variety of sentence structures	4: Shift - use a shift in time as a powerful structural technique- flashforward of flashback.	Discourse markers to add cohesion	5: Powerful ending - end your piece in an exciting, mysterious or ambiguous way. Do you use a cyclical structure? You could start and end with the same focus on the weather or an object/motif.	Range of punctuation (colon, semi-colon) and ambitious vocabulary	Paragraphing: Separate paragraphs . You could try using a one line paragraph for effect	Repeated motif or symbolism	Characters: Only one/two. Concentrate on saying a lot about a little. Fuller descriptions of one character is best. Minimal speech/dialogue is most effective. Description over speech	Varied sentence openers	Show don’t tell: Don’tTELL the reader information - e.g. “he was scared” SHOW them e.g. “sweat formed on his brow” rather than saying “it was summer” SHOW it.	Accurate SPAG		
Include	How to structure your writing																						
engaging opening and thought-provoking ending.	1: Drop the reader into the scene. Describe settings in detail-colours, sensory language, imagery, pathetic fallacy																						
Paragraphs organised in a deliberate sequence	2: Character -describe your character in detail- what are they doing there? how are they feeling?																						
Imagery and description	3: ZOOM -in an important detail of your story and describe in vivid detail- how does your character interact with it?																						
Variety of sentence structures	4: Shift - use a shift in time as a powerful structural technique- flashforward of flashback.																						
Discourse markers to add cohesion	5: Powerful ending - end your piece in an exciting, mysterious or ambiguous way. Do you use a cyclical structure? You could start and end with the same focus on the weather or an object/motif.																						
Range of punctuation (colon, semi-colon) and ambitious vocabulary	Paragraphing: Separate paragraphs . You could try using a one line paragraph for effect																						
Repeated motif or symbolism	Characters: Only one/two. Concentrate on saying a lot about a little. Fuller descriptions of one character is best. Minimal speech/dialogue is most effective. Description over speech																						
Varied sentence openers	Show don’t tell: Don’tTELL the reader information - e.g. “he was scared” SHOW them e.g. “sweat formed on his brow” rather than saying “it was summer” SHOW it.																						
Accurate SPAG																							
<p>Structural techniques: character shift/introduction, contrast, chronological, cyclical, development, dialogue, ending, flashback/forward, focus shift, foreshadowing, lists, narrative, opening, order, paragraphs, patterns/motifs/symbols, repetition, sentence structures, tense, withholding information, zooming in and out</p>																							

Macbeth

Year 11 Paper 1 Literature Knowledge organiser

Jekyll & Hyde

Themes	One key quote per theme	Characters and quotes	✓
Ambition: The dangers of excessive ambition, suggesting it leads people into evil and to turn against their duty/God.	"I have no spur to prick the sides of my intent, but only vaulting ambition"	Gabriel Utterson: <i>The model of a Victorian Gentleman: restrained, serious and guards his friend's reputations.</i>	"lean, long, dusty, dreary and yet somehow lovable" "He was austere with himself; drank gin when he was alone, to mortify a taste for vintages"
Loyalty: Loyalty is a key characteristic and to fail in your loyalty to King/God a terrible crime.	"Most sacrilegious murder hath broke ope The Lord's anointed temple"	Richard Enfield: <i>Respected but pursues a lively (and mysterious) social life.</i>	"I was coming home from some place at the end of the world, about three o'clock of a black winter morning"
Violence: Violence is praised in Jacobean society. Shakespeare suggests that violent actions lead to violent consequences.	"it will have blood; they say blood will have blood".	Dr Henry Jekyll: <i>An admired and respected Dr, but known to have had a wild streak in his youth.</i>	"the very pink of the proprieties, celebrated too" "man is not truly one, but truly two"
Masculinity: Jacobean notions of masculinity are too focused on strength/pride. This makes Macbeth easy to manipulate when Lady M questions his masculinity.	"What beast was't, then, That made you break this enterprise to me? When you durst do it, then you were a man"	Mr Hyde: <i>Repulsive, animalistic, driven by base desires and instincts. He is an expression of the repressed desires of Victorian society.</i>	"with ape-like fury, he was trampling his victim under foot" "My devil had been long caged, he came out roaring."
Femininity: Lady Macbeth challenges Jacobean notions of how women should behave, but ends up bring about her own downfall. Is Shakespeare suggesting women can be strong and ruthless, or warning that these qualities are unnatural for women?	"Come, you spirits/ That tend on mortal thoughts, unsex me here"	Dr Lanyon: <i>A disciplined and respected scientist, who disapproves of Dr Jekyll's rash approach.</i>	"it is more than ten years since Henry Jekyll became too fanciful for me. He began to go wrong, wrong in mind."
Kingship vs Tyranny: Shakespeare explores the idea that a true king must be linked to God. Someone who seeks the throne for power or selfish reasons will be viewed as a cruel tyrant not a true king.	"This tyrant, whose sole name blisters our tongues"	Sir Danvers Carew: <i>Graceful, dignified and civilized.</i>	"an aged beautiful gentleman with white hair"
The Supernatural: Shakespeare presents the supernatural as an evil, dangerous and corrupting, force.	The instruments of darkness tell us truths, win us with honest trifles, to betray us In deepest consequence		
Fate: Shakespeare questions the idea of fate. Should be view Macbeth as responsible for his own downfall or is he the tragic victim of cruel fate?	"Life's but a walking shadow, a poor player That struts and frets his hour upon the stage And then is heard no more"		
Divine retribution: Shakespeare suggests that those who go against God will suffer terrible consequences: guilt, paranoia, madness, death.	"o full of scorpions is my mind"		

Energy requirements

vary from person to person, depending on the Basal Metabolic Rate (BMR) and Physical Activity Level (PAL).

Total energy expenditure = BMR x PAL

Key terms

Digestion:

The process by which food is broken down within the digestive tract into smaller chunks for absorption.

Macronutrients –

protein/carbohydrates/fats:

Needed to provide energy and as the building blocks for growth and maintenance of the body.

Micronutrients vitamins/minerals:

Needed in very small amounts mainly to facilitate biological reactions within the body

BMR:

Basal Metabolic Rate- the energy we need just to maintain bodily function each day, approx. 1kcal per minute.

Energy from food

Energy is measured in **joules (J) or kilojoules (kJ)**,

Energy from food can also be measured in **“calories” (kcal)**.

Different macronutrients provide different amounts of energy per gram.

	Energy per 1g
Carbohydrate	16kJ (3.75 kcals)
Protein	17kJ (4 kcals)
Fat	37kJ (9 kcals)

Body Mass Index (BMI) can be used to identify if someone is the correct weight for their height and therefore, their chance of poor health outcomes.

BMI = $\frac{\text{weight (kg)}}{(\text{height in m})^2}$

Recommended BMI range (adults)

Less than 18.5	Underweight
18.5 to 25	Desirable
25-30	Overweight
30-35	Obese (Class I)
35-40	Obese (Class II)
Over 40	Morbidly obese

Carbohydrate

Free sugars

All sugars added to foods, plus sugars naturally present in honey, syrups and fruit juice.

Fibre - non-starch polysaccharides

Cellulose found in plants that cannot be digested in the small intestine.

Sugars

Includes both mono/disaccharides e.g. glucose or sucrose

Starchy foods

Main source of carbohydrate for most people and are an important source of glucose for the body. Choosing wholegrain versions will increase fibre and vitamin/mineral intakes.

Fat

A high saturated fat intake is linked with high blood cholesterol levels which can lead to coronary heart disease.

Essential Fatty Acids (EFAs)

Cannot be made in the body but are important to the healthy and efficient functioning of the body. They include-

Omega-3: Found in oily fish, seeds, walnut oil and leafy green vegetables, it helps protect the heart.

Omega-6; found in vegetables, fruits, grains, chicken and seeds. It helps lower cholesterol in the blood.

Protein

Proteins are **folded chains of amino acids**.

20 amino acids

9 amino acids are “essential” cannot be made by the body and must be taken in via the diet.

Complete proteins (HBV) are those containing all nine essential amino acids

You can **combine LBV proteins** within the same meal to make a **complete source**.

Micronutrients

Vitamins

Fat-soluble vitamins.

A, D, E and K. Our bodies can store these vitamins in fat and use them as required so we do not need to consume them every day

Water-soluble vitamins,

B1 Thiamin, B2 Riboflavin, B3 Niacin, B9 folate or folic acid, B12 Cobalamin and vitamin C Ascorbic Acid. Our bodies cannot store these and so they need to be consumed on a regular basis

Minerals and Trace Elements

Minerals are inorganic substances required by the body in small amounts for a variety of different functions.

Calcium, sodium, iron, phosphorous, fluoride and iodine.

Calcium and iron are needed in larger amounts than some of the others.

To form the
passé composé
of these verbs,
we use ETRE
instead of
AVOIR :

je suis	+ past participle
tu es	
il/elle est	
nous sommes	
vous êtes	
ils/elles sont	
To form the past participle remove & add	
-er	-é
-ir	-i
-re	-u

Monter
Rester
Sortir

Venir*
Aller
Naître*
Descendre
Enter
Rentrer
Tomber
Retourner
Arriver
Mourir*
Partir

*Irregular past participles: venu/né/mort

Role play at the train station – à la gare		
un billet	A ticket	
un aller	A single	
un aller-retour	A return	
je voudrais	I would like	
c'est combien?	How much is it?	
le prochain train part à quelle heure?	What time does the next train leave?	
le train arrive à quelle heure	What time does the train arrive?	
le train part de quel quai?	What platform does the train leave from?	

