



BOURNEMOUTH SCHOOL

Year 10

Knowledge Organiser 4

Spring Term: 2024-25

Name: _____ Master Copy

Registration Form: 10

✓Hard Work

✓Discipline

✓Smart Appearance

✓Respect

Bournemouth School

Knowledge Organiser: Year 10 Spring Term 4

'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.**

Checking:

Your tutor will check your Homework Learning Journal at least once a week. 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 'Success club' where a member of staff will help you 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 ask your tutor to 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 25 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.



Acrylic brushes have stiffer bristles that prevent dripping and are suitable for use with [acrylic paints](#). They are versatile and can be used for painting murals and creating detailed images. They are easy to clean and maintain, providing longer-lasting performance if properly cared for.



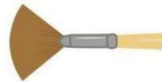
Oil brushes have longer bristles that retain more paint and enable fine details in the artwork. They can create small or large brush strokes, depending on whether you use thinner or thicker paint. Regular cleaning is essential to prevent the bristles from becoming brittle due to the oils used in oil paints.



Bright
Similar to a flat but produce smaller, more controlled strokes.



Filbert
A paddle-shaped brush that holds a lot of water so great for washes. Bristles remain together when wet so great for smooth blending and stroking. Its tapered shape is excellent for painting leaves and flowers.



Fan
Shaped like a fan. Great for soft blending. If in a rough bristle such as hog – can be used effectively for creating textured things like grass.



Liner
Ultra-fine brush point ideal for intricate outlining and detailing. Small in size but its belly can still hold a decent amount of fluid.



Rigger
Long, fine bristle shape ideal for line work or great for detail when turned on its point.



Watercolour brushes are designed for use with water-based paints like [watercolours](#), [gouache](#), and [tempera](#). They have soft bristles that create delicate lines and wash on paper surfaces. These brushes are suitable for creating backgrounds, illustrations, and projects like paper mâché. They require special cleaning to prevent damage to their shape and maintain their performance.

BEST SURFACES TO PAINT ON

CANVAS

- It is lightweight, especially helpful if painting in large sizes.
- [Canvas](#) has a wonderful absorbency and woven texture if that suits your style.
- It can be used stretched over wooden [stretcher bars](#) for a tight bounce, or left unstretched to paint on it pinned up on a wall or flat on a floor.

WOOD

- Wood panel is sturdy and rigid. This makes it easy to transport and handle. A rigid surface is best for sanding and pouring techniques.
- Wood can cost less than stretched canvas.
- They are more sturdy than canvas. This means they will last longer than canvas given similar environmental circumstances.
- If you want to paint over an old painting on wood panel, it is easily remedied by sanding off any old texture and paint.

ACRYLIC PAPER

Acrylic paper is specially designed for acrylic painting and offers a lightweight and economical option for artists.

Acrylic paper has a coating that prevents the paint from seeping through, providing a smooth and consistent surface for paint application. It comes in various weights, with heavier paper being more suitable for acrylics.

Acrylic paper is ideal for practice, studies, and quick sketches. It is also a great option for artists who prefer a portable surface for outdoor painting or sketching on-the-go.

While not as durable as canvas or wood, acrylic paper can still be framed or mounted for preservation.

Other surfaces that you can paint acrylic paint on to

- Glass
- Fabric
- Walls
- Skin
- Found objects
- Metal
- Plastic



B5b Hormone control in humans

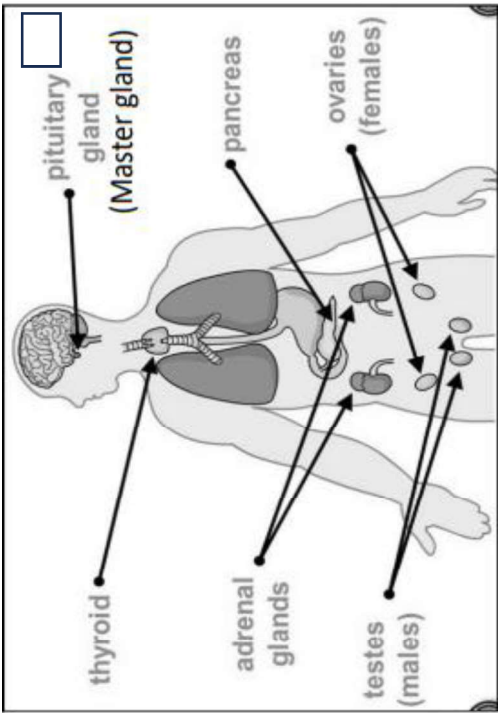
Keyword	Learn	✓
Homeostasis	Regulating the internal conditions of the body (temperature, water levels, blood glucose)	
Endocrine System	Hormonal system - involves glands, hormones and blood vessels	
Hormone	Chemical messengers released by glands that travel in bloodstream	
Gland	Releases a chemical messenger (hormone) into the bloodstream	
Thermoregulatory Centre	Contains receptors sensitive to the temperature of the blood	
Thermoregulation	If the body temperature is too high, blood vessels dilate (vasodilation) and sweat is produced from the sweat glands. If the body temperature is too low, blood vessels constrict (vasoconstriction), sweating stops and skeletal muscles contract (shiver).	

Keyword	Learn	✓
ADH (Anti-diuretic hormone)	Makes the tubules of the kidney more permeable to water.	
Deamination	Converting amino acids into ammonia. This ammonia is then converted into urea to be excreted in urine.	
Thyroxine	Stimulates the basal metabolic rate. Plays an important role in growth and development	
Adrenaline	Produced in times of fear or stress. Increases the heart rate (more oxygen and glucose delivery to brain and muscles). Prepares you for 'flight or fight'	
Type 1 Diabetes	The pancreas fails to produce sufficient insulin. It is characterised by uncontrolled high blood glucose levels and is normally treated with insulin injections	
Type 2 Diabetes	The body cells no longer respond to insulin produced by the pancreas. A carbohydrate controlled diet and an exercise regime are common treatments. Obesity is a risk factor for Type 2 diabetes.	



B5b Hormone control in humans

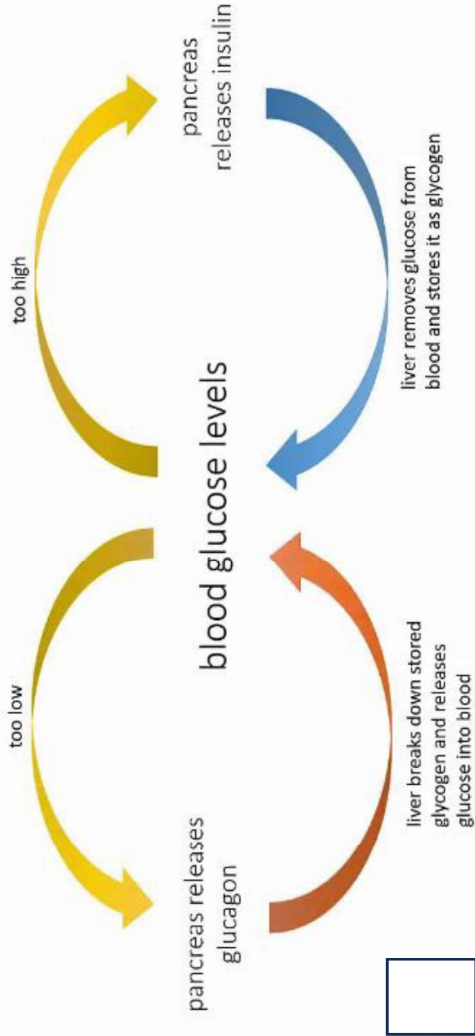
Hormone	Role in menstrual cycle
FSH	Produced by the pituitary gland. Matures the egg.
Oestrogen	Produced by the ovaries. Thickens uterus lining and Inhibits FSH.
Progesterone	Maintains uterus lining.
LH	Produced by the pituitary gland. Releases the egg (ovulation)



IVF – learn the steps

- 1. FSH/LH given to mature and release more eggs
- 2. eggs collected and fertilised artificially
- 3. fertilised eggs develop into embryos
- 4. implanted into mother’s uterus

Contraception Type	Examples and how it works
Barrier Methods	Condom/diaphragm – prevent sperm reaching egg
Oral (The Pill)	Contains oestrogen to inhibit FSH and stop egg maturing
Long term Hormonal	Skin patch, injection, implant contains progesterone to inhibit maturation and release of egg for several months/years
IUD (Intrauterine device)	prevents implantation of egg into uterus/releases hormone



GCSE BUSINESS

Marketing

Topic 3.5.4 The elements of the marketing mix: Price and Promotion

Methods of Promotion					Reasons for promotion
Method	Explanation	Advantages	Disadvantages		☒
Advertising	Increasing awareness through paid mediums.	- Build customer awareness - Promote the benefits of your products or services.	- Encourage people to buy products and services they don't really need. - Very costly (especially TV and radio advertising)	- Inform/remind customers about product - Create/increase sales - Create/change image of product - Persuade customers to buy	
Public Relations (PR)	Usually free media coverage such as the opening of a new store or new product launch.	- Cheap method of promotion - Can create a positive image for the organisation	No control over how message is conveyed		
Sales Promotion	Strategies used by a business to increase sales in the short term.	- Effective at achieving a quick boost to sales - Encourages customers to trial a product or switch brands	- Sales effect may only be short-term - Customers may come to expect or anticipate further promotions	Key term Promotional mix is a combination of methods including advertising, sales, public relations and direct marketing to achieve a specific marketing goal.	☒
Sponsorship	Businesses can increase the profile of the business.	- Increase brand awareness - Target new market segments	- Hard to measure effectiveness of method - Can be costly	Factors affecting promotional mix	☒
Social media	The use of social media platforms to promote their products and services.	- Easier to communicate directly with customers - Very cheap / cost effective	Inaccurate or inappropriate responses can be shared quickly and easily. This will create bad publicity for the business.	1.Finance available 2. Competitor Actions 3. Nature of product or service 4. Nature of market 5. Target market	
Personal selling	A salesperson uses his or her skills and abilities in an attempt to make a sale	- Customer Confidence in product from experienced knowledge - Can gain feedback to pass on	- Training Cost. - Expensive cost per sale		
Pricing methods					
Method	Explanation	Examples	Advantages	Disadvantages	☒
Price skimming	Start with a high price and then reduce over time	High tech products such as a new Apple iPhone model – wanted by 'early adopters' who want the latest tech	Firms can recover significant research and development costs, reaching break-even quicker.	Not a long term pricing strategy, as competitors soon launch rival products	
Price penetration	Start with a low price and increase it over time	An example would be subscription streaming services, such as Netflix, with introductory offers	- Increase market share quickly in competitive markets - Encourages new customers to try product	Lower profit margins	
Competitive pricing	Set a similar price to your competitors	Tesco matching Aldi prices on milk and bread.	Selling prices should be inline with rivals, so price should not be a competitive disadvantage	The business needs to also use non-price methods to compete.	
Cost plus pricing	Working out the cost of making a product and then adding a percentage to ensure profit is made.	- House building companies - Bespoke jewellery	- The business will know that its costs are being covered. - Easy to calculate	May lead to products that are priced un-competitively.	
Loss leader	Selling one product at a loss so a customer has to buy additional products that will generate a profit	- Games consoles sold at a loss e.g. Playstation as they make money on sale of games - Printers sold at a loss, profit from ink cartridges	If a business undercuts its competitors on price, attracts new customers and existing customers become more loyal	- Customers "bulk-buy" at the discounted price, affecting profit levels - A short-term pricing tactic	



Definitions	
Key Term	Definition
Producers	This is the maker of the product or service
Wholesalers	These businesses buy products and sell them in smaller quantities to retailers
Retailers	These are the shops that sell goods and service to the final customer
Distribution channel	Method used to get product from producer to final consumer
Indirect distribution channel	Involves intermediaries that perform a company's distribution functions
Intermediaries	Anyone used in the process between producer to consumer.
Direct distribution channel	Where a company sells directly to the end consumer, usually through e-commerce
E-commerce	A method of buying and selling goods and services online

Other Distribution Channels	
○ Mail order businesses do not have any stores, instead they send catalogues to customers who then place orders. ○ Some businesses sell their products over the telephone. This is known as telesales. Customers can phone the business to place an order or the business can call potential customers to try and convince them to buy them. ○ Some businesses sell their products on a website using e-commerce. Some sell via mobile devices, which is known as m-commerce.	

