PUDSEY
GRAMMAR SCHOOL

EST.1905

KNOWLEDGE ORGANISER

YEAR 11

Student Name: .....

Year and Form: .....

★ RESPECT ★ RESILIENCE ★ INTEGRITY ★ COMPASSION ★ AMBITION

INDEX

GCSE Fine Art AO1/2/3 Develop/Refine /Record

Composition techniques

There are a number of different ways composition can be developed:
Move objects around in a still life or change the pose in portraiture or figure composition.
Try different arrangements, e.g. linear, triangular or circular compositions.
Change how natural, organised, busy or sparse your composition is.
Use different amounts of **negative space**, showing more or less background.
Experiment with **leading lines** to draw the viewer's eye into the composition.
Change the height and angle of your viewpoint.
Use frames within frames e.g. looking through objects to frame elements of the composition.
Create a cropped composition by zooming in to a specific area.
Try different backgrounds.
Remember to link this to at least 2 of the artist you have looked

Refining ideas

After your initial development you should select an idea and work on refining it. Refinement is the improvement of the idea. It does not involve radical changes, but is about making small changes which improve the idea in some way. This might be done by

Modification of the composition – e.g. replacing one object with another or changing a pose slightly
Variation of a technique – e.g. trying oil pastel rather than painting to achieve an expressive style
Adaptation of the idea – e.g. including some detail in the foreground of a landscape to add more depth and distance
Alteration of an aspect – e.g. arranging objects in a triangular composition instead of a linear grouping, or changing the colour of the sky in a coastal scene to achieve a more dramatic atmosphere
Enhancing an element of the idea – e.g. improving the application of a particular technique, or harmonising the background colours with other aspects of the composition
Fine-tuning a technique or an aspect of the composition.
Tweaking the positioning of a subject to make the composition more balanced, or to create more tension, as appropriate.

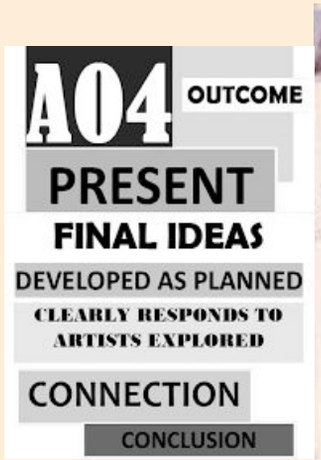
Composition using technology

Taking photographs of different arrangements can help development:
You can try out different viewpoints and arrangements quickly.
It is easy to change between landscape and portrait format to try different effects.
The camera's viewfinder can be used to 'frame' compositions and preview the result.
Working from photographs can be more practical for subjects that might move or where conditions might change.
New compositions can be created by cropping existing images digitally.
Remember that artists use photography as a tool to record visual information.
It is still important to create your own personal response to the image by experimenting with materials and techniques.

GCSE Fine Art AO4 Present

Present

This means you will present a personal and meaningful response that realises your ideas and your understanding of the artists and the different materials you will use



Planning your Personal Response

Remember to think about the following points when planning your final piece:
The arrangement of your images think about linear, triangular or circular compositions.
How natural, organised, busy or sparse your composition is.
Use of negative space, showing more or less background.
The use of leading lines to draw the viewer's eye into the composition.
The use of height and angle of your viewpoint..
The use of cropped composition by zooming in to a specific area.
How you have use developed the background.
Practise with the materials you will use in your final piece
Remember to annotate your work explaining what oy have done

Producing your Personal Response

Take photographs of your work at different stages:
Work on board, canvas or paper the materials need to suit your strengths and the style of the artists or art movement you have looked at in your sketchbook
Create a piece that has impact and is bold that highlights your skills and understanding.
Your composition may change from your planning of your final piece, you need to explain this within your evaluation
It is still important to create your own personal response to the project by experimenting with materials and techniques.

Final piece and Evaluation of your work

After your have planned out and refined your idea for your final piece you will need to produce a larger version. This can be on any size or any background from card to canvas. You can adapt and change your final piece from your plan if needed.

Once this is complete you will need to take a photograph of your final piece and evaluate your work. Remember to look back at your statement of intent that you wrote at the start of the project, have you achieved what you set to do?

Prompt question for your evaluation

Describe your work and how it has developed over the project, does it link to the starting point? How and Why?

What changes have I made to my work and why did I do this?

Do you feel your final piece is successful and how does it link to the artists and art movements you have looks at?

What materials and techniques you have used within your work?