ETRE verbs in the perfect tense		
Je suis allé	I went	
Je suis resté	I stayed	
Je suis arrivé	I arrived	
Je suis sorti	I went out	
Nous sommes allés	We went	
Nous sommes restés	We stayed	
Nous sommes arrivés	We arrived	
Nous sommes sortis	We went out	
Je me suis bien amusé	I had fun	
Nous nous sommes bien amusés	We had fun	

Future plans – mes projets		
La mode	Fashion	
Je voudrais aider les autres	I would like to help others	
Je voudrais travailler avec des gens	I would like to work with people	
Gagner un bon salaire	To earn a good salary	
Fidèle	Loyal	
Travailler seul	To work alone	
Mon point fort	My strong point	
Un métier/un emploi/un travail	A job/career	
Faire quelque chose d'intéressant	To do something interesting	
Ma passion, c'est..	My passion is..	
Ce qui m'intéresse le plus, c'est..	What I am most interested in is..	

Etre verbs have to agree
Add 'e' for feminine
Add 's' for plural
Add 'es' for fem plural

Reflexive verbs also use être in
the perfect tense.

For example:
Je me suis bien levé
Nous nous sommes couchés

Les métiers/les emplois - jobs		
directeur/directrice	boss	
mécanicien(ne)	mechanic	
infirmier/infirmière	nurse	
professeur	teacher	
serveur/serveuse	waiter/waitress	
médecin(e)	doctor	
chanteur/euse	singer	
électricien(ne)	electrician	
au chômage	unemployed	
acteur/actrice	actor/actress	
joueur/joueuse de tennis	tennis player	
policier/policière	police officer	
chef/cheffe de cuisine	chef/cook	
le patron/la patronne	the boss	

For jobs, drop the article
Eg je suis professeur
Je voudrais être médecin



Mes passions et mon avenir		
Qu'est-ce que tu veux faire à l'avenir	<i>What do you want to do in the future?</i>	
Avant de/d'...	<i>Before...</i>	
avoir des enfants	<i>having children</i>	
me marier	<i>getting married</i>	
trouver un bon travail	<i>finding a good job</i>	
après avoir...	<i>After having..</i>	
réussi mes examens	<i>passed my exams</i>	
fini mes études	<i>finished my studies</i>	
voyagé à l'étranger	<i>travelled abroad</i>	

Future plans		
J'aimerais	<i>I would like</i>	
J'espère	<i>I hope</i>	
J'ai envie de/d'...	<i>I want</i>	
J'ai l'intention de/d'...	<i>I intend</i>	
Mon but est de/d'...	<i>My goal is..</i>	
Mon ambition est de/d'...	<i>My ambition is ..</i>	
Je (ne) veux (pas)..	<i>I (don't) want..</i>	
aller à l'université	<i>To go to university</i>	
sivre une formation professionnelle	<i>To do professional training</i>	
trouver un emploi	<i>Find a job</i>	
gagner beaucoup d'argent	<i>To earn lots of money</i>	
avoir ma propre entreprise	<i>To have my own business</i>	
J'aurai des enfants	<i>I will have children</i>	
Je chercherai un emploi	<i>I will find a job</i>	
J'irai à l'université	<i>I will go to university</i>	
Je visiterai d'autres pays	<i>I will visit other countries</i>	

Express mondial		
Partir	<i>To leave</i>	
Je suis parti	<i>I left</i>	
D'abord	<i>Firstly</i>	
Une nuit	<i>One night</i>	
Une voiture	<i>A car</i>	
Ils/elles ont pris	<i>They took</i>	
Dormir	<i>To sleep</i>	
J'ai dormi	<i>I slept</i>	
Une boulangerie	<i>A bakery</i>	
Gagner	<i>To earn/to win</i>	
Ils ont gagné 10 euros de l'heure	<i>They earned 10 euros per hour</i>	

Picture description		
Sur la photo	On the photo	
Je peux voir/on peut voir	I can see/you can see	
Il y a	There is	
À gauche/à droite	On the left/on the right	
À l'arrière plan	In the background	
Au premier plan	In the foreground	
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	

Opinion structures		
A mon avis	In my opinion	
D'après-moi	In my opinion	
Selon moi	According to me	
Selon mes parents/ mes amis	According to my parents/friends	
Je dirais que	I would say that	
J'imagine que	I imagine that	
Je pense que	I think that	
Je crois que	I believe that	

Simple future essentials		
Ce sera	It will be	
Il y aura	There will be	
Je serai	I will be	
Je ferai	I will do	
J'irai	I will go	
Je jouerai	I will play	
Je regarderai	I will watch	
Je visiterai	I will visit	
Je mangerai	I will eat	
Nous mangerons	We will eat	
Nous irons	We will go	

To form negatives the ne ..pas goes around the conjugated verb. For near future + perfect tense it goes around the form of aller/ avoir/etre		
ne...pas	not any	
nejamais	never	
ne...rien	Nothing	
ne...que	Only	
ne...aucun	not any, none	
ne...personne	No-one	
ne..ni..ni	Neither...nor...	
ne...plus	Not any more	

Modal verb common structures		
Modal verbs are followed by an infinitive		
Il faut	You must/have to	
Il ne faut pas	You must not	
On doit	You/we must	
On peut	You/we can	
On devrait	You/we should	
On pourrait	You/we could	
Je devrais	I should/ought to	
Nous devrions	We should	
Nous pourrions	We could	

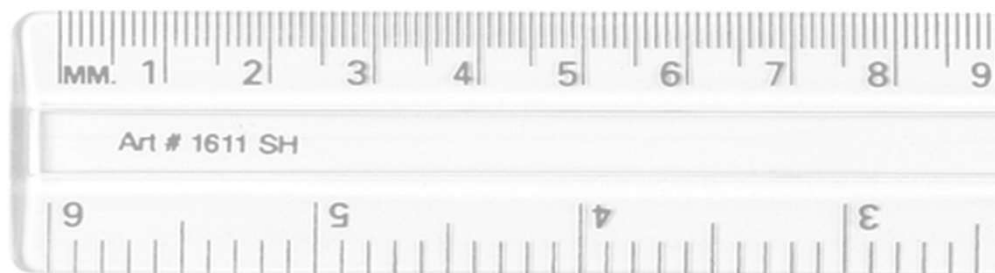
Keyword	Principles of Design – read, cover, write, review	tick
Colour theory	Color theory is the collection of rules and guidelines which designers use to communicate with users through appealing color schemes in visual interfaces.	
Colour wheel	A color wheel is a tool that helps you to combine appropriately the colors, and its represented by a circle formed by primary, secondary, and tertiary colors.	
RGB	RGB Color model stands for Red, Green, and Blue and is mainly used for electronic displays including computers and smartphones, and is based on the additive color model of light waves.	
CMYK	CMYK Color model stands for Cyan, Magenta, Yellow, and Key (Black). CMYK is the colour model used for printing.	
Monochromatic	The monochromatic scheme as the name says combine different shades from one color to create an attractive design.	
Complementary	A complimentary colour scheme uses colours opposite each other on the colour wheel to create a high contrast aesthetic.	
Hue	Hue either refers to is a pure colour or the dominant colour. If black is added to a hue it becomes a shade and if white is added it becomes a tint.	
Saturation	Saturation refers to the intensity of a colour. Highly saturated colours appear more vibrant and bold, whereas less saturation appears dull.	
Eyedropper tool	The eyedropper tool is used across various programs like Adobe illustrator and Photoshop. The tool allows the user to select a specific colour from an area on the screen.	



Move Tool (V)	Pen Tool (P)	Transparency Tool (Y)	Rectangle Tool (M)	Artistic Text Tool (T)
Artboard Tool	Pencil Tool (N)	Place Image Tool	Ellipse Tool (M)	Frame Text Tool (T)
Node Tool (A)	Vector Brush Tool (B)	Vector Crop Tool	Rounded Rectangle Tool (M)	Colour Picker Tool (-)
Corner Tool (C)	Fill Tool (G)		Triangle Tool (M)	View Tool (H)
			Additional shapes clicking the chevron	Zoom Tool (Z)