Main Distribution Channels	
Distribution channels can be set up in a number of ways:	
○ Producer → customer ○ Producer → wholesaler → customer ○ Producer → wholesaler → retailer → customer	

Multi-Channel Distribution Channels		
Definition	Advantages	Disadvantages
Where a business uses more than one type of distribution channel. An example would be a high street retailer distributing in store, e-commerce and catalogues sent via direct mail.	○ Allows more target market segments to be reached ○ Customers increasingly expect products to be available via more than one channel	○ Can be complex to manage ○ Danger that pricing strategy becomes confused (in the eyes of customers)

Relationship between price and demand	
Usually, an increase in price leads to a decrease in demand. However, a strong USP or brand image may mean that demand isn't strongly affected by changes to the price.	

Factors affecting Pricing Decisions	
Costs	Depending on the cost of making the product, the price will need to be set to ensure they make a profit
Nature of market	If demand is low, a business may have to lower their prices to encourage people to buy the product
Degree of competition	A business may need to reduce its prices to compete with other businesses
Product Lifecycle	A business may charge a different price depending on the stage of the product life cycle
Brand image	Some products can have a higher price because customers perceive the business's brand as desirable

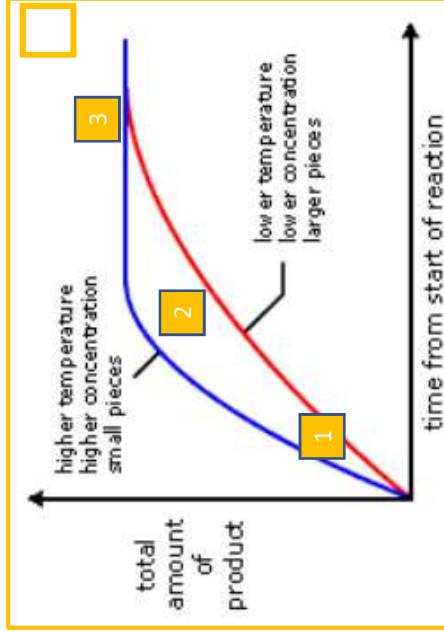
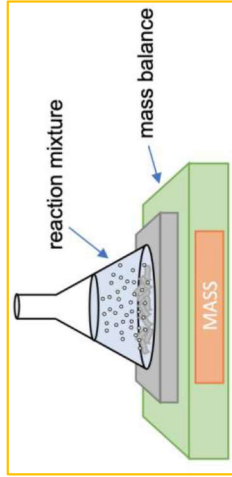
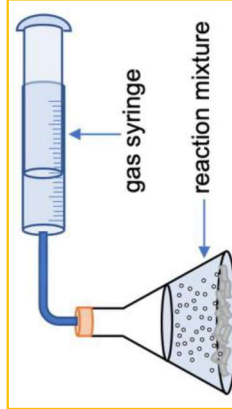
Topic 6a – the rate and extent of chemical change

Collision Theory		
Factor	Why does rate increase?	✓
Increase surface area : volume ratio of solids	Collisions occur at the surface so there are more frequent collisions between particles.	
Increase the concentration of solutions and pressure of gases	More particles in a given volume so there are more frequent collisions between particles.	
Increase the temperature	Particles have more energy so there are more frequent collisions and each collision is more likely to exceed activation energy.	
Use a catalyst	Provides an alternative pathway for a reaction requiring lower activation energy. Increases frequency of successful collisions.	

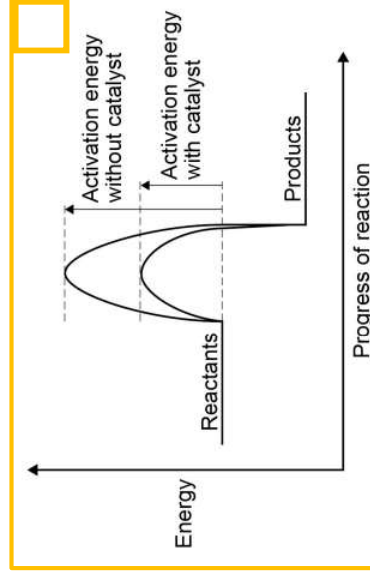
$$\text{mean rate of reaction} = \frac{\text{quantity of reactant used}}{\text{time taken}}$$

$$\text{mean rate of reaction} = \frac{\text{quantity of product formed}}{\text{time taken}}$$

Product	How to measure
Gas collection	Use a gas syringe
Gas escapes to atmosphere	Measure decrease in mass using a balance
Precipitate formed	Time taken for cross to disappear



- 1) Rate is fastest at the start when the concentration of reactants is highest.
- 2) The rate slows down as reactants are converted into products. The concentration of reactants decreases.
- 3) The reaction has stopped once ONE of the reactants has been used up.



Measuring rate of reaction at specific times.

- 1) Draw a tangent to the curve at the required time on your line of best fit.
- 2) Make the tangent as large as possible
- 3) Calculate the gradient of the tangent using the formula:

$$\text{Gradient} = \frac{\text{change in } y}{\text{change in } x}$$
- 5) State units



1.3.1 Networks & Topologies

1.2.5 Compression

Keyword	Definition	✓
Network	Where two or more computer devices are connected together.	
LAN	Local Area Network A computer network located within a small geographic area. The hardware is owned and maintained by the organisation that uses it.	
WAN	Wide Area Network Covers a large geographical area. The infrastructure is provided by a large telecommunications company.	
Transmission media	The medium the data is sent through.	
Bandwidth	How much data can be transferred over a network in a given time.	
Latency	How much time it takes for a packet of data to travel across the network.	
Client-server	A network where one computer (server) provides data and services for many other computers (clients).	
Peer-to-peer	A network where all of the computers have equal status.	
Switch	Hardware that allows devices to connect together to form a wired network in a LAN..	
WAP	Hardware that connects Wi-Fi devices to a wired network.	
Router	Hardware that connects different networks together.	

Keyword	Definition / Example	✓
Compression	Uses an algorithm to reduce the file size by removing repeated/unnecessary data.	
Lossy	Reduces file sizes by removing some of the data permanently.	
Lossless	Reduces file sizes in such a way that no data is lost, and the original file can be regenerated exactly.	

1.4 Network Security

Keyword	Definition	✓
Malware	Any kind of malicious program that is installed on a computer system.	
Virus	Malware that, when executed, replicates itself by modifying other computer programs and inserting its own code into those programs.	
Worm	Malware that replicates itself in order to spread to other computers.	
Social engineering	Tricking or manipulating people into giving away critical information or access details.	
Brute force attacks	Use software to automatically try every possible combination of letters, numbers and characters until the correct password is found.	
Denial of service attacks	Designed to bring down servers or websites by flooding them with superfluous bogus requests such as repeated attempts to login.	
Data interception	When data is intercepted during transmission.	
SQL injection	The placement of malicious code in SQL statements, via web page input.	



GCSE Design Technology revision:
CORE 1.08 Metals

GCSE Design Technology:
TIMBER 7.6 part 2 Manufacturing processes

Tick	Manufacturing aid	Explanation
	Jigs	- Used for drilling or bending material - Used as they are a quick and accurate way to drill holes or bend a material - They are used repeatedly – saving time - Used in batch production (and sometimes one-off)
	Fixtures	- These hold a work piece in place while it is being cut or shaped - It speeds up the manufacturing process but several fixtures may be needed which adds to costs - Used in batch production (and sometimes one-off)
	Templates	- Used to mark around complex shapes which need to be cut out - Used so that the same shape can be quickly and accurately marked out repeatedly - Used in batch production
	Patterns	- A collection of templates that are need to make the whole product - Used in batch production
	Sub-assemblies	- Components which have been assembled as an individual component in the production of a larger product - They are tested by their manufacturers for quality before delivering
	CAM	- Computer Aided Manufacture - Uses computers to guide a cutting head - The drawing is created in CAD (Computer Aided Design) then sent to a CAM machine i.e. a laser cutter

Non-ferrous metal	Properties	Uses
Aluminium	- Corrosion resistant - Easily machined - Good heat/electrical conductor - Malleable	- Aircraft parts - Window frames - Engine parts - Drinks cans
Copper	- Corrosion resistant - Ductile - Easily machined - Excellent heat/electrical conductor	- Electrical wire/components - Gas and water pipes - Printed circuits
Brass	- Corrosion resistant - Easily machined - Good heat/electrical conductivity - Casts well	- Plumbing fittings - Door fittings - Locks - Musical instruments

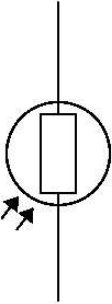
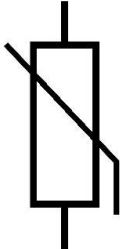
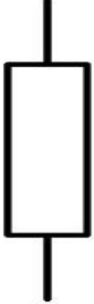
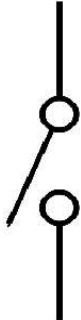
Ferrous metal	Properties	Uses
Mild steel	- Ductile - Malleable - Magnetic - High tensile strength	- Screws, nails, bolts - Car body panels, - General engineering purposes
Stainless steel	- Corrosion resistant - Hard - Resists wear - Difficult to cut	- Kitchenware - Sinks - Cutlery - Medical equipment
Cast iron	- Hard 'skin' - Soft core - Magnetic - Good compression strength	- Machine Parts - Vices - Break discs - Manhole covers



GCSE Design Technology:
TIMBER 7.7 part 1 Equipment and processes

Tick	Tool/ equipment	Use
	Try square	Marks out a right angle on timber/polymers.
	Marking gauge	Marks a parallel line to an edge on timber.
	Plane	Removes thin layers/shaves away wood from the edge of it.
	Chisel	Chips away timber or pares it off (levelling).
	Hand saw	Cuts larger pieces of wood – usually manmade boards.
	Tenon saw	Cuts a straight line in thin, shorter pieces of timber.
	Coping saw	Cuts a small curve into timber or polymers.
	Scroll saw	Cuts shapes into thin, small pieces of wood.
	Jig saw	Cuts large pieces of wood – usually more shapes but can cut straight lines.
	File	Used to smooth edges of wood, polymers and metals.
	Rasp	Used to shape soft timbers (balsa, jelutong) and Styrofoam.
	Surform	Used to roughly shape soft timber (balsa, jelutong) and Styrofoam

GCSE Design Technology revision:
CORE 1.06 Electronic components

Component	Symbol	Function
LDR (Light Dependent Resistor)		Light on LDR, the resistance changes. More light = less resistance; electricity flows.
Thermistor		Resistance changes with temperature. Hot = low resistance cold = higher resistance.
Transistor		Acts as a tiny electronic switch. It is known as a semi conductor. It can amplify small currents.
Resistor		Changes the resistance to limit the flow of electricity through part of a circuit.
LED (Light Emitting Diode)		Gives out light when electricity passes through.
Buzzer		Makes a sound when electricity flows through.
Switches		Turns the flow of electricity on in a circuit on or off.