Fine Art GCSE Exam Prep & Art Exam NEA

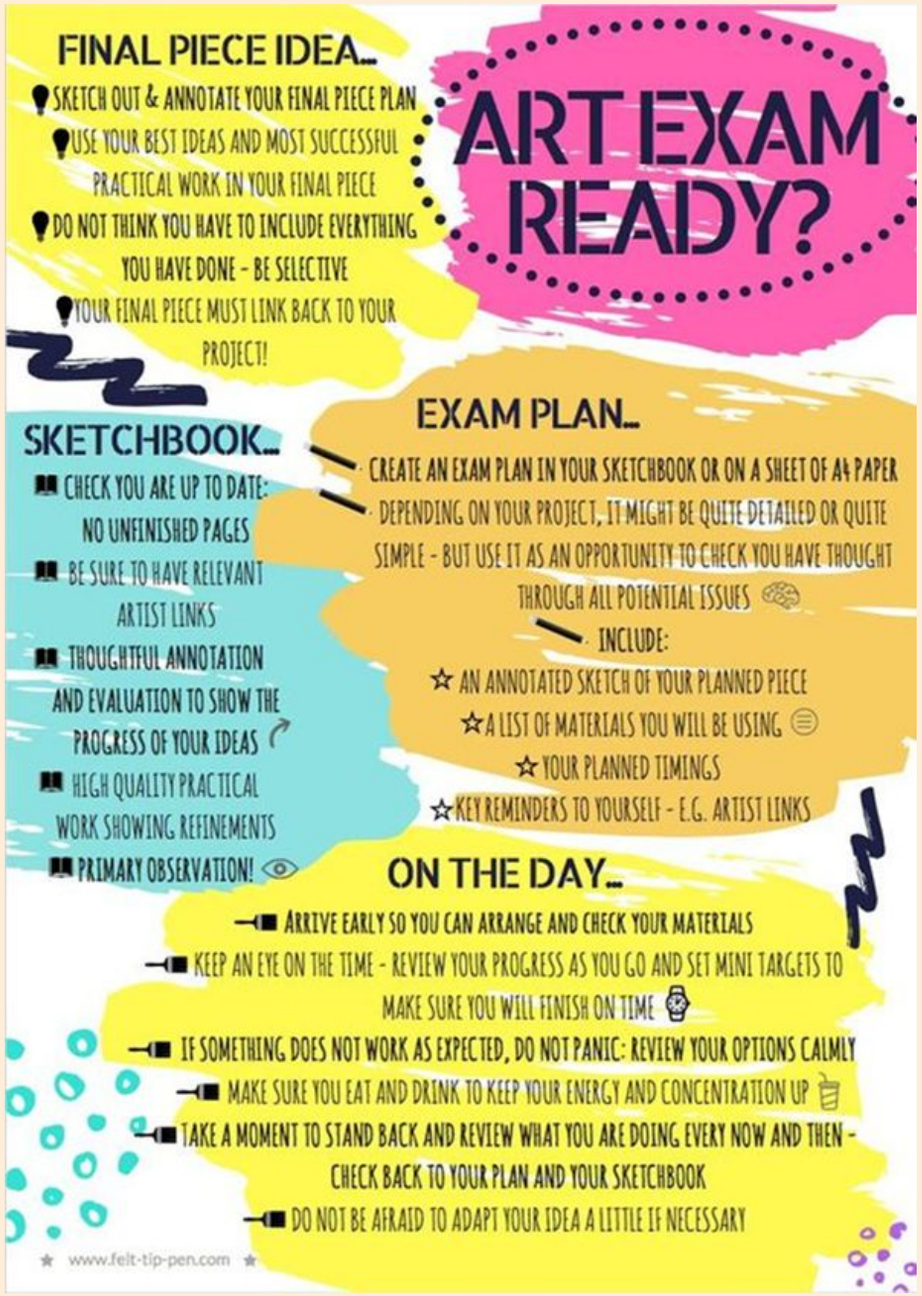
Externally Set Task

Using the skills, knowledge and understanding you have developed over the course you will be expected to create a project based on a starting point given to you by the exam board.

Sketchbook for Externally Set Task

will be completed from 2nd Jan up until the 1st day of the exam and will include:-

- Title page with chosen question
- Mind map
- Mood board
- 1st Artist research small copy & own response
- 2nd Artist research small copy & own response
- 15-20 photographs linked to your chosen project/artists
- Observational studies pencil x2
- Observational studies colour and other materials x3
- Experimentation page including mark making and the use of other materials
- Design idea 1 these need to be sketch out developed and an A3 piece within the sketch book
- Design idea 2 these need to be sketch out developed and an A3 piece within the sketch book
- Final Design Idea planned and sketched out in sketch book with annotation
- Annotations throughout the sketchbook supporting your ideas
- Final piece to be completed in 10hr under exam conditions



Theme 2

2.1.1 Business growth
Methods of internal growth (organic)
- New products developed through research and development and innovation
- New markets (through changing the marketing mix or taking advantage of technology and/or expanding overseas)

Methods of external growth (inorganic)
- Merger- When two companies come together
- Takeover- When on company takes over another

2.1.2 Changes in business aims and objectives
Why business aims and objectives change as businesses evolve: ● in response to: market conditions, technology, performance, legislation, internal reasons such as getting a new leader.
How business aims and objectives change as businesses evolve: ● focus on survival or growth ● entering or exiting markets ● growing or reducing the workforce ● increasing or decreasing product range.