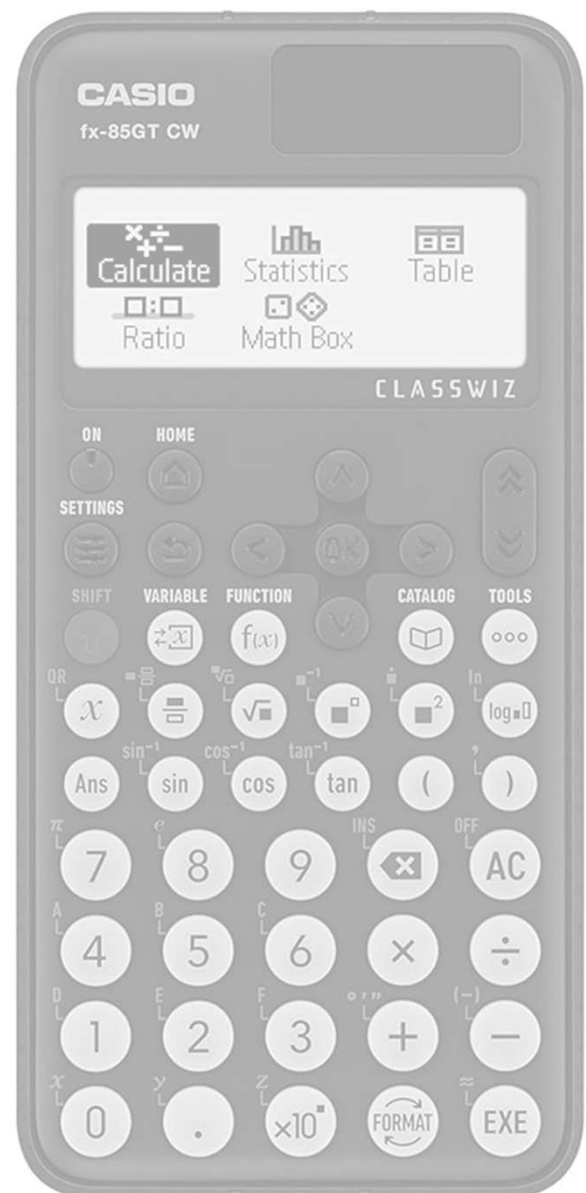
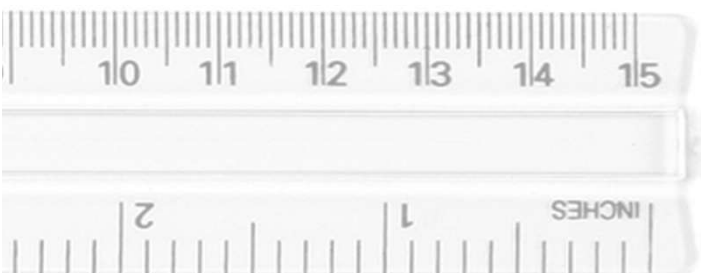
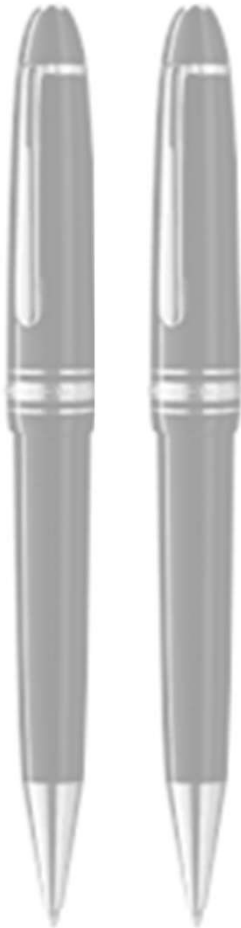
Equipment



Check



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





5.3 London’s context.

Site:
Located on the Thames River, the land is flat as it is on the **flood plain**. Located on the Thames as this was a **‘bridging point’** during Roman times. Economically this meant that businesses started in the area and trade soon started.

Situation:
London is a very well connected city. It is **situated** in the south east of England, in Western Europe. The M25 runs around London. A number of other motorways lead to London. These include the M1, M11 and M23 meaning quick access to other cities across UK. There are **5 airports** meaning tourists and trade are easily attracted- London can be considered a **global hub** for air travel. Ferries and Eurotunnel allow for further increase in trade which helps to boost **FDI**.

London’s structure is more complex than both the Burgess model and the Hoyt model. It’s main economic function has shifted to the Docklands and now includes world famous building like Canary Wharf. **In some ways you could say London has 2 CBDs**, many businesses and tourists are attracted to Central London
As with the Burgess model the city because more suburban in its function as you get further out. Housing age decreases and in many areas we are seeing new development in residential areas. With the internet and transport businesses are starting to move out of town for cheaper rent, they are ‘footloose’. Environmental quality improves as you get further out, there is less traffic and pollution and population density decreases.

5.4 London changes through employment, services and the movement of people.

Pull factors (jobs, culture, infrastructure, education, health play a huge role in attracting migrants (both national and international to London).
Clusters of migrant populations occur as culture develops. New immigrants can be supported by friends and family with settling and language barriers. Most migrants are adults aged between 21-35.

- Migrants from within the UK tend to be graduates from UK universities seeking work and a London lifestyle.
- International migration consists of skilled and unskilled workers.

Skilled workers – take up well-paid jobs in the knowledge economy in London.
Unskilled workers – find work easy to get. Clusters of particular ethnic communities develop which help defend migrants from discrimination, support ethnic shops and services and help to preserve cultural distinctiveness.

While parts of London are booming and wealthy, some are very deprived. Deprivation has several causes. The government gathers information on employment, health, education, housing and services to produce an Index of Multiple Deprivation (IMD) which shows how deprived places are.



5.5 London opportunities and challenges

London has not always been a thriving city. After the closure of London’s docks in 1981, the riverside between Tower Bridge and the Thames became derelict. New container ships were larger than before, so ports moved downstream where the water was deeper. This led to...

- **DEINDUSTRIALISATION**
 - Industries that relied on the ports moved too, or closed down.
 - By 2001, only 7.1% in manufacturing in London, in 1971 it was 30%
- **DEPOPULATION**
 - Closures had massive impact on communities.
 - East London had unemployment rates over 60%.
 - People left the area in search of work – between 1971 and 1981, 500,000 people left inner London boroughs.
- Depopulation led to an increased rate of movement of people from the inner to outer suburbs. **SUBURBANISATION**.
 - This is possible due to transport within London.
- The shift to the suburbs led people to spend their money there too, instead of London. This led to **DECENTRALISATION**.
- In the 1980s in an effort to reverse the process of inner city decline the UK government set up Urban Development Corporations (known as UDCs). The aim of these UDCs was to **REGENERATE** inner city areas with large amounts of derelict and unused land by taking over planning responsibility from local councils.

People who work in London have a difficult choice to make – where to live? Choosing London means very high rent or mortgage payments. Choosing further out of London means a cheaper house, but a lot of money and time spent commuting. As a result of this, London has become a sprawling city, invading surrounding rural areas.
To limit its growth, a green belt was introduced by planners to protect the countryside. This is an area in which no major building was allowed.
Since 1991, the flow of people leaving London has reversed. Re-urbanisation has taken place.



5.6 Improving quality of life. ☐

Stratford has also undergone regeneration through the **Olympics**. This has changed people’s perception of the area ‘rebranding’ and is attracting people from into the area.

Where the 2012 Olympic Venues now stand was once London’s most derelict land. Prior to its decline in the 1970s, the area had been one of the biggest industrial areas in Europe. Clearing the abandoned buildings and derelict land was one on London’s biggest regeneration projects.

Advantages

- ✓ The stadiums were made of at least 25% recycled materials.
- ✓ The Lower Lea Valley had poor soil conditions, but the soil was cleaned up on site.
- ✓ Sustainable and biodiverse vegetation that is suited for an urban environment was used.

Disadvantages:

- x The games produced 3.3 million tons of CO2.
- x Many of the materials used for construction came from overseas rather than local businesses.

The current cost of living in London may drive people away, especially as housing demand drives up both buying and renting costs. The pandemic changed peoples’ views of London, as 48% of London’s employees worked from home – is it necessary to have expensive office spaces?

Sustainable Development is the ability to provide for current generations without compromising the ability of future generations to meet their own needs.

Sustainable development of London can be achieved if the following areas are focused on:

- Transport
- Employment
- Affordable housing
- Energy efficiency
- Green spaces
- Recycling.

5.7 Rural connections. ☐

Terling is a traditional-looking English village, near Chelmsford in Essex.

Services in many villages are struggling.

In Terling:

- shops fight for survival
- the doctors’ surgery has recently closed and been taken over by a cafe,
- the bus runs twice a week
- the pub has closed

Dairy farms around Terling no longer provide jobs, as cows were sold when milk prices fell, and farm workers were sacked.

DESPITE THIS... Property prices are booming, and the village primary school is full!

Terling is VERY ACCESSIBLE!

- Railway station is 5 minutes drive away, with trains taking 45 minutes to London.
- A 5 minute drive away is the A12, which links London and Colchester.
- Chelmsford is 7 miles away.
- It has supermarkets, shops and services (which led to the reductions in services in Terling)

The movement of people from central London to places like Terling (counter-urbanisation) has been continuous.

Terling and Chelmsford in Essex are a part of a bigger area surrounding London – **the rural-urban fringe**. This lies beyond the suburbs and is predominantly rural, but depends on London for work and services. London itself does not have enough people to work within the city, so this codependency works for both London and its surrounding region.

Settlements in the rural-urban fringe become **dormitory** towns and villages.

5.8 Rural areas have opportunities and challenges. ☐

CORNWALL

- Population of 570,000.
- In August, around 4 million tourists visit the area.
- 700km of coastline with sandy beaches, small fishing harbours and isolated coves.
- A strong image- Poldark, pasties, clotted cream, seafood....
- It has one of the fastest growing populations.

Cornwall’s biggest problem is employment.

The decline of traditional **primary employment** (farming, fishing, china clay quarrying and tin mining) has left the country with few full-time, permanent jobs.

West Cornwall is one of the UK’s most deprived areas. Not only does it have the UK’s lowest average incomes and a high percentage of elderly people, it also has few services.

RURAL DIVERSIFICATION – finding a wider range of activities in rural areas to enable farms and other rural businesses to survive.