Creative writing- structure guide.

- Establish:** Two or three sentences which establish the tone/atmosphere, of your narrative.
- Drop:** Drop the reader into the setting- describe the setting in vivid detail using sensory
- Zoom in:** Describe your character and their appearance/ emotions. Establish the narrative challenge/problem they face.
- Shift:** Move the narrative to a different time, focus or place. Perhaps using a flashback or a flashforward.
- Return/zoom in/action:** Return back to your character and zoom in on their thoughts and feelings to progress the narrative.
- Zoom out:** Finally, zoom out and bring this to some sort of resolution. Try to link this to your opening.

Technique	Definition
Syndetic listing	A list with a conjunctions between each item: A scarf <u>and</u> hat <u>and</u> coat.
Asyndetic listing	A list without conjunctions between each item: A scarf, hat, coat, gloves.
Cyclical structure	A story which begins and ends in a similar way, or with a similar event.
Omniscient narrator	A narrative perspective (normally 3 rd person) where the author could describe any element of the story or explore any character’s perspectives.
First person	A narrative told specifically from one character’s perspective.
Prolepsis	Flashforward
Analepsis	Flashback
Linear narrative	A story where events are told in the order that they occur.
Non-linear narrative	A story where events are told in an order different to the order they occur in.

Exam Structure

1 hour 45 Minutes. 5 Questions. 2 sections: Reading and Writing.

	Mark	Time	Description
Q1	4	4 min	Identify 4 things we learn about something, from a passage in the text.
Q2	8	8 min	Analyse the author’s use of language in a passage of the text.
Q3	8	8 min	Analyse how the author has structured the entire extract.
Q4	20	20 min	Using a passage from the text, evaluate a student’s statement, backing up your response with analysis.

You also have 20 minutes reading/thinking time to split between questions 1-4.

Q5	40 (24 + 16 SPAG)	45 min	A piece of creative, descriptive writing, based on an image or story topic.
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Poem	Summary	Themes	Quotes
Ozymandias- Shelley	The broken statue of a once-great Pharaoh acts a symbol for the impermanence of man's power, compared to nature.	Man vs Nature, Abuse/arrogance of power.	"My name is Ozymandias, Kind of Kings" "Round the decay of that colossal wreck"
London- Blake	A man wanders the streets of London , witnessing the suffering of the working classes.	Abuse/arrogance of power, Inequality, Man vs Nature.	"the mind forged manacles" "the chimney-sweeper's cry, every black'ning church appeals"
Extract from The Prelude- Wordsworth	A young man steals a boat, only to be humbled by nature's power as an unseen mountain towers over him.	Man vs Nature, Arrogance of power.	"my boat went heaving through the water like a swan" "A huge peak, black and huge [...] upreared its head"
My Last Duchess- Browning	An arrogant duke shows a guest a painting of his last wife; he hints that he had her murdered as she displeased him.	Abuse/arrogance of power, Inequality	"That's my last Duchess painted on the wall" "I gave commands then all smiles stopped"
CotLB- Tennyson	600 soldiers bravely carry out a miscommunicated order. The charge is a failure, but their heroism is remembered.	Heroism of war, Memory.	"Half a league, half a league, half a league onward" "Into the valley of death rode the six hundred"
Exposure- Owen	A group of soldiers in the trenches of WW1 suffer the appalling conditions and exposure to the cold.	Horror of war, Memory, Man vs Nature, Disillusionment.	"Our brains ache in the merciless iced east winds that knive us" "Dawn massing in the East her melancholy army"
Storm on The Island-Heaney	A rural island community is swept over by a terrible storm. The storm can act as an extended metaphor for the troubles in Ireland.	Man vs Nature, Horror of conflict, social divides.	The sea "spits like a tame cat turned savage" "wind dives and strafes invisibly. Space is a salvo."
Bayonet Charge- Hughes	A soldier is overcome with terror, going over the top during WW1.	Horror of war Disillusionment.	"suddenly he awoke and was running" "in what cold clockwork of the stars and the nations was he the hand pointing that second?"
Remains- Armitage	A soldier shoots a looter while on patrol and his haunted by PTSD and feelings of guilt.	Horror of war, Memory, Psychological suffering.	"his blood shadow stays on the street" "he's here in my head when I close my eyes, dug in behind enemy lines".
Poppies – Weir	A mother grieves as she sees her son go off to war, remembering the boy he once was.	Memory, Loss/Grief (psychological suffering)	"released a songbird from its cage" "hoping to hear your playground voice catching on the wind"
War Photographer- Duffy	A photographer suffers from feelings of depression and isolation after reporting on conflict around the world.	Horror of conflict, Psychological suffering, Memory.	"In his darkroom he is finally alone" "A stranger's features faintly start to twist before his eyes, a half formed ghost"
Tissue- Dharker	Paper is used as an extended metaphor for the strength and fragility of the things which make up our lives: faith, finance, culture, cities etc.	Power of society, Individual identity.	"Paper that lets the light shine through" "Maps too. The sun shines through their borderlines"
The Émigrée- Rumens	A girl, displaced from her home country struggles with conflicted feelings for her old/new homes.	Power of society, Individual identity, Memory.	"my original view, the bright, filled paperweight" "I am branded by an impression of sunlight"
Checking Out Me History- Agard	The narrator explores the figures cut out of history by Eurocentric, whitewashed accounts of the world. He reclaims his cultural history.	Power of society, Inequality, Individual identity.	"Dem tell me Wha dem want to tell me" "now I checking out me own history, I carving out me identity"
Kamikaze – Garland	A daughter looks back on how her father failed to carry out his mission as a WW2 kamikaze pilot, suffering disgrace for his choice.	Power of society, Family, Individual Identity, Memory.	"her father embarked at sunrise" "sometimes, she said, he must have wondered which had been the better way to die"

Where food comes from – food processing

Where food comes from

No matter where it is bought from, food is grown, reared or caught, then processed in some way, to make it edible and safe to eat.

Food processing

Food processing is any deliberate change in a food that happens before it is available for us to eat; almost all food is processed in some way.

Commercially, the main reasons to process food are to eliminate microorganisms (which may cause disease) and to extend shelf life. Food production and processing ensures that food is edible and safe to eat.

Foods are processed for a number of reasons:

- to extend the shelf life, e.g. making strawberries into jam;
- convenience, e.g. frozen ready meals;
- health, e.g. reduced fat yoghurt;
- to provide consumers with more variety and choice;
- to provide additional nutritional benefits, e.g. fortified breakfast cereals.

New product development (NPD)

NPD is the process of creating new or modified food products, with the aim of increasing sales to maintain a company's competitiveness within the consumer market. NPD involves a complex series of stages, requiring the combined talents of many specialists to make it successful:

- initial ideas;
- test kitchen;
- sensory evaluation;
- pilot plant;
- production specification;
- consumer testing;
- scale up and launch.

For more information, go to:

<https://bit.ly/398qABo>

Food Manufacturing

Modern processing has developed over the centuries, with canning and pasteurisation advancing the microbiological safety of food. Food processing can be very simple, e.g. preparing, freezing or drying food to preserve nutrients and freshness. It can also be complex, e.g. formulating a frozen meal with the right balance of nutrients and ingredients.

There are two main stages to food processing:

- primary - foods are processed after harvest or slaughter, e.g. wheat is harvested and then milled into flour;
- secondary - food is made into products, e.g. flour into bread or pasta. Steps need to be taken at all stages of food supply to prevent contamination and spoilage and avoid food wastage.

Hazard analysis, critical control points (HACCP)

Food businesses have a legal responsibility to produce safe food. HACCP is a structured approach to risk assessment, used by food companies to make sure they do not break the law by putting consumers at risk.

The seven principles of HACCP are:

1	Hazard analysis
2	Determine the Critical Control Points (CCP)
3	Establish critical limits
4	Critical Control Point (CCP) monitoring
5	Corrective actions
6	Establish verification procedures
7	Record keeping procedures

Functional foods

Functional ingredients are ingredients that are specifically included in food for additional health benefits, including pre- and pro-biotics.

Food additives

Additives are used to ensure safety, increase shelf life or improve the taste, texture or appearance of food. Additives need to be approved before they can be used.

Additives are given an 'E number' to show that they have been rigorously tested for safety and have been approved for use in food by the European Commission.



Jams contain several kinds of additives, including emulsifiers and gelling agents.

Freezing & dehydrating

The shelf life of food and drink can be extended by freezing and dehydrating.

Freezing – commercial methods are based on two principles:

1. very low temperatures inhibit growth of microorganisms;
2. the formation of ice crystals draws available water from the food.

Dehydration – reduces the water activity level, weight, bulk of the food, and helps to preserve a product. There are a number of techniques used including: sun drying, spray drying, fluidised bed drying, roller drying and accelerated freeze-drying.



Pasteurisation, sterilisation and irradiation

The shelf life of food can be extended if sufficient heat is applied to kill microorganisms and inactivate the enzymes that are present.

Pasteurisation – extends shelf life by killing most food spoilage organisms and pathogenic organisms. Products are treated with mild heat, usually to less than 100°C for 30-35 minutes.

Sterilisation – is a more severe process that destroys all microorganisms.

Irradiation – produces an effect in food similar to pasteurisation.

Filling, forming and enrobing

Many manufactured food products go through a number of processes before they make it to the shop shelves.

Filling – a measured quantity of food mixture is injected or sandwiched into the centre of food.

Forming – ensures that products are of a uniform shape and size.

Enrobing – is a process of coating the outer layer of a product, e.g. chocolate-coated biscuits.

Extrusion and canning

Extrusion – is a process where raw materials are forced through a cylindrical barrel in order to form, shape and sometimes cook.

Canning – aims to destroy all microorganisms and their spores through the application of heat by sterilising food in airtight containers.

Tasks

1. Describe the purpose of food additives. Include at least three examples.
2. Choose a food product and research how it is produced, e.g. frozen fish fingers, chocolate covered biscuits, semi-skimmed milk.

Key terms

Additives: Are added to ensure safety, increase shelf life or improve the taste, texture or appearance of food.

E numbers: Given to an additive to show it has been approved for use in the EU.

Food labels: Provide information and help consumers make choices.

Food processing: Any deliberate change in a food that happens before it is available for us to eat.

Hazard analysis, critical control point (HACCP): A system which looks for and prevents potential problems before they happen.

Packaging: Used to protect the food or drink from physical damage, chemical or bacterial contamination and provide information.

Pathogenic: Disease causing microorganisms.

Packaging

Due to advances in technology, most food items are now sold pre-packed.

Food products often have a long journey from the initial manufacturer, until finally being eaten by the consumer. The aim of packaging includes:

- preventing physical damage, e.g. from knocking, shaking or crushing;
- preventing contamination from micro-organisms, pollution or vermin;
- protecting against dehydration or dampness;
- protecting the product's nutritional and sensory characteristics;
- keeping the product in peak condition;
- helping to increase a product's shelf life.

Packaging is also designed to be visually stimulating and provide information about the product.

Food labelling

Manufacturers include a range of information on food labels. Some of which is legally required and some of which is useful to the consumer or supermarket. Best-before and use-by dates are examples of information that is legally required.



Accommodation General	
un chateau	A castle
une tente	A tent
libre	Free
propre	Clean
chercher	To look for
coûter	To cost
recommander	To recommend
disponible	Available
louer/location	To hire/hiring
ouvert/fermé	Open/closed
un terrain de sport	A sports ground
l'entrée	Entry ticket/price
un billet	A ticket
gratuit	Free (no charge)
des renseignements	Information
s'amuser	To have fun
le logement	Accommodation
un souvenir	A memory
le musée ouvre à quelle heure?	What time does the museum open?
le musée ferme à quelle heure?	What time does the museum close?
Du...au...	From the ..to the ..