- Tourist attractions – think Eden Project, an old quarry that is now a big tourist attraction in Cornwall.
- Farm shops
- Tourist accommodation
 - Many farms now supplement their income with that from tourism.
 - These include:
 - Barn conversions – turning farm buildings into holiday cottages
 - Campsites
 - Spa retreats

Wie sieht die Zukunft aus?-What does the future look like?		
Ich will helfen	<i>I want to help</i>	
I habe vor,...	<i>I intend</i>	
Ich plane	<i>I plan</i>	
Ich hoffe,....	<i>I hope</i>	
Ich habe mich entscheiden, ...	<i>I have decided...</i>	
Ich bin bereit, ...	<i>I am ready</i>	
Im Sommer	<i>in summer</i>	
nächstes Jahr	<i>next year</i>	
später	<i>later (on)</i>	
nach den Prüfungen	<i>after the exams</i>	
In der Zukunft	<i>In the future</i>	
nach der Schule	<i>after school</i>	

Was ist dein Traumberuf?- What is your dream job?		
Möchtest du später mit...arbeiten	<i>Later on, would you like to work with...</i>	
Möchtest du in der Zukunft (als)...arbeiten	<i>In the future would you like to work (as).</i>	
Das würde mir viel Spass machen.	<i>That would be a lot of fun.</i>	
Das kann ich mir gut vorstellen.	<i>I can well imagine that.</i>	
Das wäre eine Möglichkeit	<i>That would be a possibility.</i>	
Das würde ich lieber nicht machen.	<i>I would rather not do that.</i>	
Das würde auf keinen Fall machen.	<i>There is no way I would do that.</i>	
Das wäre dein Traumberuf?	<i>What would your dream job be?</i>	
Mein Traumberuf wäre, etwas für die Umwelt zu tun	<i>My dream job would be to do something for the environment.</i>	

Was wirst du nach den Prüfungen machen?- What will you do after the exams?		
Nach meinem Schulabschluss...	<i>After my school-leaving qualifications</i>	
möchte ich	<i>I would like...</i>	
werde ich...	<i>I will..</i>	
auf die Universität gehen.	<i>go to university</i>	
eine Ausbildung machen.	<i>to do an apprenticeship</i>	
(eine) Arbeit/einen Job finden.	<i>to find a job</i>	
Habe ich vor...	<i>I intend...</i>	
Plane ich...	<i>I plan...</i>	
(Lehrer) zu werden	<i>to become a teacher</i>	
I weiss noch nicht, ...	<i>I don't know yet...</i>	
Ich bin mir noch nicht sicher,...	<i>I'm not sure yet...</i>	
was ich später machen möchte	<i>what I would like to do later.</i>	
was ich studiere werde.	<i>what I will study</i>	
Ich werde....	<i>I will...</i>	
viel schlafen, ...	<i>sleep a lot.</i>	
nichts tun, ...	<i>do nothing...</i>	
weil ich mich entspannen muss/möchte.	<i>because I need to / would like to relax.</i>	
in die Oberstufe gehen,...	<i>go to Sixth Form college</i>	
mein Abitur machen, ...	<i>do my A-levels</i>	
weil ich mich für... interessiere.	<i>because I'm interested in...</i>	
an meiner Schule bleiben,	<i>stay at my school...</i>	
eine Arbeit suchen,...	<i>Look for work...</i>	
weil ich Geld verdienen möchte.	<i>Because I would like to earn money.</i>	
nach...fahren	<i>Travel to...</i>	
weil ich etwas Praktisches machen möchte.	<i>Because I would like to do sth practical.</i>	

Using werden in the simple future		
Ich werde	I will be	
Du wirst	You will	
Er wird	He will	
Sie wird	She will	
Wir werden	We will	
Sie werden	They will	
Sie werden	You will (polite)	

To talk about actions in the past use the perfect tense. A part of haben or sein plus a past participle	
Ich habe/er, sie hat/wir haben	I/he, she/we
gespielt/gemacht/ gehört/gekauft/ bestellt/gegessen/ getrunken/geschlafen	played/did/ listened/bought/ ordered/ate/ drank/slept
Ich bin/er, sie ist/wir sind	I/he, she/we
gefahren/gegangen/ geflogen/gekommen geschwommen/geblieben	travelled/went/ flew/came/ swam/stayed
Important imperfect tense verbs: ich war, er/sie/es war – I was, /he/she/it was wir waren – we were Ich hatte, wir hatten – I had, we had es gab – there was	

Subordinate conjunctions		
bevor	before	
nachdem	after	
ob	Whether, if	
seitdem	Since then, since	
sobald	As soon as	
während	During, while	

Meine Traume für die Zukunft-My dreams for the future		
der Beruf	<i>occupation</i>	
der Garten	<i>garden</i>	
der Nachteil	<i>disadvantage</i>	
der Plan	<i>plan</i>	
der Vorteil	<i>advantage</i>	
die Arbeit	<i>employment, work</i>	
die Welt	<i>world</i>	
die Zeit	<i>time</i>	
die Zukunft	<i>future</i>	
das Abitur	<i>A-level equivalent</i>	
das Einkommen	<i>income, pay</i>	
das Geld	<i>money</i>	
das Haus	<i>house</i>	
das Kind	<i>child</i>	
das Leben	<i>life</i>	

Meine Traume für die Zukunft-My dreams for the future		
seit ich klein war	<i>Since I was young...</i>	
allein	<i>alone</i>	
eigen	<i>own</i>	
erfolgreich	<i>Successful</i>	
genug	<i>Enough</i>	
glücklich	<i>happy</i>	
künstlich	<i>artificial</i>	
ob	<i>if</i>	
persönlich	<i>personal</i>	
schön	<i>nice, beautiful</i>	
später	<i>later</i>	
nicht unbedingt	<i>not necessary</i>	
wichtig	<i>important</i>	
das Kind	<i>child</i>	
das Leben	<i>life</i>	

Was sind deine Stärken?-What are your strengths?		
Die Fähigkeit	<i>Skill</i>	
Die Stärke	<i>Strength</i>	
Ich kann gut...	<i>I am good at...</i>	
zuhören.	<i>Listening.</i>	
erklären.	<i>Explaining.</i>	
organisieren.	<i>Organise.</i>	
Ich kann mich gut konzentrieren.	<i>I can concentrate well.</i>	
Ich kann andere Menschen...	<i>I can ... other people</i>	
überzeugen.	<i>Convince.</i>	
begeistern.	<i>Inspire.</i>	
Ich kann unabhägig arbeiten.	<i>I can work independently.</i>	
Ich mag Verantwortung.	<i>I like responsibility</i>	
Ich arbeite gut in einem Team.	<i>I work well in a team.</i>	
Ich zeige Initiative.	<i>I show initiative.</i>	
Ich kann körperlich viel leisten.	<i>I can achieve a lot physically.</i>	
Ich habe...	<i>I have...</i>	
viel Verständnis.	<i>A lot of understanding.</i>	
gute Qualifikationen.	<i>Good qualifications</i>	
Außerdem denke ich, dass...	<i>In addition I think that....</i>	
Meine Eltern/Lehrer behaupten auch, dass	<i>My parents/teachers also maintain that</i>	
Ich versuche, mich zu verbessern.	<i>I am trying to improve.</i>	
Ich bin nicht so gut im Planen.	<i>I am not so good at planning.</i>	

Eine Zwischenjahr- a gap year		
Ein Zwischenjahr	<i>A gap year</i>	
Würdest du gern ein Zwischenjahr machen?	<i>Would you like to take a gap year?</i>	
Ich kann mich noch nicht entscheine.	<i>I do not know yet.</i>	
Auf der einen Seite denke ich,...	<i>On the one hand, I think...</i>	
Auf der anderen Seite denke ich,	<i>On the other hand, I think...</i>	
dass es gut wäre, gleich mit dem Studium zu beginnen.	<i>that it would be good to start studying immediately.</i>	
dass ich keine Zeit verlieren möchte.	<i>that I would not like to waste my time</i>	
dass ich gern reisen würde.	<i>that I would like to travel.</i>	
dass ich einmal tun würde.	<i>that I would like to do nothing for once.</i>	
dass ich gern Freiwilligenarbeit machen würde.	<i>that I would like to do volunteer work.</i>	
dass ich gern ein bisschen Berufersfahrung sammeln würde	<i>That I would like to gain a little work experience.</i>	
Also, ich weiß nicht, aber ich denke, dass ich wahrscheinlich...	<i>Therefore, I don't know yet but I think that I probably...</i>	
Ich kann mich noch nicht entscheiden.	<i>I cannot decide yet!</i>	



Bournemouth School: History Department: Knowledge Organiser: Year 11: Autumn 2: 1900-present