Booking Accommodation	
Une chambre	A bedroom
Une chambre double	A double room
Une salle	A room (general)
Un hotel	A hotel
Un jardin	A garden
Un lit	A bed
Le service	The service
Un balcon	A balcony
Complet/complète	Full
Libre	Free
Payer	To pay (for)
Réserver	To reserve
L'addition	The bill
Un ascenseur	A lift
Un étage	A floor
Est-ce qu'il y a ..?	Is there...?
Ça coûte combien?	How much does it cost?
Par carte	By card/bank card
Payer en espèces	To pay with cash
Pour une nuit/deux nuits	For one/two nights
Avec douche	With a shower
La climatisation	Air conditioning

Les fêtes – celebrations	
Un carnaval	A carnival
Un festival	A festival
Une fête	A party/celebration
Faire la fête	To party/celebrate
Se passer	To spend
Un spectacle	A show
Un événement	An event
Un plat	A dish
Apprécier	To appreciate/like
Un jeu/des jeux	games
Tout le monde	Everyone
Avoir lieu	To take place
gouter	To taste

Picture Description - Actions	
Il est/ils sont	He is/they are
Il fait/ils font	He is /they are doing
Il a /ils ont	They have
Il mange/ils mangent	He is/they are eating
Il porte/ils portent	He is/they are wearing
Il semble/ils semblent	He seems/they seem

Hotel reviews	
Le papier toilette	Toilet paper
Une sèche-cheveux	A hairdryer
Un ascenseur	A lift
Une salle de jeux	A games room
Wifi	Wifi
De la place	Space
Un parking	A car park
Se plaindre	To complain
Régler	To settle a bill/pay for
Aucun (e) (s)	None
Le rapport qualité-prix	Quality/price ratio
Un coin	A corner
Le bruit	Noise
Il n'y a pas de	There is/are no..

Picture description	
Sur la photo	On the photo
Je peux voir/on peut voir	I can see/you can see
De plus je peux voir	Also I can see
A gauche/à droite	On the left/on the right
À l'arrière plan	In the background
Au gros 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

Pros and Cons	
Un avantage	An advantage
Un désavantage	A disadvantage
Un pour	A for (a benefit)
Un contre	An 'against' (
D'un côté	On the one hand
D'un autre côté	On the other hand
Le pire, c'est..	The worst thing is..
Le mieux, c'est..	The best thing is..
Au contraire	On the contrary
Toutefois	However
Tandis que	Whereas
Selon moi	According to me
Selon mes parents	According to my parents



Tourist attractions	
une capitale	capital city
un centre	centre
un château	castle
côte	coast
une forêt	forest
une île	island
une montagne	mountain
un musée	museum
un office de tourisme	tourist office
un site	site
la tour Eiffel	Eiffel Tower
le tourisme	tourism
Un touriste	tourist
une visite	visit / excursion
célèbre	famous
européen	European
gratuit	free
historique	historical
trouver / se trouver	to find / to be situated

Le monde en fête	
Tu es allé (e) à quel festival/carnaval?	Which carnival/festival did you go to?
Je suis allé (e) à la fête/au carnaval	I went to the festival/carnival
J'ai goûté des plats	I tasted dishes
J'ai dansé	I danced
On a fêté	We celebrated
On a entendu	We heard
Nous avons mangé	We ate

Tourist attractions	
le paysage	landscape
un renseignement mondial	information global / world
attirer	to attract
nuire à	to harm

Imperfect tense verbs	
J'étais	I was
il/elle/on était	He/she/we was/were
Je voyageais	I travelled
J'allais	I went
C'était	It was
Il y avait	There was
Il n'y avait pas de	There was no
Aucun (e) (s)	None
Je mangeais	I ate
Je prenais	I took

The conditional translates as 'would' in English. Use it to describe what you would do if you could. Eg if I won the lottery I would buy a Lamborghini!

It would be= ce serait
I would be = je serais

I would like= je voudrais
I would like=j'aimerais

Weather in the past tense	
Il faisait beau	It was nice weather
Il faisait chaud	It was hot
Il pleuvait	It was raining
Il neigeait	It was snowing
Il faisait froid/gris	It was cold/grey
Il y avait du soleil/des nuages	There was sun/clouds
Il y avait du brouillard	There was fog
Il y avait des orages	It was stormy

To form the conditional, add the endings to the infinitive of regular verbs		For example
Je	-ais	Je voyagerais
Tu	-ais	Tu voyagerais
Il/Elle/On	-ait	Il/elle/on voyagerait
Nous	-ions	Nous voyagerions
Vous	-iez	Vous voyageriez
Ils/Elles	-aient	Ils/elles voyageraient

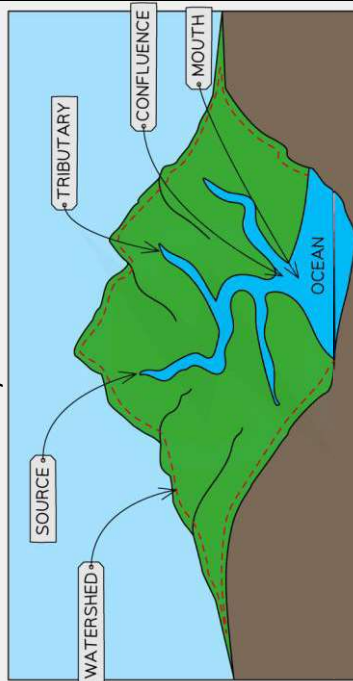
Irregular conditional verbs:	
J'irais	I would go
Je ferais	I would do
Je serais	I would be
Je pourrais	I could



Section 1: Drainage basins

What is a drainage basin?

An area of land drained by a river and its tributaries.



Watershed: Highland or hill that separates one drainage basin from another

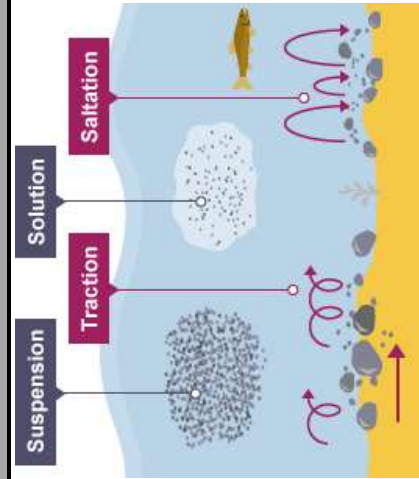
Confluence: the point where two rivers/streams meet/join

Tributary: a smaller stream or river that joins a bigger stream or river

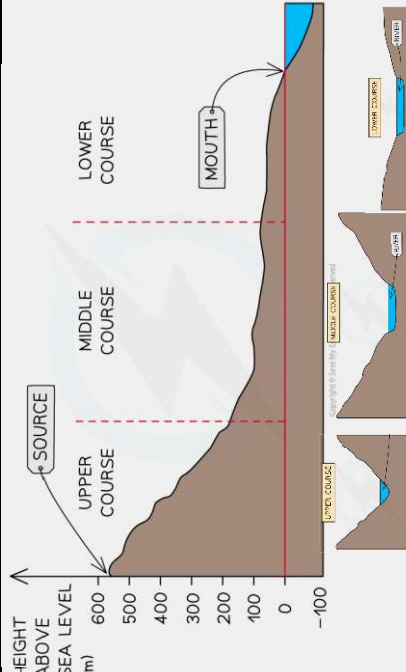
Source: the starting point of a river or stream

Mouth: the point where a river leaves the drainage basin and enters the sea

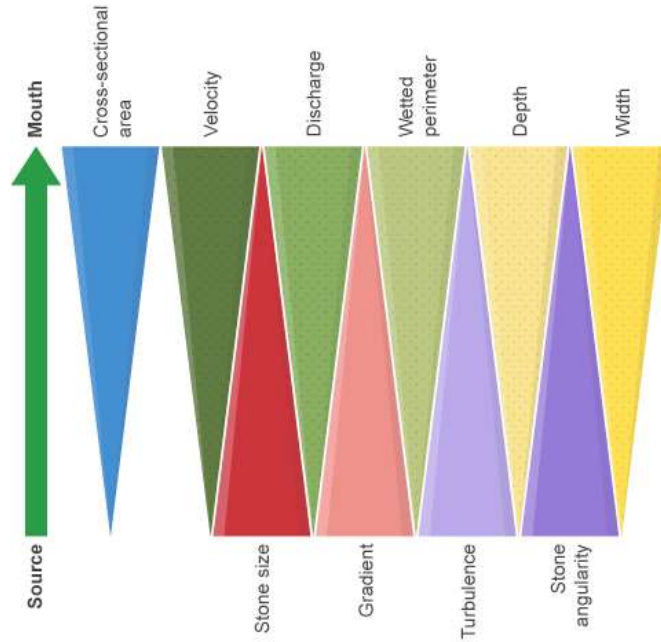
Section 2: River transport



Section 3: River courses



Bradshaw Model = theoretical model that shows how a river's characteristics change as it goes downstream. If the triangle increases in size it means that variable increases the further you go down the stream



Section 4: River landforms

V-Shaped Valleys: In the upper course, the river erodes vertically, deepening the valley. Weathering weakens the sides, causing material to collapse, forming a steep V-shape.

Interlocking Spurs: The river weaves around resistant rock, unable to erode it. This creates protruding ridges, or interlocking spurs, forming a zig-zag pattern.

Waterfalls: harder rock overlays softer rock which is eroded more rapidly by abrasion, hydraulic action and solution. Overtime, this continues and a deep plunge pool forms undercutting the harder rock overhang. This is unsupported and collapses adding debris speeding up erosion and the waterfall retreats upstream, creating a gorge.

Meander: Large bends that swing from side to side (sinuosity) on the floodplain. Faster flowing water erodes the outside of the bend through lateral erosion creating a steep bank (river cliff) whilst the inside of the bend due to slower shallower water deposition takes places creating a gently sloping bank (slip-off slope).

Oxbow Lake: When a meander grows its neck narrows then at times of flood the river simply cuts straight through it leaving an old meander cut off (horseshoe-shaped lake). Deposition blocks up the old bend.

Levees: During floods, heavy sediment is deposited near the channel, while finer material spreads further. Over time, raised banks (levees) form along the river.

Floodplains: Repeated flooding deposits silt across the valley floor. This builds up over time, creating a wide, flat, fertile floodplain.