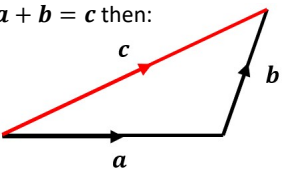
Key terms/definitions (4 SPaG marks on this unit for spelling and punctuating with consistent accuracy, controlled use of grammar, and use of a wide range of specialist terms)					Timeline of key events:				✓
Term	Definition								
Welfare state	System of government support for poorest/most vulnerable								
Absolute poverty	Lacking basics (e.g. food/shelter) to survive for any length of time								
Car crime	Driving offences and/or theft of or from vehicles								
Computer crime	Mainly theft or online fraud: e.g. banking/illegally copying music								
Hate crimes	Crime: victims targeted for their race, sexual orientation, religion								
Terrorism	Violence/intimidation in pursuit of political goals								
Fraud	Deliberate act of deception resulting in personal gain								
Opportunistic thief	Thief acting on the spur of the moment when opportunity arises								
Conscientious objector	Refuses to work in the armed forces for moral or religious reasons								
Coward/cad	Lacking in courage/behaves dishonourably								
Tribunal	Panel of people brought together to settle some type of dispute								
Pepper spray/CS gas	Sprays used by police which irritate the eyes/burn throat								
CPOs	Crime Prevention Officers: they advise people on security								
Neighbourhood Watch	Organisation set up to prevent crime in local communities								
DNA matching	Using genetic information to help trace victims and criminals								
Custody	Being locked up or incarcerated								
Ofsted	Organisation: inspects quality of education in schools/prisons								
Non-custodial	Alternative punishment to being locked up in prison								
Curfew	Time when people must be at home, not on streets or elsewhere								
Tagging	Electronic marker attached to a criminal to monitor whereabouts								
Absconding	Leaving or escaping a location to avoid arrest								
Probation officers	Manage offenders to protect public/reduce chance of re-offending								
Juvenile delinquents	Young person who habitually commits criminal acts/offences								
Human Rights	Basic rights/freedoms which belong to every person								
Sanctity of Life	Belief that all life is sacred and must be protected								
Nature of crime	✓	Purpose of punishments	✓	Key factors affecting Crime and Punishment	✓	Changes in policing:	✓	Factors leading to changes in prisons:	✓
- Crimes against the person (e.g. murder/assault), - Crimes against property (e.g. theft, robbery, poaching, smuggling), - Crimes against authority (e.g. heresy, treason, illegal protest).		- Retribution (revenge), - Deterrence (warn others not to commit the same crime), - Reform (improve behaviour), - Removal (keep criminals off streets), - Compensation (victim or society paid back for the trouble caused by criminal).		- Poverty and Wealth, - Attitudes in society, - Institutions: the Church, - Institutions: Government, - Individuals, - Science and technology, - Travel, - Towns.		- Numbers/organisation, - Training/recruitment, - Transport, - Equipment, - Crime detection tools, - Record-keeping, - Main duties.		- Decrease in fear of crime, - Changing perception about causes of crime, - Arrest was a better deterrent than prison, - Increase in focus on reforming prisoners through education.	

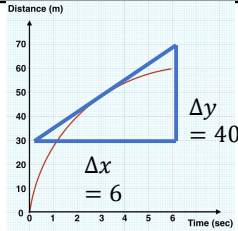
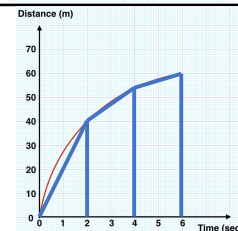
1901: Fingerprints and chemical analysis of blood samples used by police to identify suspects
 1902: Abolition of crank/treadmill within prisons
 1916: World War I conscription introduced
 1920: First female police officers
 1922: Abolition of solitary confinement within prisons
 1932: First Approved Schools set up for offenders under 15
 1933: First open prison built
 1935: Driving test introduced
 1939: World War II conscription introduced
 1947: 14 weeks training introduced for police recruits
 1948: Attendance centres introduced (non-custodial centres for offenders aged 10-21)
 1948: UN Declaration of Human Rights
 1953: Derek Bentley hanged
 1965: Death penalty in the UK abolished for all crimes except treason in times of war and piracy
 1969: Parliament voted to permanently abolish capital punishment
 1974: Police National Computer created to combine databases including fingerprints/vehicles/missing persons
 1982: Neighbourhood Watch began
 1982: Borstals abolished
 1988: First UK conviction using DNA samples
 2007: New law introduced covering 'hate crimes'
 2014: Ofsted judged over half of prisons as inadequate or requiring improvement

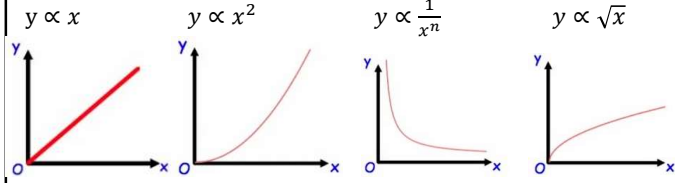
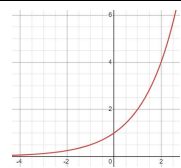
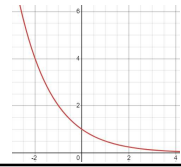
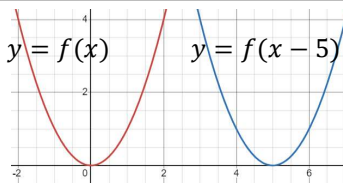
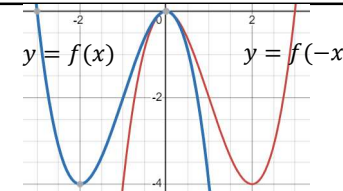


Bournemouth School: History Department: Knowledge Organiser: Year 10: Whitechapel Historic Environment

1. Housing in Whitechapel	✓	2. Why did residents fear crime	✓	3. The Metropolitan Police	✓
<p>1. Rookeries – overcrowded lodging houses eg 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>1. Fear of criminal underclass – afraid of “natural criminals”</p> <p>2. Lodging Houses and pubs – centres of criminal activity. Eg prostitution</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</p> <p>5. Failure of Reform – eg Peabody Estate</p>		<p>1. Set up in 1829 – Met Police Act</p> <p>2. Detective Branch est 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 – Criticised over police 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. 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>3. H Division’s main police station was on Leman Street</p> <p>4. 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 – Detectives trying to catch criminal gangs</p>		<p>1. Geography – Overcrowded slums</p> <p>2. Alcohol – Pub licences etc</p> <p>3. Organised Gangs – difficulty finding witnesses</p> <p>4. Prostitution – Brothels</p> <p>5. Immigrant communities – Jews, Irish often would not cooperate with the Police</p>	
7. The Crimes of Jack the Ripper	✓	8. How did they try to catch Jack the Ripper?	✓	9. How did the Press hinder the Ripper investigation?	✓
<p>From 31st August – 9th November Jack the Ripper murdered 5 prostitutes in Whitechapel.</p> <p>1. Mary Nichols 31st August</p> <p>2. Annie Chapman 8th September</p> <p>3. Elizabeth Stride and Catherine Eddowes 30th September – The Double Event</p> <p>4. 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. Eg The bunch of grapes • Media pressure led to the resignation of multiple heads of CID • Anonymous writers sent in letters claiming to be the Ripper, this only made the police’s job more difficult • The Whitechapel Vigilance Committee was set up by George Lusk –The committee hired two private detectives to investigate the killings, they published posters offering a reward 	

Keyword		Definition	Example(s)
Vector		A quantity with magnitude and direction	Forces, velocity, displacement
Displacement vector, \vec{AB}		How to get from A to B	$\vec{AB} = \mathbf{p}$ You must underline, $\vec{AB} = \underline{\mathbf{p}}$
Magnitude of a vector, $ \mathbf{a} $		The length of a vector, found using Pythagoras	$\mathbf{a} = \begin{pmatrix} x \\ y \end{pmatrix} \Rightarrow \mathbf{a} = \sqrt{x^2 + y^2}$
Scalar		The amount a vector is multiplied by.	$2\mathbf{a}$ is twice the length of \mathbf{a} in the same direction $-\mathbf{a}$ is the same length as \mathbf{a} in the opposite direction
Resultant vector		The sum of multiple vectors, which can be represented diagrammatically.	If $\mathbf{a} + \mathbf{b} = \mathbf{c}$ then: 
Position vector, \vec{OA}		How to get from the origin to A	$\vec{AB} = \vec{OB} - \vec{OA}$
Parallel vectors		Vectors in same direction. May be different lengths or the negative.	\vec{CD} is parallel to \vec{EF} if $\vec{CD} = k\vec{EF}$
Collinear		Points which lie on the same line	If $\vec{PR} = k\vec{PQ}$ then P , Q and R are collinear

Tangent to Distance-Time graph	<p>Finds an estimate of the velocity at a specific time.</p> <p>From graph on right: Gradient of tangent $= \frac{40}{6} = 6.7$ Velocity is 6.7 m/s</p>	
Area under Velocity-Time graph	<p>Finds the distance travelled over a time period. Is found using the trapezium rule.</p> <p>From graph on right: Area $= \frac{1}{2}(2)[0 + 60 + 2(40 + 54)]$ Distance is 248 m</p>	

Keyword		Definition	Example(s)
Direct Proportion		When two quantities increase in the same ratio	$p \propto q$: as q doubles, so does p . Can be written as $p = kq$
Inverse Proportion		When one quantity increases, the other decreases by the same ratio	$p \propto \frac{1}{q}$: as q doubles, p halves. Can be written as $p = \frac{k}{q}$
Proportion graphs		$y \propto x$ $y \propto x^2$ $y \propto \frac{1}{x^n}$ $y \propto \sqrt{x}$	
Exponential Functions		Functions of the form $f(x) = k^x$ where a is a constant Graphs of the form $y = ak^x$ The x -axis is an asymptote .	$y = 2^x$ 
Exponential growth		When $k > 1$, i.e: $f(x) = 2^x$	$y = 2^{-x}$ 
Exponential decay		When $0 < k < 1$ i.e: $f(x) = \frac{1}{2}^x$ or $f(x) = 2^{-x}$	
Translating functions		Described by a column vector. $f(x + a) \rightarrow \text{translation } \begin{pmatrix} -a \\ 0 \end{pmatrix}$ $f(x) + a \rightarrow \text{translation } \begin{pmatrix} 0 \\ a \end{pmatrix}$	
Reflecting functions		Reflections are relative to the axis – all coordinates on the axis are invariant. $f(-x) \rightarrow$ reflection in y -axis $-f(x) \rightarrow$ reflection in x -axis	
Quadratics		If a quadratic is written in the form $y = (x + a)^2 + b$, it is a translation of $y = x^2$ by the vector $\begin{pmatrix} -a \\ b \end{pmatrix}$	

Year 11

Unit: Killer Queen

See set work support guide and other resources:

[Student resources > 10 > AOS2 – Vocal music > Queen](#)



Bournemouth School
mspc
department



This QR code will take you to a Spotify playlist with listening for *Killer Queen*. You will find it helpful to listen to it as you learn.