Topic 4b: River Processes



Section 5: Hydrographs A hydrograph is a way of showing how a river responds to a rainfall event showing the relationship between rainfall (mm) and discharge (m^3/s). Rising limb = indicates discharge increases a few hours after rainfall. Peak flow = Discharge reaches max levels. Recession (falling) limb = indicates a fall in discharge once the water has passed downstream. Lag time = time from peak rainfall to peak discharge	Section 6: Somerset Levels The Somerset levels are one of the UK's lowest lying areas (< 8m above sea level). It is a wetland system that was artificially drained in the 17th century for farming (grazing). During drainage the land shrunk, much of it is now below high tide water level. In the winter of 2014, a particularly serious flood hit the Levels. Causes: Prolonged Heavy Rainfall – The area saw record-breaking rainfall in January and February. Flat, Low-Lying Land – The Somerset Levels are naturally prone to flooding. River Dredging Issues – Rivers had not been dredged for years, reducing their capacity. High Tides & Storm Surges – Water backed up in rivers, worsening flooding. Urbanisation & Land Use Changes – Some areas had poor drainage, increasing surface runoff. Impacts: Social: Over 600 homes flooded, villages cut off, transport links disrupted. Economic: £10 million+ in damages, businesses and farmland destroyed. Environmental: Contaminated floodwater, loss of habitats, soil erosion
Section 5: Hydrographs Factors Affecting Flood Hydrographs Rock Type – Impermeable rock = flashy. Permeable rock = subdued. Soil Type – Clay (low infiltration) = flashy. Sandy (high infiltration) = subdued. Slopes – Steep slopes = flashy. Gentle slopes = subdued. Vegetation – Less vegetation = flashy. More vegetation = subdued. Land Use – Urban areas (concrete, drains) = flashy. Natural land = subdued. Basin Shape – Small, round basin = flashy. Large, long basin = subdued. Antecedent conditions – wet conditions before a storm cause the ground to become saturated. This speeds up overland flow and shortens lag time. Drier conditions mean the rainfall can infiltrate into the soil slowing down lag time.	Section 7: River management Hard Engineering Flood Walls - Immediate protection, low maintenance. - Costly (£6m/km), ugly, worsens downstream floods. Embankments - Cheap (£1m/km), increases capacity. - Can fail if overtopped, needs upkeep. Flood Barriers - Protects cities, used when needed. - Very expensive (£534m Thames Barrier), needs monitoring. Soft Engineering Floodplain Retention - Cheap, absorbs floodwater naturally. - Needs space, limits land use. River Restoration - Slows flow, improves habitats. - Takes time, reduces farmland. The Somerset Levels and Moors Flood Action Plan is a 20-year plan that was developed after the 2014 floods. The Flood Action Plan aims to reduce the risk of future flooding through management of the river and the Somerset area. In a 2022 review, the following were confirmed to have been completed: 4km of the River Tone and 4km of the River Parrett have been dredged (removed 130,000m³ of silt) - Repairs and reinstate river and flood banks - Installation of permanent infrastructure to enable temporary pumping at Dunball, Northmoor and B&T Canal - Support adoption of more flood resilient farming systems and adaptation

Factors Affecting Flood Hydrographs

- Rock Type** – Impermeable rock = **flashy**. Permeable rock = **subdued**.
 - Soil Type** – Clay (low infiltration) = **flashy**. Sandy (high infiltration) = **subdued**.
 - Slopes** – Steep slopes = **flashy**. Gentle slopes = **subdued**.
 - Vegetation** – Less vegetation = **flashy**. More vegetation = **subdued**.
 - Land Use** – Urban areas (concrete, drains) = **flashy**. Natural land = **subdued**.
 - Basin Shape** – Small, round basin = **flashy**. Large, long basin = **subdued**.
- Antecedent conditions** - **wet conditions before a storm cause the ground to become saturated**. This speeds up overland flow and shortens lag time. Drier conditions mean the rainfall can infiltrate into the soil slowing down lag time.



Ich komme zu Besuch – I come to visit	
Ich möchte eine Fahrkarte nach ..., bitte.	I would like a ticket to ... please.
Einfach oder hin und zurück?	Single or return?
Eine Rückfahrkarte.	A return ticket.
Was kostet das?	How much does it cost?
Wann fährt der Zug ab?	When does the train leave?
Wann kommt der Zug an?	When does the train arrive?
Gibt es ... in der Nähe?	Is there ... nearby?
Gehen Sie hier geradeaus.	Go straight ahead here.
Nehmen Sie die erste Straße links/rechts.	Take the first street on the left/right
... liegt auf der linken/rechten Seite.	... (it) is on the left/right-hand side.
sich befinden	to be situated
im Zentrum/am Stadtrand	in the centre/in the suburb
in der Nähe von/fern	near/far
die Straße	street

Picture description	
Im Bild/Im Foto	On the photo
Ich/Man kann ... sehen	I can see/You can see
Im Bild gibt es	In the picture there is
Auf der linken/rechten Seite	On the left/on the right side
Im Hintergrund	In the background
Im Vordergrund	In the foreground
Das Foto wurde gemacht	The photo was taken
Sie spielen, essen , tragen	They are playing, eating, wearing
USE PRESENT TENSE TO SAY WHAT PEOPLE ARE DOING – “NO IS-ING” “AM-ING” OR “ARE-ING”	

Im Geschäft – in the shop	
Ich brauche ...	I need ...
einen warmen Pullover	a warm pullover
eine schwarze Hose	black trousers
ein blaues Hemd	a blue shirt
ein tolles Kleid	a great/terrific dress
Schuhe	shoes
Welche Größe brauchst du/ brauchen Sie?	What size do you need?
Ich brauche Größe ...	I need size ...
Er/Sie/Es ist ... / Sie sind ...	He/She/It is ... / They are ...
zu/ein bisschen	too/a little
nicht/ziemlich	not/rather
groß/klein	big/small
kurz/lang	short/long
billig/teuer	cheap/expensive
eng/weit	narrow (tight)/wide
Wo kann ich ... anprobieren?	Where can I try ... on?
Wo kann ich ... zurückbringen?	Where can I return it?
Wie gefällt es dir/Ihnen?	How do you like it?
... gefällt mir/gefallen mir (nicht)	I (don't) like ...
Was kostet das? / Was kosten sie?	How much does it cost?
Das kostet ...	It costs ...
Ich nehme ihn/sie/es (nicht)	I will/won't take it/them

Fragewörter – Question Words	
Wann?	When?
Was?	What?
Wie?	How?
Wie viel?	How much?
Wie viele?	How many?
Wie lange?	How long for?
Welch-?	Which?
Um wie viel Uhr?	At what time?
Warum?	Why?
Wo?	Where?
Wohin?	Where to?
Woher?	Where from?
Was für?	What kind of?
Wer?	Who?
Möchten Sie?	Would you like?
Gibt es?	Is/Are there?
Kann man ...?	Can you...?
Haben Sie ...?	Do you have?

Role Play essentials	
Guten Tag.	Hello
Wie geht's?	How are you?
Auf Wiedersehen.	Goodbye.
Danke	Thank you.
Bis später/bald!	See you later/soon
Können Sie das/ die Frage bitte wiederholen?	Can you repeat that/the question please?
Ich möchte	I would like
Ich will	I want



Wo gehst du gern einkaufen? – Where do you like to go shopping?	
die Apotheke	pharmacy
die Bäckerei	bakery
die Bank	bank
das Käsegeschäft	cheese shop
das Kleidungsgeschäft	clothes shop
das Schreibwaren-geschäft	stationary shop
das Uhrengeschäft	watch/clock shop
In meiner Stadt/In meinem Dorf gibt es	In my town/In my village, there is/are
keine Geschäfte	no shops
viele Cafés	a lot of cafés
einen großen Supermarkt	a large supermarket
ein großes Einkaufszentrum	a large shopping centre

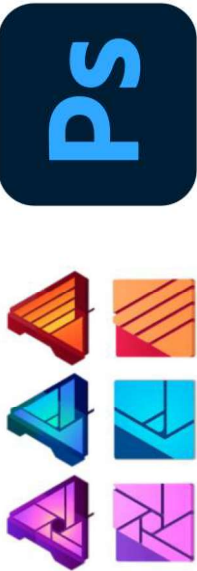
Bei mir zu Hause – At mine	
Zimmer zu Hause	rooms at home
das Badezimmer	bathroom
das Büro/	office
das Arbeitszimmer	dining room/
das Esszimmer/die Essecke	dining area
die Garage	garage
der Garten	garden
die Küche	kitchen
das Schlafzimmer	bedroom
das Wohnzimmer	living room
der Keller/der Dachboden	basement/loft
ich parke das Auto	I park the car

Wo gehst du gern einkaufen? – Where do you like to go shopping?	
Ich kaufe (nicht) gern ... ein	I (don't) like shopping
im Einkaufszentrum	in a shopping centre
mit einer App	with an app
online	online
weil das ... ist	because it is
praktisch(er)	(more) practical
einfach(er)	easy (easier)
teuer (teurer)	(more) expensive
Man kann ...	You can ...
Zeit sparen	save time
schöne Sachen finden	find beautiful things
Kleidung anprobieren	try on clothes
Waren einfach/sofort zurückschicken	return goods easily/immediately
Man bekommt bessere ...	you get better ...
Informationen	information
Preise	prices
Die Waren kommen direkt nach Hause.	The goods come direct/straight home.
Die Preise sind reduziert.	Prices are reduced.
Relative pronouns	
Ich habe alles, <u>was</u> ich brauche.	I have everything (that) I need.
Ich weiß nicht, <u>wer</u> kommen wird.	I don't know <u>who</u> will come.
Gibt es ein Café, <u>wo</u> ich etwas trinken kann?	Is there a café <u>where</u> I can drink sth?
Was, <u>wer</u> and <u>wo</u> can be used as relative pronouns when referring to sth. non-specific.	

Mein idealer Wohnort – My ideal place to live	
Wo würdest du am liebsten leben/wohnen?	Where would you prefer to live?
Ich würde am liebsten in ... leben/wohnen	I would prefer to live in ...
Wo würdest du gern leben/wohnen?	Where would you like to live?
Ich würde gern in ... leben/wohnen	I would like to live in ...
Wie wäre deine ideale Umgebung/Gegend?	What would your ideal area be like?
Sie (er/es) wäre ...	It would be ...
Was hätte dein idealer Wohnort?	What would your ideal place to live have?
Er (Sie/Es) hätte ... grün	It would have ... green
alt/neu	old/new
hell/dunkel	light/dark
den/einen Baum	the/a tree
die/eine Brücke	the/a bridge
der/ein Wohnort	the/a place to live
die/eine Großstadt	the/a city
die/eine Hauptstadt	the/a capital city
die/eine Kleinstadt	the/a small town
die/eine Umgebung	the/a surroundings
die/eine Wohnung/ das/ein Haus	the/a flat/house
den/einen Platz	the/a square
das/ein Fitnesszentrum	the/a gym
das/ein Gebäude	the/a building
Als ich klein war, ..	When I was little
Früher wohnte ich	In former times, I used to live
ich fand ihn/sie/es ...	I found it ...
jetzt wohne ich	now I live



10 Graphics
Term 4-
Album Covers



The Principles of Design

Pattern	A regular arrangement of alternated or repeated elements (shapes, lines, colours) or motifs.	
Contrast	The juxtaposition of different elements of design (e.g. Rough and smooth, dark and light) to highlight their differences and/or to create visual interest (focal point).	
Emphasis	Importance and attention given to one part of work of art. Emphasis can be achieved through placement, contrast, colour, size or repetition.	
Balance	A feeling of balance happens when the elements are arranged symmetrically or asymmetrically to create the impression of equality.	
Proportion/Scale	The relationship between objects with respect to size and number.	
Harmony	The arrangement of elements gives the viewer the feeling that all the parts of the piece form a coherent whole.	
Rhythm/Movement	The use of recurring elements to direct the movement of the eye through the artwork. Rhythm can be random, regular, alternating, progressive and flowing. The way they are arranged should lead the eye to a focal area.	

Annotating your work
Use these headings to explain your own Graphic Design and how other designers have inspired you.

	Tick
What?	What is it? Explain the piece of work you are annotating Examples: This is a digital 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 design 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 Element and Principles of Design 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 painted it with... I developed in digitally using... 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...

Skills – Photoshop/ Affinity

	Key Designers
Leif Podhajsky	Leif Podhajsky is an Australian graphic designer and art director, well known for his distinctive album cover art
Magdiel Lopez	Magdiel Lopez is a Cuban-born graphic designer renowned for his vibrant, surrealist artwork , particularly showcased in his "A Poster a Day" series.
Milton Glazer	Milton Glazer created playful, psychedelic graphics with controlled blasts of colours along with silhouettes and bold geometric outlines.

- ☐ Layers
- ☐ History
- ☐ Adjustment tools
- ☐ Selection tools
- ☐ Liquify
- ☐ Gradient
- ☐ Brush tool
- ☐ Pen tool
- ☐ Type
- ☐ Dodge/burn
- ☐ Transform
- ☐ Define pattern
- ☐ Filters
- ☐ Puppet warp



Bournemouth School: History Department: KO Year 10: Spring 2: Elizabethan Society 1558 - 1588

1. Society & Leisure		✓	2. Education		✓	3. Why did Poverty increase?		✓
Key Terms	Definitions		Key Terms	Definitions		Key Terms	Definitions	
Bear-baiting	Bears chained to posts for dogs to attack		Apprentice	Education for children learning a trade		Alms	Term to describe help to the poor	
Feast Days	Opportunities for dancing & drinking		Grammar Schools	Private schools for sons of the well-off		Cloth trade	Woollen cloth was most significant	
Football	A lower class game		Humanists	New influences: philosophers studied		Debasement	New coins containing less gold	
Gambling	Money bet on the outcome of sports		Nobility	Educated their children at home		Dissolution	Monasteries closed down by HVIII	
Harrison's book	Describing the four classes in society		Petty Schools	For boys aged 4-8. Paid for by parents		Enclosure	Enclosing land with hedges	
Hunting	Enjoyed by all: deer, hawking, rabbits		Protestant	Promoted literacy to access Bible		Inflation	Prices rising faster than wages	
Music	Enjoyed by all: madrigals, ballads, in-house		Rhetoric	University: Public speaking / persuasion		Recession	Slower trade = unemployment	
Mystery plays	Popular at start of her reign, then secular		School for girls	Dame Schools: Private tutors for rich		Rent-racking	Increased rents badly hitting farmers	
Storytelling	Popular with all ranks in society		Social order	Education designed to reinforce it		Trade disruption	Problems with trading with Netherland	
Theatre	Popular pass-time enjoyed by all ranks		Classics	Classical authors taught in Grammars		Vagabondage	Homeless and jobless: a concern	
4. Attitudes to Poverty		✓	5. Why did the Elizabethans explore abroad?		✓	6. Frances Drake's circumnavigation		✓
Key Terms	Definitions		Key Terms	Definitions		Key terms	Definitions	
Undeserving poor	Or 'idle poor': those fit but not in work		Astrolabe	Used to measure latitude & longitude		Cacafuego	Spanish treasure ship raided	
Vagabond	Undeserving poor, not in work		Colony	Land controlled and occupied by settlers		'Elizabeth'	One of Drake's ship lost	
Deserving poor	Or 'deserving poor'. Caused by illness/old age		Heathens converted	Elizabethans spreading Protestantism		Golden Hind	Drake's ship (formerly 'Pelican')	
Ipswich	A town ahead of its time for managing the poor		Lucrative trading	Ventures creating substantial wealth		'Marigold'	Captained by J Thomas: sank	
Poor Relief Act	Designed to distinguish the able & impotent poor		Piracy	Plundering enemy ships at sea		Mocha	Drake landed and was attacked	
Statute of Artificers	Aimed to ensure the collection of poor relief		Renaissance	Enlightened thinking encouraging exploration		Mutiny	Dougherty charged and executed	
Thomas Harman:	Wrote pamphlets on types of vagabonds		Richard Hakluyt	Author urging sailors to explore more		Nova Albion	'New England': California claimed	
Vagabonds Act 1572	Turning point: Aimed to deter vagrancy		Adventure	Exploring for a sense of adventure.		Ternate	Traded with the king here for spices	
			Longer voyages	Better navigation and ship design		Tierra del Fuego	Islands at bottom of S. America	
			Trade routes	Russia, India and New World profits		Valparaiso	Settlement attacked by Drake	
7. Why was Walter Raleigh significant and why did the early attempts to colonise Virginia fail?		✓	8. Who's who?		✓	9. Timeline: Society and Exploration		✓
Key Terms	Definitions							
Algonquians	The natives in areas sought by the English		 1532-1588	Robert Dudley, Earl of Leicester; the Queen's favourite?	 1540-1596	1560's & 70's: 72 new Grammar Schools		
Bartering	Explorers exchanged utensils for food					1563: Statute of Artificers		
Patronage	Gaining support from sponsors					1562 – 69: John Hawkins' 3 slave voyages		
Expeditions	Voyages to Virginia: in 1584 and 1587					1569: Gerardus Mercator's sea charts published		
Trip Leaders	Raleigh sent Grenville, Lane and Harriot					1572: Vagabonds Act		
Manteo & Wanchese	Natives in England to help colonists					Early 1570's: poor harvests impacting the poor		
Reconnaissance	Fact-finding mission to Virginia 1584					1576: Poor Relief Act		
Expectations	Did not match reality		 1542-1587	Walter Raleigh: Pioneered settlement of America – 1552-1618	 1520-1598	1576: Martin Frobisher tried & failed to reach China		
Native Americans	Chief Wingina resisted colonists					1577: William Harrison's 'Description of England'		
'Tiger'	Largest of the 5 ships sent by Raleigh					1577 – 80: Drake's circumnavigation of the globe		
						1585 - 1587: Raleigh's attempts to colonise Virginia		



Elizabeth I: Key events: Topic 1: Queen, government and religion 1558-69 1558: Accession to the Throne 1559: Religious Settlement; Treaty of Cambresis; Scottish Protestant Lords' rebellion 1560: Treaty of Edinburgh Dec 1560: Mary Queen of Scots returns to Scotland from France Armistice signed 1563: King Philip II bans the importation of English cloth to the Netherlands 1565: Mary QoS marries Henry Stuart, Lord Darnley 1566: Mary's son James is born. Dutch Revolt against Spanish rule begins 1567: Darnley murdered; Mary QoS marries Bothwell; she abdicates and is imprisoned. Spanish Fury: Alba sends 10,000 Spanish troops to crush Dutch Revolt 1568: Mary QoS escapes captivity and flees to England. Genoese Loan incident, angering the Spanish. 1569: Norfolk Plot and Revolt of the Northern Earls. Mary QoS placed under house arrest in England. Paper 2 Depth Study: Question Technique: Question 1a and b: 'Describe one feature of...' (2 x 2 marks) State, Explain the first feature: State, Explain the second feature: Question 2: 'Explain why...' (12 marks) Three PEEL points on causation. Question 3: 'Statement' How far do you agree? (16 marks; choice of 2 questions) Introduction: criteria, line of argument, three PEEL points for/against the statement in the question, conclusion making a judgement as to whether you agree with the statement in the question, using criteria to judge	Elizabeth I: Key events: Topic 2: Challenges to Elizabeth at home and abroad, 1569–88 1569: Norfolk Plot & Revolt of the Northern Earls 1570: Papal Bull against Elizabeth 1571: Ridolfi Plot 1572: Drake attacked Spanish at Nombre de Dios in Panama 1574: First Jesuits priests smuggled into England 1576: 'Spanish Fury' sees the sacking of Antwerp, uniting Dutch against Spanish 1577: Don Juan honours the Pacification of Ghent; Spanish army arrive 6 months later Dec 1577: Drake's circumnavigation of the globe begins 1579: Duke of Parma put in charge of The Netherlands Feb 1579: Drake reaches Callao, Peru; attacks ships including the Cacafuego Nov 1580: Philip takes control of Portugal Nov 1580: Drake returns from circumnavigating the globe 1581: Drake Knighted on Golden Hind 1582: Duke of Alencon returned to Netherlands, backed by Elizabeth's money 1583: Alencon had failed in the Netherlands Nov 1583: Throckmorton Plot uncovered 1584: Death of Alencon leads to formation of a Catholic League in France July 1584: Death of William of Orange. Dec 1584: Treaty of Joinville 10th Aug 1585: Treaty of Nonsuch Jan 1586: Earl of Leicester accepts title 'Governor General of the Netherlands' July 1586: Babington Plot uncovered 19th -22nd April 1587: Drake's raid on Cadiz Late 1587: Leicester recalled to England 29th July 1588: Armada spotted in Channel 8th Aug 1588: Battle of Gravelines Sept 1588: Armada defeated	Elizabeth I: Key events: Topic 3: Elizabethan society in the Age of Exploration, 1558–88 1560s: 42 grammar schools founded in England 1562 – 68: John Hawkins made three voyages to West Africa, capturing Africans and selling them as slaves to Spanish settlers in West Indies and Central America 1563: Statute of Artificers: to collect poor relief 1563 – 64: bad years for cloth trade: rising unemployment 1568 – 73: more bad years for cloth trade... 1569: Mercator introduces sea charts showing longitude and latitude Early 1570s: Bad harvests in England 1560s: 30 more grammar schools founded in England 1572: Vagabonds Act: to deter vagrancy 1572: Censorship introduced to theatre companies 1576: Poor Relief Act: distinguishing between able-bodied and impotent poor 1576: 'The Theatre' opened by James Burbage in London 1577: 'The Curtain' theatre opened Dec 1577: Drake's circumnavigation of the globe begins Nov 1580: Drake returns from circumnavigating the globe 1585: First voyage organised by Raleigh to North America, settling on Roanoke Island 1586 – 88: more bad years for cloth trade and rising unemployment 1587: 'The Rose' theatre opened 1587: Second voyage organised by Raleigh to North America, settling in North Carolina
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Keyword	Definition	Example(s)	Keyword	Definition
Asymptote	A line which a graph tends towards but never reaches.	$y = \tan x$ has asymptotes at $x = \pm 90^\circ$, $x = \pm 270^\circ$	Population	A population is the set of items that you are interested in.
Bearings	Angles with a given direction. Always measured clockwise from North and written using 3 digits.	093° 125°	Census	A census is a survey of the whole population.

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

SINE RULE

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

COSINE RULE

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

Area of Triangle = $\frac{1}{2}ab \sin C$	TRANSFORMATIONS OF FUNCTIONS $y = -f(x)$: represents a reflection in the x-axis $y = f(-x)$: represents a reflection in the y-axis $y = -f(-x)$: represents a reflection in both axes, equivalent to a rotation of 180° about (0,0). $y = f(x) + a$: represents a translation through $\begin{pmatrix} 0 \\ a \end{pmatrix}$ $y = f(x + a)$: represents a translation through $\begin{pmatrix} -a \\ 0 \end{pmatrix}$	Keyword Random Summary Statistics Random Number Generator Capture/Re-capture Lower Quartile (Q_1) Upper Quartile (Q_3) Interquartile Range Frequency Density Definition Definition A sample is truly random if every item has an equal chance of being chosen. The summary statistics of an unbiased sample, act as estimates of the summary statistics for the whole population. Calculators have the ability to randomly generate decimal numbers between 0 and 1. We can use these to randomly identify data for consideration. A method used to estimate the population of a species of animal, by capturing, tagging and re-capturing a sample. Calculated as the $\frac{n+1}{4}$th value in a set of n data values. Estimated as being the $\frac{n}{4}$th data value within large data sets. Calculated as the $\frac{3(n+1)}{4}$th value in a set of n data values. Estimated as being the $\frac{3n}{4}$th data value within large data sets. IQR = Upper Quartile – Lower Quartile. It is a measure of how spread out the middle 50% of the data is. Frequency Density = $\frac{\text{Frequency}}{\text{Class Width}}$ Used in creation of histograms when group intervals are uneven.
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CUMULATIVE FREQUENCY GRAPHS:

- Cumulative frequency is found by adding up the frequencies.
- The y-axis is **cumulative frequency**
- Points are plotted at the top end of the class intervals.
- Points are joined with a smooth curve.