Context

Stadium rock rock music intended for larger venues

Glam rock style of rock known for its over the top and glamorous dress sense

Anthem song with a strong memorable melody with rousing and uplifting characteristics.

Dynamics

Not notated in score; levels defined in the mix

Rhythm

Compound metre a metre in which the beat subdivides into three

Swing rhythm rhythm where the

first of a pair of quavers is played longer than the second.

Texture

Homophonic a texture comprising of a melody and an accompaniment

Vamp a short repeated accompanying phrase

Structure

Intro opening section of the song before the main parts

Verse section in which the lyrics change but the music remains broadly the same each time it is heard

Chorus section in which the lyrics and the music remains the same. Often catchy and memorable, with

a lift in mood from the verse.

Alternates with the verse

Solo an extended often improvised melodic line played by an instrument. Usually in the middle of the song.

Outro final ending section, like a coda in classical music

Melody

Word painting making the music sound like the meaning of the words

Syllabic when lyrics are sung with one note per syllable

Tessitura the range of the instrument/voice in which the melody is set

Year 11

Unit: Killer Queen

See set work support guide and other resources:

[Student resources > 10 > AOS2 – Vocal music > Queen](#)



Bournemouth School
mspc
department



This QR code will take you to a Spotify playlist with listening for *Killer Queen*. You will find it helpful to listen to it as you learn.

Instrumentation

Distortion an effect that increases the volume and sustain on an electric guitar, making the timbre more gritty or smoother, depending on settings

Effects devices used to enhance or alter the basic quality of the sound

Flanger an effect with a swirling sound

Hi-hat pair of cymbals mounted on a stand so that they can be struck together using a foot pedal

Bass (or kick) **drum** – biggest drum on a kit, played with a foot pedal

Mix the relative volume of different

tracks in a recording, and their place in the stereo field.

Panning giving sounds different levels in the left and right speakers to give the impression they are coming from different places.

Overdubbing recording a part over previously recorded music

Pull-off when a note is sounded on the guitar by pulling the finger off the fret to alter the note. Makes the pitch lower

Ride type of cymbal which often has a counter-rhythm to the main beat

Snare a drum with a series of loose metal wires in contact with the lower skin giving a distinctive buzz

or rattle to the sound

Roll – a rapid succession of notes on a drum or percussion instrument.

Stereo field how the sounds are positioned in the left and right speakers

Vibrato technique used to cause rapid variations in the pitch of a note.

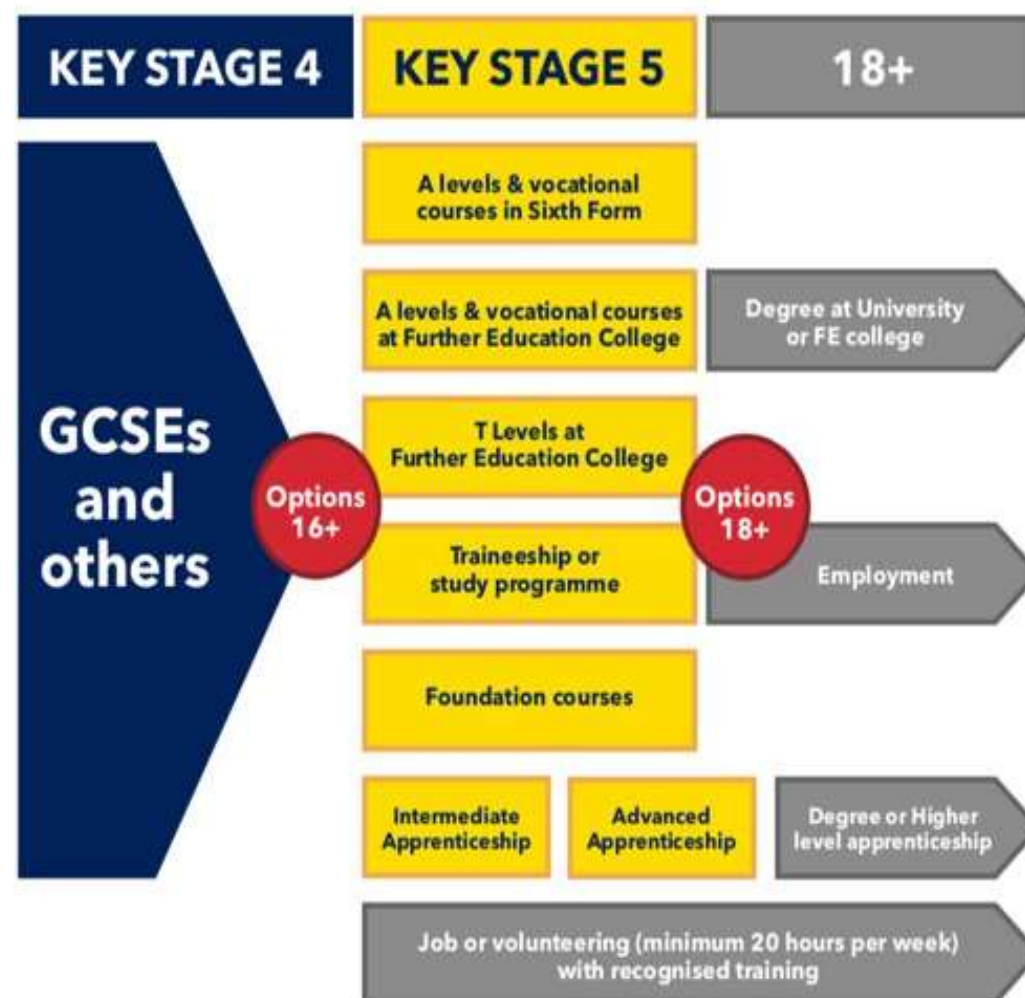
Harmony

Added notes notes that are added to the basic triad



Keyword	Learn	
Post-16 opportunities	Education or training beyond Year 11.	
Vocational Courses	Provide training and qualifications related to a specific job, such as being a plumber, hairdresser or a professional cook. These courses are mostly offered at Further Education (FE) Colleges	
T Levels	A two year qualification for 16-19 year olds designed in collaboration with employers. Each T Level is equivalent to 3 A Levels, with the aim to support the young person to develop their skills, knowledge and to thrive in the workplace.	
Apprenticeship	A paid job where the employee learns and gains valuable experiences. Alongside on-the-job training, apprentices spend at least 20% of their working hours completing classroom-based learning with a college, university or training provider which leads to a nationally recognised qualification.	

Post-16 and the law: You may leave school at the end of June 2026 when you are 16 years old BUT you must remain in education or training until you are 18.



Useful Careers Websites

The **Unifrog** platform is designed to support learners in making the most informed decisions about their futures and has a range of tools that are suitable for all year groups. Each student has their own personal account that provides a wide range of information related to their interests and aspirations. www.unifrog.org

Information on apprenticeships, including a range of different schemes:

<https://amazingapprenticeships.com/>
www.gov.uk/apply-apprenticeship

General careers information:

<https://careerpilot.org.uk/>
www.nationalcareers.service.gov.uk
www.prospects.ac.uk/job-profiles