Age in Years	Cumulative Frequency
0	0
10	5
20	15
30	25
40	35
50	40

BOX PLOTS:

- Requires 5 key pieces of data.
- The width of the box represents the IQR.
- There is a single horizontal scaled axis.

Statistic	Value
Minimum value	20
Lower Quartile	45
Median	65
Upper Quartile	85
Maximum value	100

HISTOGRAMS

- Used to represent grouped, continuous data.
- Area of the bars represents **frequency**.
- Y-axis represents **frequency density**.

Length (cm)	Frequency Density
0-10	1
10-20	2
20-30	4
30-40	5
40-50	3
50-60	2
60-70	1
70-80	1

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Unit Beethoven: 1st movement from Piano sonata no. 8 in C minor ('*Pathétique*')

Structure

Bridge passage another term for transition

Coda a section sometimes added at the end of a piece or movement.

Codetta a short coda at the end of a section within a piece or movement.

Development second section in sonata form in which the themes of the exposition are developed and a variety of keys are explored

Exposition first section in sonata form – contains first subject in tonic and second subject in a different but related key – dominant or relative major

First subject the first theme or melody in Sonata form.

Recapitulation final section of a sonata form which repeats the material of the exposition, but this time all in the tonic key.

Second subject the second theme or melody in sonata form.

Sonata form a large-scale form developed in the Classical era comprising exposition, development and recapitulation.

Transition a linking passage often used to modulate (change the key of the music) in preparation for the second subject in Sonata form.

Context

Classical era the musical period from ~1750-1820.

Patronage a system where composers earned money from a wealthy individual for writing music.

Romantic era the period of musical history from ~1810-1900

Romanticism the artistic and intellectual movement behind the Romantic era. Romanticism is characterised by an emphasis on an individual's expression of emotion and their freedom of imagination, as well as a love of the natural world. Another common theme was individual rebellion against established social rules and conventions, which led to the rise of the virtuoso heroic soloist in Romantic concertos.

Dynamics

Crescendo gradually getting louder.

Diminuendo gradually getting quieter.

Fortissimo very loud

Sforzando (**sf** or **sfz**) an accent showing that a note or chord should be played with greater force than those surrounding it.

Rhythm

Rit./Ritardando slowing down.

Tempo rubato (usually just **rubato**) Literally 'robbed time'. The tempo is sped up and slowed down for expressive effect.

Texture

Alberti bass a figuration common in the Classical period, using broken chords as an accompaniment.

Homophonic a texture comprising a melody with accompaniment.

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



Year 10

Unit Beethoven: 1st movement from Piano sonata no. 8 in C minor ('Pathétique')

Harmony

Cadential relating to a progression of chords forming a cadence.

Consonant intervals or chords that sound pleasant; triads and intervals of a third and sixth are examples.

Diminished seventh a four-note chord (tetrad) made up entirely of minor thirds.

Dissonant intervals or chords that clash—seconds, sevenths and the tritone (augmented fourth or diminished fifth).

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

Dominant seventh chord V with added minor seventh.

Harmonic rhythm the rate at which the chords change.

Imperfect cadence a cadence ending on chord V. Sounds incomplete.

Interrupted cadence a cadence with chord V followed by chord vi—interrupts an expected perfect cadence.

Inversion chords with a note other than the root in the bass.

Pedal a sustained or repeated note in the bass, while the harmony changes.

Perfect cadence Chord V followed by chord I at the end of a phrase.

Melody

Appoggiatura an ornament sometimes referred to as a 'leaning in' note. The appoggiatura leans on the main note, usually taking half its value and starting a step higher.

Articulation the manner in which a note or sequence of notes is played—for example staccato, legato, accented etc.

Chromatic from the Greek word for colour. In harmony, notes and chords that are not diatonic (part of the key of the music). In melody, ascending or descending in semitones.

Conjunct movement by step.

Diatonic notes that belong to the key of the piece.

Legato played smoothly

Lyrical songlike, flowing

Mordent an ornament that goes quickly from the main note to the note above (upper mordent) or below (lower or inverted mordent) and back again.

Octave An interval covering eight diatonic notes.

Ornament notes that decorate a melody, shown by small (grace) notes before a note or symbols above it.

Sequence repetition of a musical phrase at a higher or lower pitch than the original.

Staccato played in a detached manner

Instrumentation

Range The distance from the lowest to the highest notes an instrument can play.

Register how high or low a piece, or passage, sounds.

Tonality

Passing modulation modulations where the new key on lasts a few bars (or less) before modulating to another key.

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





Keyword	Learn	✓
Intimacy	a close, familiar, and often affectionate or loving personal relationship with another person or group.	
Pleasure	enjoyment or satisfaction derived from what is to one's liking	
Consent	is an agreement by choice made by someone with the freedom and capacity to consent.	
Readiness	the condition of being ready.	
Respect	due regard for the feelings, wishes, or rights of others.	
Pressure	to force (someone) toward a particular end; influence.	
Persuasion	to move by argument, entreaty, or expostulation to a belief, position, or course of action	
Coercion	the practice of persuading someone to do something against their will by using force or threats.	
Pornography	the depiction of erotic acts in a sensational manner so as to arouse a quick intense sexual excitement	
Controlling	behaviour inclined to exercise arbitrary and overbearing control over others.	
Manipulation	to control a person or situation to one's own advantage by artful, unfair, or insidious means	

Help and support:

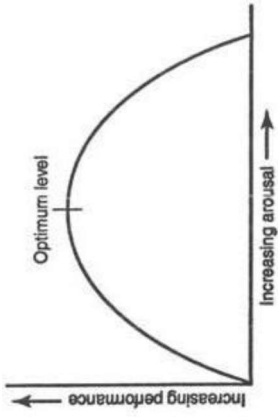
ChildLine: www.childline.org.uk 0800 1111
Brook: www.brook.org.uk 0808 802 1234
Samaritans: www.samaritans.org 116 123
Thinkuknow: www.thinkuknow.co.uk/14_plus/Need-advice/Porn
Contact CEOP www.ceop.police.uk/Safety-Centre (to report abuse online)
Call the Police (999 for an emergency, 101 to report a non-urgent crime)
Contact Victim Support: www.victimsupport.org.uk
Refuge: www.refuge.org.uk
Mankind: www.mankind.org.uk
Domestic abuse helpline: 0808 2000 247

Relationship advice:

- **Be respectful** at all times
 - **Communicate clearly**, share your thoughts and seek the thoughts of others without judgement
 - **Safety**, keep each other safe
 - **Consent**, it is the person seeking consent who is responsible for ensuring that these conditions are met. Ask, do not assume.
- Remember – the law is there to protect young people.** Naked images of under 18s are illegal, but you will not be in trouble with the police if someone has made you share an image of yourself. The law was created to protect young people, not get them into trouble. **NOTE:** You will be trouble if you share naked images of others who are under 18; with or without their consent.



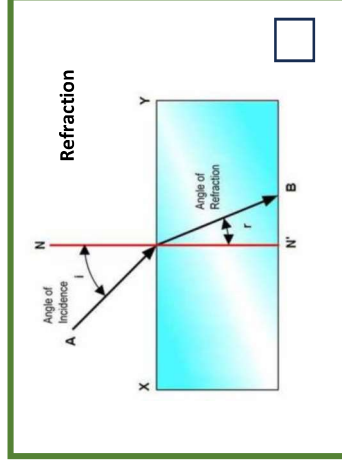
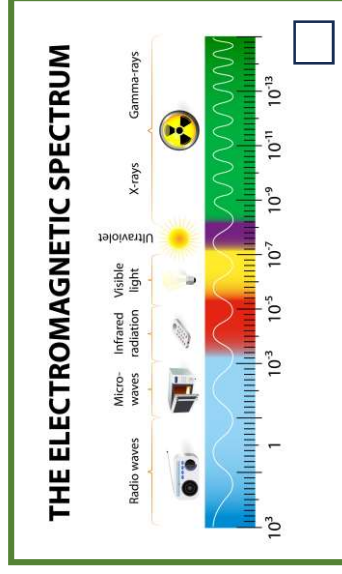
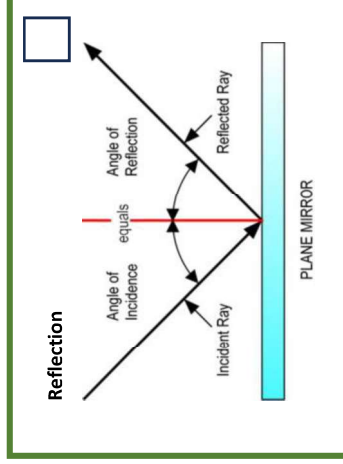
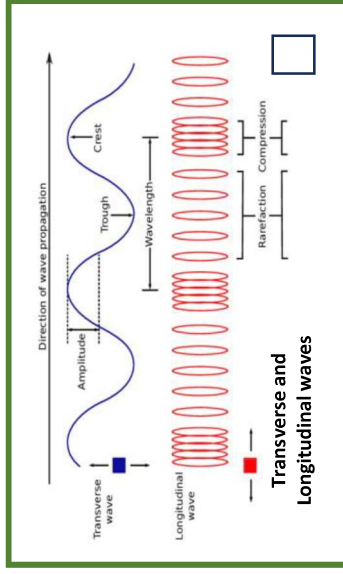
Chapter 4 – Sports Psychology

Tick	Knowledge of Performance	Tick
3.2.1.4– Guidance Manual Guidance- Involves a coach physically moving a performer into the correct position or supporting them as they perform a skill. Advantages It is good for complete beginners It allows the performer to develop the correct feel Disadvantages A movement can feel different when someone is moving you A performer may not feel that they are doing the action	Advantages: many aspects to one performance, so the feedback can be very detailed for experienced performers or focus on one or two aspects for beginners Disadvantages: challenging to break a performance down in order to provide the detailed feedback required for experienced performers. 3.2.1.5—Arousal Arousal is a physical and mental state of alertness / readiness, ranging from deep sleep to intense excitement or alertness. Gross movement skills usually require higher arousal levels than fine movement skills. Arousal is linked to the quality of performance, if your arousal is too low for the task you will underperform. Equally if your arousal is too high for the task taking place you will often over perform or “burn out”  Deep breathing — taking slow, deep breaths whilst relaxed to reduce the heart rate. Mental rehearsal — cognitive relaxation techniques involving control of mental thoughts and imagining positive outcomes. Positive self talk — a cognitive relaxation technique involving developing positive thoughts about your performance.	
Positive Feedback Advantages: It is motivational for the performer, particularly for beginners. It makes all the performers feel that they had successful aspects to their performance. Disadvantages: It can emphasise positive aspects too highly and suggest that the overall performance was better than it actually was. Negative Feedback Advantages: It enables a coach to provide guidance on how a skill should be performed correctly or better. It can help performers to prioritise the specific skills they need to improve. Disadvantages: It can be very demoralising particularly for beginners. Too many negative comments can leave the performer struggling to know how to respond. This is particularly the case for beginners.	Aggression Aggression — often defined as a deliberate intent to harm or injure another person. It can be physical or mental. Direct aggression — an aggressive act that involves physical contact with others. Indirect aggression — an aggressive act that does not involve physical contact. It can be taken out on an object to gain an advantage. Personality Types Introvert — a quiet, shy, passive and reserved person. Usually associated with individual sports. Extrovert — a sociable, active, talkative and outgoing personality type. Usually associated with team sports. Motivation Motivation — the drive to succeed, or the desire to achieve or be inspired to do something. It can be intrinsic or extrinsic. Intrinsic — the drive to succeed that comes from within. Extrinsic — the drive to perform well or to win in order to gain external rewards.	
Mechanical Guidance Advantages It is good for dangerous sports It can allow a performer to perform a skill without fear of injury It is good for building confidence Takes place when objects or aids are used to assist in the coaching process. Disadvantages Equipment can be expensive Performers can come to rely on the aid		
Knowledge of Results Advantages: It gives the performer a quick measure of their success. Disadvantages: It can be demotivating for other performers in situations where there can be only one winner		

Chapter 6 – Waves

Keyword	Learn	✓
Mechanical Wave	Disturbances that travel through matter, transferring energy from one place to another.	
Electromagnetic wave	Transverse waves. Their vibrations or oscillations are changes in electrical and magnetic fields at right angles to the direction of wave travel.	
Transverse wave	In transverse waves, the vibrations are at right angles to the direction of wave travel.	
Longitudinal wave	In a longitudinal wave, the vibrations are parallel to the direction of travel.	
Amplitude	The maximum displacement of a vibration or oscillation, measured from the position of equilibrium.	
Wavelength	The length of one wave measured in metres.	
Frequency	The number of waves passing a point in one second.	
Law of reflection	angle of incidence = angle of reflection, $i = r$.	
Refraction	When light moves from less dense to more dense mediums the angle of refraction is less than the angle of incidence (and vice versa).	
Ultrasound	Any sound wave that has a frequency higher than the range of human hearing, so above 20 000 Hz (20 kHz).	
Specular reflection	When all parallel rays of light are reflected in the same direction (this happens with a plain, smooth reflector like a mirror).	
Diffuse	When parallel light rays are reflected in multiple directions.	

Equations:

Wave Speed (m/s) = wavelength (m) x frequency (Hz), $v = \lambda \times f$ Frequency (Hz) = $1 / \text{the period of the wave (s)}$, $f = 1 / T$ 

Drawing ray diagrams – the rules

Draw a lens (be it concave, convex or any other).

Draw an object on the right or left side of the lens.

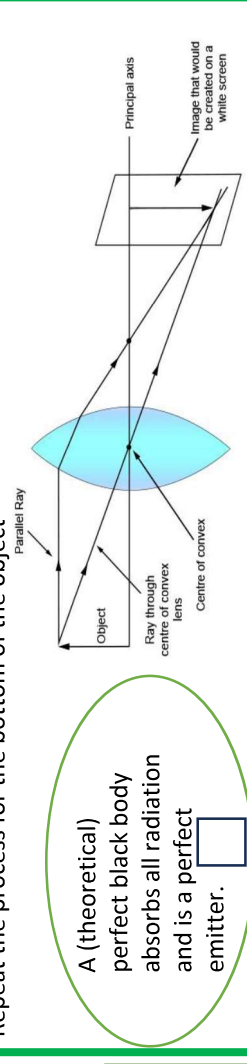
Draw a minimum of two rays starting from a single point (top of the object).

Draw a ray from the object to the lens that is parallel to the principal axis. Once through the lens, the ray should pass through the principal focus.

Draw a ray which passes from the object through the centre of the lens.

Locate and mark the image of the top of the object.

Repeat the process for the bottom of the object





<u>Religious teachings about human sexuality</u> Human sexuality: refers to how people express themselves as sexual beings. Heterosexual: Sexually attracted to members of the opposite sex. Homosexual: Sexually attracted to members of the same sex. For homosexual relationships Reform Jews believe that loving, committed homosexual relationships should be allowed.		<u>Sexual relationships before and outside of marriage</u> Adultery: voluntary sexual intercourse between a married person and someone who is not their husband or wife. Sex before marriage Some liberal Christians believe that sex before marriage can be a valid expression of love, as long as they are in a committed relationship. Others argue that sex before marriage is wrong. Traditionally, Judaism considers sex before marriage as sinful and wrong. Sex outside marriage Adultery is against one of the Ten Commandments 'thou shalt not commit adultery' Exodus 20:14 (Judaism and Christianity) Both religions believe adultery breaks the spiritual bond of marriage.	<u>Contraception and family planning</u> Contraception: methods used to prevent pregnancy (e.g. condoms, the pill - artificial), the rhythm method - natural Most Christians and Jews accept family planning in certain circumstances, but not to stop having children altogether. Christian views Catholics - artificial contraception goes against natural law. Sex should be about creating new life (rhythm method is allowed). Other Christian's contraception should be allowed for family planning. Jewish views Orthodox accepts use of contraception by married couples Reform allow contraception for many reasons including social and financial reasons.
<u>Divorce and Remarriages</u> Divorce: legal ending of marriage Remarriage: when someone marries again while their former husband or wife is still alive. Why do people get divorced? Adultery, people changing and growing apart, work and money pressures, addiction, inability to have children etc. Religious views on divorce and remarriage Some Christians believe in the sanctity of marriage and divorce is wrong. Catholics can separate but not remarry whilst their partner is still alive. Other Christians believe divorce is the lesser of two evils and should be allowed. Jews believe marriage is a voluntary contract, so divorce is allowed.		<u>Religious Teachings about Marriage</u> Marriage: legal union between a man and woman as partners in a relationship (same-sex marriage is legal in the UK) Cohabitation: refers to a couple living together and having a sexual relationship without being married. What is the nature and purpose of marriage? Jews have a binding contract (Ketubah) that protects the woman's financial security. It provides a secure foundation to raise a family. Christians believe marriage is the proper place to enjoy sex, raise children and provide a secure and stable environment for family life. Cohabitation and same - sex marriage Catholics and Orthodox Jews oppose cohabitation as they believe sex should only take place within marriage. Against same-sex marriage Reform and liberal Jews → accept same-sex marriage & cohabitation.	<u>The nature of families</u> Different types of families Nuclear family- a mother, father and children (most common family type in the west). Extended family › includes grandparents and other relatives. Jews view themselves as an extended family, descending from Abraham, Isaac and Jacob . Some Christians and Orthodox Jews disapprove as they believe children should have both male and female role models. Polygamous families are when a man has more than one wife. Illegal in UK Role of parents- to love and care for children, educate them about their faith, encourage positive morals and values. Role of children- to love and respect parents, support and care for them.
<u>The Purpose of Families</u> Procreation: bringing babies into the world. For Christians and Jews , the purpose of families is to procreate, educate children in the faith and to protect children and keep them safe. Procreation. Mainly takes place within the family. Jews consider a large family a blessing from God. For Christians , procreation is an important purpose of the family. Stability and the protection of children Families provide secure, stable environments for children to grow up in. Educating children in a faith – In Judaism , the Shema instructs parents to teach children God's laws. Christians are expected to teach children good morals and Christian values.		<u>Religious Attitudes to Gender Equality</u> Gender equality: men and women should have the same rights and opportunities as each other. Gender prejudice: holding biased opinions about people based on their gender. Sexual stereotyping: having a fixed idea or image of how men and women will behave. Gender discrimination: acting against someone on the basis of their gender. Christians believe all people are created in the image of God. "There is neither Jew nor Gentile" Galatians 3:28 [NIV] In Reform Judaism , women can be rabbis however this is not allowed in Orthodox Judaism . Women take on more traditional roles within Orthodox Judaism.	<u>KISSJO SKILLS:</u> Knowledge Impact Specialist language Source Judgement Opinion



¿Qué ropa llevas en el insti?	
llevo	I wear
un uniforme	a uniform
una camisa	a shirt
una corbata	a tie
una chaqueta	a jacket
un jersey	a jumper
un pantalón	trousers
una falda	a skirt
unos zapatos	shoes
unas zapatillas de deporte	trainers
una camiseta	a t-shirt
un vestido	a dress
ropa deportiva	sports clothing
me gusta mi uniforme porque es	I like my uniform because it is
cómodo	comfortable
barato	cheap
no me gusta nada mi uniforme	I don't like my uniform at all
es incómodo	it is uncomfortable
caro	expensive

Mis clubs escolares	
Soy capitán del equipo	I am captain of the team
Soy miembro de un club	I am a member of a club
Ayudo con la radio escolar	I help with the school radio
Toco en la orquesta	I play in the orchestra
¿Cuánto tiempo llevas...?	How long have you been...?
Llevo dos años haciendo...	I have been doing... for two years
participando en	participating in
jugando al / a la	playing
¿Por qué te gusta esta actividad?	Why do you like this activity?
Me encanta porque	I love it because
En mi opinión, hacer...	In my opinion, doing...
te permite	allows you to
te anima a	encourages you to
te ayuda a	helps you to
aprender cosas nuevas	learn new things
desarrollar tus talentos	develop your talents
hacer nuevos amigos	make new friends
ser creativo	be creative
te hace sentir orgulloso	makes you feel proud

Después de mis exámenes	
Cuando termine mis exámenes	When I finish my exams
Cuando sea mayor	When I am older
Si pudiera	If I could
Si tuviera la oportunidad	If I had the opportunity
Me gustaría + infinitive	I would like to
Me encantaría + infinitive	I would love to
Quiero + infinitive	I want to

Key vocabulary	
el instituto / el colegio	the school
la escuela	the school
los estudios	studies
formación	training
el curso escolar	the school year
el año escolar	the school year



Preterite (past) tense

-ar verb endings preterite		
-é		-amos
-aste		-asteis
-ó		-aron

-er verb endings preterite		
-í		-imos
-iste		-isteis
-ió		-ieron

-ir verb endings preterite		
-í		-imos
-iste		-isteis
-ió		-ieron

Un viaje escolar	
Visitamos	We visited
Fuimos	We went
Hicimos	We did
Asistimos	We went
Hicimos	We did
Un viaje de fin de curso	An end of year trip

Past tense opinions	
Pensé que	I thought that
Mi amigo pensó que	My friend thought that
Lo pasé bomba	I had a blast
Fue genial	It was great
Fue inolvidable	It was unforgettable

Mi escuela primaria	
When talking about your primary school, you can use the following verbs:	
era	it was
tenía	it had
había	there was
e.g. Mi escuela primaria era grande. (My primary school was big)	
Tenía una biblioteca. (It had a library)	
Había un gimnasio (There was a gym)	

The conditional tense	
The conditional tense is formed by taking the infinitive and adding the endings seen below.	
The endings are the same for AR, ER and IR verbs	
Infinitive + ending = conditional tense	
estudiar + ía = estudiaría (I would live)	
Estudiar	To study
estudiaría	I would study
estudiarías	you would study
estudiaría	he/she would study
estudiaríamos	we would study
estudiaríais	you all would study
estudiarían	they would study

Useful conditional verbs	
iría	I would go
vía	I would travel
visitaría	I would visit
trabajaría	I would work
organizaría	I would organise
mejoraría	I would improve
permitiría	I would allow
reduciría	I would reduce
ofrecería	I would offer
construiría	I would build
pondría	I would put

¿Cómo vas al insti?	
Voy al insti...	I go to school...
A pie	On foot
En coche	By car
En tren	By train
En autobús	By bus
En bici	By bike
A las siete y media	At half past seven

¿Cómo es tu día escolar?	
Las clases empiezan...	Classes start...
Las clases terminan...	Classes finish...
Cada clase dura	Each class lasts
Cincuenta minutos	Fifty minutes
Hay un descanso a las...	There is a break at...
La hora de comer es...	Lunch is at...
A las siete y media	At half past seven

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

Timetable

[illegible]