Apprenticeships



Further Education



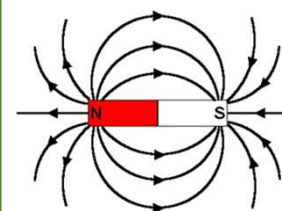
University

3.2.2.3 Ethical and socio-cultural issues in physical activity and sport

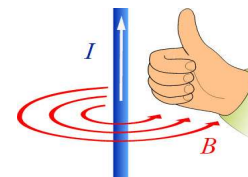
Conduct of performers			Anabolic Agents	Drugs that help athlete to train harder and build muscle. Advantages: Build up body weight, increase size of muscles therefore improving a performers strength. Disadvantages: Shrink the testicles of men, cause high blood pressure, damage liver, kidneys and heart. Women may have more body hair, smaller breasts a deeper voice.
Etiquette	The unwritten rules concerning player behaviour e.g. in football players usually kick the ball out of play when another player is injured.			
Sportsmanship	Appropriate, polite and fair behaviour while participating in a sporting event e.g. shaking hands with your opponents at the end of a game.			
Gamesmanship	The use of dubious methods, that are not strictly illegal, to gain an advantage e.g. time wasting.			
Contract to Compete	Agreeing to play by the rules, trying to win but also allowing your opponent to play.		Stimulants	Make athletes more alert and mask effects of fatigue. Advantages: Increase alertness, reduce reaction time, reduce tiredness. Disadvantages: Highly addictive, high blood pressure, heart and liver problems. May increase the risk of injury as performer more tolerant to pain and will continue to train.
Spectator Behaviour				
Hooliganism	Rowdy, violent or destructive behaviour		Peptide Hormones (EPO)	EPO increases numbers of red blood cells and therefore improves oxygen delivery to muscles. Advantages: Increase the amount of red blood cells in the body therefore increasing the ability of an athlete to transport oxygen to the working muscles during exercise.
Reasons for Hooliganism	<ul style="list-style-type: none">• Rivalry between teams e.g. local derby.• Alcohol consumption• Gang culture• Growing frustration either at own teams performance or some referee decisions.		Beta Blockers	Drugs taken to calm a performer down by reducing the effects of adrenaline. Advantages: Reduce heart rate, muscle tension and blood pressure. This helps a performers precision and accuracy. Disadvantages: Can cause nausea, poor blood circulation leading to heart problems and tiredness.
Reasons for Hooliganism	<ul style="list-style-type: none">• Rivalry between teams e.g. local derby.• Alcohol consumption• Gang culture• Growing frustration either at own teams performance or some referee decisions.		Blood Doping	Increasing the number of red blood cells with a athletes blood stream. Process: i) Blood is removed, athlete continues to train and replace blood, then original blood added. Advantages: Increases a performers red blood cell count therefore allowing them to get more oxygen to their working muscles to create energy. Disadvantages: Blood becomes thicker, can lead to heart attacks or an embolism
Combating Hooliganism	<ul style="list-style-type: none">• Prevention of known hooligans being at matches / events.• Alcohol bans in and around grounds.• Early kick offs to prevent the excessive consumption of alcohol prior to the game.• Segregation of fans• Policing and stewarding improve crowd control.• Use of CCTV cameras at grounds allows spectators to be monitored.		Advantages for a Performer	<ul style="list-style-type: none">• Increase chance of winning due to higher performance levels.• More success means more money and a secure life financially
			Disadvantages for a Performer	<ul style="list-style-type: none">• Taking PED's can affect a performers health in a negative way.• Taking PED's is cheating and if caught performers will face lengthy bans.• If caught a performers reputation and income will be ruined.
Performance Enhancing Drugs			Disadvantages for a Sport	<ul style="list-style-type: none">• Sports lose credibility and gain a ban reputation e.g. cycling.• Due to this, sports find it more difficult to attract sponsors causing less money being invested in the sport (less income).

Physics: Magnetism and Electromagnetism

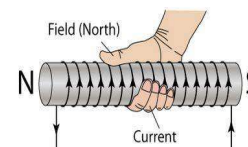
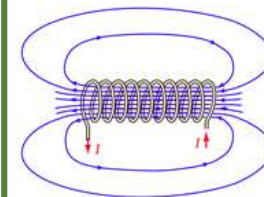
Keyword	Learn	✓
Permanent magnet	Produces its own magnetic field.	
Induced magnet	A material that becomes a magnet when placed in a magnetic field. When removed from the magnetic field it loses most/all of its magnetism quickly.	
Magnetic field	The region around a magnet where a force acts on another magnet or on a magnetic material. The direction of the magnetic field is given by the direction of the force that would act on another north pole placed at that point.	
Magnetic force	A non-contact force that is strongest at the poles of a magnet. Unlike poles (N-S) attract, like poles (N-N) (S-S) repel.	
Magnetic materials	The force due to a magnet always attracts a magnetic material (iron, steel, cobalt and nickel).	
Magnetic field line	The direction of a magnetic field line is from the north pole of a magnet to the south pole of the magnet.	
Current in a wire	The magnetic field is stronger closer to the wire and if the current is larger.	
Current in a solenoid	The magnetic field inside a solenoid is strong and uniform. The magnetic field around a solenoid has a similar shape to that of a bar magnet.	
Electromagnet	Is a solenoid with an iron core.	
B	Magnetic flux density measured in tesla, T.	
I	Electrical current measured in amperes, A	
Motor effect	When a conductor carrying a current is placed in a magnetic field the magnet producing the field and the conductor exert a force on each other.	
Generator effect	If an electrical conductor moves relative to a magnetic, a potential difference is induced across the ends of the conductor. If the conductor is part of a complete circuit, a current is induced in the conductor.	



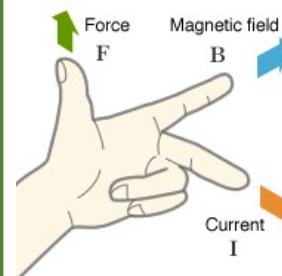
Learn to draw the shape of the field lines and direction of the arrows North to South. One arrow on each line.



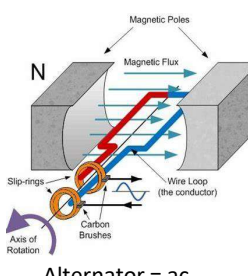
Learn to draw the shape of the field lines. Use the right hand grip rule to find the direction of the magnetic field (B).



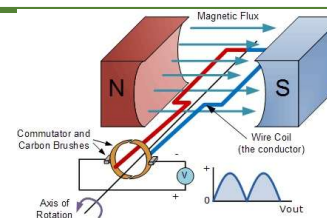
Learn to draw the shape of the field. The lines inside must be equally spaced apart. Use this right-hand rule to tell you the direction of the field **inside** the solenoid. The arrows on the outside go from North to South.



Fleming's Left Hand Rule
Learn what each finger represents
First finger = magnetic **F**ield
seCond finger = **C**urrent
thuMb = **M**ovement or force.



Alternator = ac with two slip rings



Dynamo = dc with a split ring commutator

A motor looks similar to the dynamo except there will be a **battery** in the circuit.

$$F = BIL \text{ force(N)} = \text{magnetic flux density(T)} \times \text{current(A)} \times \text{length of wire in magnetic field(m)}$$



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?

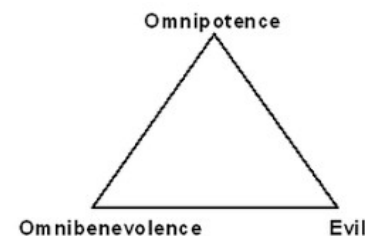
- ☐ God is Omnibenevolent (All Loving)
- ☐ God is Omnipotent (All Powerful)
- ☐ God is Omniscient (Knows All)
- ☐ Evil exists in the world.
- ☐ **Can they all be true?**

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
- ☐ Atonement



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

A trabajar	
la experiencia	the experience
un punto débil	a weakness
un punto fuerte	a strength
una solicitud de empleo	a job application
un anuncio	a job advert
el puesto	the position
las prácticas laborales	work experience
los títulos	qualifications
las capacidades	capabilities/skills
el currículum	CV

Un trabajo para todos	
la flexibilidad	flexibility
la posibilidad	possibility
la oportunidad	opportunity
la igualdad	equality
la estabilidad	stability
la seguridad	security
la cantidad	quantity
la variedad	variety
..... me interesa(n) interests me
..... me importa(n) matters to me
..... me preocupa(n) worries me

A trabajar	
para + infinitive	in order to.....(do)
sin + infinitive	without... (doing)
antes de + infinitive	before.... (doing)
después de + infinitive	after.... (doing)
lograr	to achieve
saber	to know
mejorar	to improve
buscar	to search for
conseguir	to obtain/get
solicitar	to apply
comprobar	to check
empezar	to start
trabajar	to work
dar	to give

Las lenguas te abren las puertas	
Los idiomas	Languages
Las lenguas	Languages
Mi nivel de...	My level of...
Te abre la mente	It opens your mind
Aumenta tu confianza	It increases your confidence
Te hace parecer más atractivo	It makes you seem more attractive
Mejora tus perspectivas laborales	It improves your work prospects
Estimula el cerebro	It stimulates your brain
Se puede trabajar en el extranjero	You can work abroad
Te ayuda a conocer nuevos sitios	It helps you to see new places
Te permite hacer nuevos amigos	It allows you to make new friends

Quería ser...	
cuando era joven	when I was younger
quería ser...	I wanted to be...
médico/a	doctor
enfermero/a	nurse
abogado/a	lawyer
camarero/a	waiter
azafato/a	flight attendant
dependiente	sales assistant
peluquero/a	hairdresser
soldado/a	soldier
policía	police officer
contable	accountant
me gustaba la idea de	I liked the idea of

En el future...	
Voy a	I am going to
Me gustaría	I would like to
Espero	I hope to
Tengo ganas de	I want to
Tengo la intención de	I intend to
casarme	get married
tener hijos	have children
ir a la universidad	go to university
hacer una carrera universitaria	to do a degree
conseguir un buen trabajo	to get a good job
buscar un puesto con un buen salario	look for a job with a good salary
ser empresario	be an entrepreneur



Ir (to go)	Past tense	
fui	I went	
fuiste	You went	
fue	He/she went	
fuimos	We went	
fuisteis	You (pl) went	
fueron	They went	

Ir	Future tense	
iré	I will go	
irás	You go	
irá	He/she will go	
iremos	We will go	
iréis	You (pl) will go	
irán	They will go	

Ir	Conditional tense	
iría	I would go	
irías	You would go	
iría	He/She would go	
iríamos	We would go	
iríais	You (pl) would go	
irían	They would go	

Useful verbs		
hay	There is / are	
había	There was / were	
habría	There would be	
habrá	There will be	
tiene	It has	
tenía	It had	
tendría	It would have	
tendrá	It will have	

Ser (to be) – different tenses		
es	It is	
son	They are	
fue	It was	
fueron	They were	
sería	It would be	
será	It will be	
va a ser	It is going to be	

Opinion structures		
Pienso que	I think that	
Creo que	I think that	
En mi opinión	In my opinion	
Diría que	I would say that	
Según mi amigo	According to my friend	
Según mis padres	According to my parents	
Mi mejor amigo dice que	My best friend says that	
Mis padres dicen que	My parents say that	

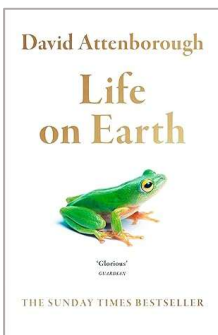
Connectives		
porque	because	
dado que	given that	
puesto que	because	
ya que	because / since	

Intensifiers		
muy	very	
bastante	quite	
un poco	a bit	

Negativos		
nada	nothing	
nadie	nobody/no one	
ninguno/a/os/as	no, none, not one	
tampoco	neither	
ni.....ni	neither nor	
no hay	there isn't	
nunca	never	
jamás	never (strongly)	

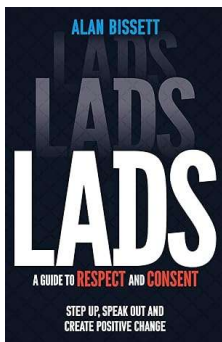
Impress the examiner		
Cuando era joven	When I was younger	
Cuando sea mayor	When I am older	
Me encantaría	I would love to	
Si fuera posible	If it were possible	
Si pudiera	If I could	
Si tuviera más tiempo	If I had more time	
Me habría gustado pasar más tiempo allí	I would like to have spent more time there	

Pros & cons		
Por un lado	On one hand	
Por otro lado	On the other hand	
Una ventaja es que	An advantage is that	
Otra ventaja es que	Another advantage is that	
Una desventaja es que	A disadvantage is that	
Otra desventaja es que	Another disadvantage is that	
Lo bueno es que	The good thing is that	
Lo malo es que	The bad thing is that	
Lo que más me gusta es	What I like the most is	
Lo que menos me gusta es	What I like the least is	
Sin embargo	However	
No obstante	However	



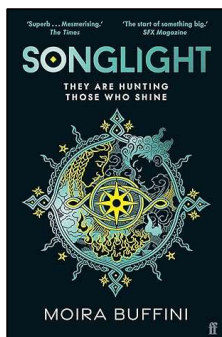
Life on Earth by David Attenborough

A new, illustrated edition of Attenborough's iconic *Life On Earth*, with Sir David Attenborough revisiting the original text forty years further on in relation to subsequent developments in science, ecology and photography.



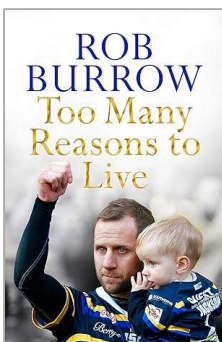
Lads: A guide to respect and consent by Alan Bissett

A guide exploring consent, respect, and navigating the tricky terrain of interacting with girls in a way that they can be allies not enemies.



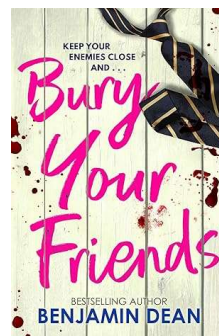
Songlight by Moira Buffini

Northaven where the townsfolk are ruthless hunters. Reviling those who have developed songlight, the ability to connect telepathically with others. Anyone found with this sixth sense is caught, persecuted and denounced. Welcome to the future. Friends, neighbours, family are quick to turn on each other. When power is everything, how will they survive?



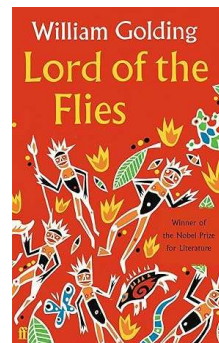
Too Many Reasons to Live by Rob Burrow

This is the story of a tiny kid who adored rugby league but never should have made it – and ended up in the Leeds hall of fame. It's the story of a man who resolved to turn a terrible predicament into something positive – when he could have thrown the towel in. It's about the power of love, and the bonds of friendship.



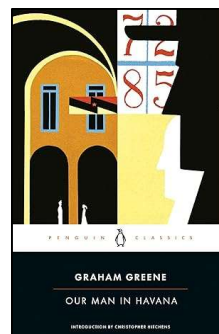
Bury Your Friends by Benjamin Dean

Noah and his best friends are finally graduating; to celebrate they're hosting a party weekend at an opulent country estate. Things take a sinister turn when they find themselves in the crosshairs of a killer making one simple demand: every hour, one person must be evicted from the house or someone inside the house will die...



Lord of the Flies by William Golding

When a group of schoolboys are stranded on a desert island, what could go wrong? At first it seems as though it is all going to be great fun; but the fun before long becomes furious and life on the island turns into a nightmare of panic and death.



Our Man in Havana by Graham Greene

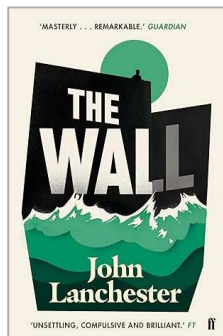
Wormold's daughter had reached an expensive age - so he accepted a mysterious Englishman's offer of extra income. All he has to do is run agents, file reports, and spy. But his fake reports have an alarming tendency to come true.



Clouds Cannot Cover Us by Jay Hulme

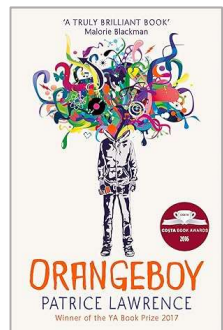
This is Jay Hulme's first published collection of poetry. It showcases his unique voice and form of expression. The poems have been carefully selected to chart Jay's journey from growing up in a working-class family in Leicestershire to his feelings and thoughts about school life and his experience as a transgender teenager.





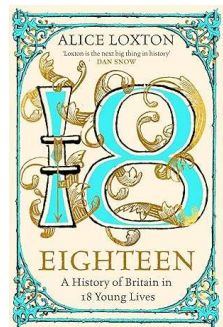
The Wall by John Lanchester

Kavanagh begins his life patrolling the Wall. If he's lucky, if nothing goes wrong, he only has two years of this, 729 more nights. Along with the rest of his squad, he will endure cold and fear day after day, night after night. But somewhere, in the dark cave of his mind, he thinks: wouldn't it be interesting if something did happen, if the Others came, if you had to fight for your life?



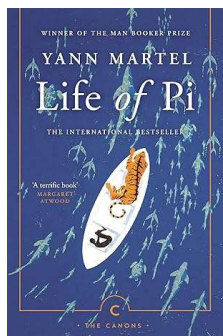
Orangeboy by Patrice Lawrence

Sixteen-year-old Marlon has made his mum a promise - he'll never follow his big brother, Andre, down the wrong path. When a date ends in tragedy, Marlon finds himself hunted. They're after the mysterious Mr Orange, and they're going to use Marlon to get to him. Marlon's out of choices - can he become the person he never wanted to be, to protect everyone he loves?



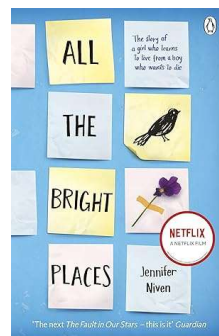
Eighteen by Alice Loxton

A new history of Britain, told through 18 figures in British history at the age of 18. What happens if the First World War breaks out while you're at university? How does a young woman born without arms or legs make a living in Georgian London? What turns a rugby-obsessed teenager from a Welsh mining town into Richard Burton?



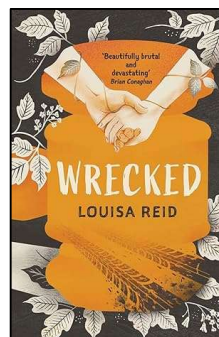
The Life of Pi by Yann Martel

Pi lives in Pondicherry, India, where his father owns the city's zoo. The family decides to emigrate to Canada, but tragedy strikes at sea. In the lifeboat are five survivors: Pi, a hyena, a zebra, a female orang-utan and a 450-pound Royal Bengal tiger.



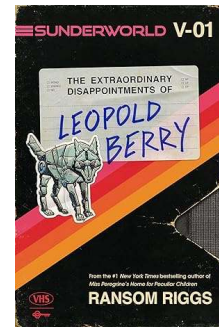
All the Bright Places by Jennifer Niven

A compelling and beautiful story about a girl who learns to live from a boy who's drawn to death. When Finch and Violet meet on the ledge of the bell tower at school, it's unclear who saves whom. And when they pair up on a project to discover the 'natural wonders' of their state, both Finch and Violet make more important discoveries.



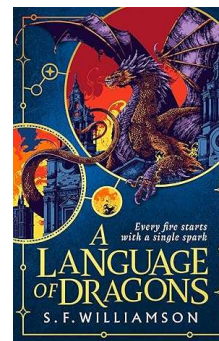
Wrecked by Louisa Reid

Joe and Imogen seem like the perfect couple but after accidentally becoming involved in a tragic fatal accident, they become embroiled in a situation out of their control, and Joe and Imogen's relationship becomes slowly unravelled until the truth is out there for all to see ... Structured around a dramatic and tense court case, the reader becomes both judge and jury.



Sunderworld Vol. 1 by Ransom Riggs

After years of grief-fuelled visions of creatures from his favourite television show, seventeen-year-old Leopold Berry discovers that magic is real, and he might be the chosen one after all.



A Language of Dragons by S. F. Williamson

Welcome to Bletchley Park. with dragons. London, 1923. Dragons soar through the skies and protests erupt on the streets, but Vivien Featherswallow isn't worried. She's going to follow the rules, get an internship studying dragon languages, and make sure her little sister never has to risk growing up Third Class. By midnight, Viv has started a civil war.



Timetable

[illegible]