2.1.3 Business and globalisation
The impact of globalisation on businesses:
Imports: create competition for UK firms from overseas businesses
Allow UK businesses to buy from overseas
Exports: Give UK business the opportunity to sell to overseas markets therefore gaining market share.
May lead to business relocating to be closer to their target market Encourage multinational businesses to operate in different countries in order to avoid tariffs
Barriers to international trade: The two main methods of discouraging imports are tariffs and trading blocs
How businesses compete internationally: One of the main ways of competing internationally is using the internet to access a worldwide audience with very little start up costs.
A business may need to change its marketing mix to compete internationally

2.1.4 Ethics, the environment and business
Ethical considerations impact business activity in every department and there is usually a trade off with profit
HR- Treating employees fairly
Production- Fairtrade, child labour, working conditions Marketing-Cultural considerations, being honest in adverts

2.2 Making marketing decisions
Product
The design mix- This is the formula of function, cost and aesthetics that the business uses to create their product
The product life cycle- The stages in the product life cycle are introduction, growth, maturity (where extension strategies may be used) and decline
Price
Price skimming- Setting a price high because a product is new and unique then dropping it after a while eg Iphone
Penetration pricing- Setting a low price to gain market share then increasing it eg Actimel
Destroyer pricing- Setting prices so low that it destroys the competition eg Ryan Air
Psychological pricing- Using 99p at the end of the price so that the customer thinks it is cheaper
Premium pricing- This strategy is used by most branded products. It is charging a higher price because the consumer sees the product as having added value eg Mac make up
Influences on pricing strategies: technology, competition, market segments, product life cycle.
Place
This refers to where a product or service is sold. There are two main options; to become a retailer or an e-tailer
Retailer- Sells in a store
E-tailer- sells online
Promotion
This is how a business gets their brand out into the public eye. There are lots of options for promotion including advertising, sponsorship, product trials, special offers, and branding

Retained profit- Profit kept from previous years trading
Sale of assets- Selling items that the business owns such as a van
Loan capital- Money from a bank loan
Share capital- Money raised from selling shares
Stock market flotation- Selling shares on the stock exchange
Aim- A long term goal
Objective- A step taken to achieve a goal
Legislation- A law
Imports- A good bought from abroad
Export- A good made in the UK but sold abroad
Tariff- A tax on imported good that makes them more expensive
Trade bloc- A group of countries who agree to trade freely together
E-commerce- Buying and selling online The marketing mix- Price, product, promotion and price
Ethics- What is considered morally right or wrong in a business situation
Trade off- This refers to the trade off between ethics and profit. Acting ethically reduces profit due to increased costs
Pressure group- A group of people that try to influence a business' behaviour
Product life cycle- The stages all products pass through from research and development to being taken off of the market
Extension strategy- This takes place in the maturity stage of the product life cycle and its aim is to extend the lift of the product and prevent it going into decline. Examples including new packaging or new flavours
Prod**uct differentiation-** Giving your product a USP so that it stands out from other products

Theme 2

2.3 Making operational decisions
The purpose of business operations is to make goods and services
Three main types of production
- Job production- Making one of unique products. Involves lots of labour and is expensive
- Batch- Making batches of products. Often used in bakeries
- Flow- Continuous automated production

Working with suppliers
Benefits of just in time
- Stock does not go out of date
- Stock cannot be stolen
- Storage and security fees are less
- Discourages waste
- Capital is not tied up in stock

Drawbacks
- Cannot fulfil demand if a delivery is late
- No spare stock if mistakes are made or a component is faulty
- Poor weather can impact deliveries
- Cannot cope with an unexpected spike in demand

The role of procurement
The role of procurement is to build relationships with suppliers. This allows the business to control the quality of their product. It also means they can ensure that delivery occurs reliably, at a cost and speed they are happy with.
The procurement decisions made will impact:
- Costs- The cost of raw materials and delivery
- Reputation- Good procurement should mean the business can always fulfil demand
- Customer satisfaction

Managing quality
Managing quality is important to a business because it helps them to control cost and create a competitive advantage.
There are two main methods of controlling quality, quality control and quality assurance.
Quality assurance- Quality is everyone's job. Each person is responsible for their part of the production process and refuses to take faulty production from the stage before. This means that products are checked throughout the process for faults. **Benefits**
- Less waste as faults are identified earlier in the production line
- Better quality as quality is checked at each point in the production process
- Better customer satisfaction through better quality
- Lower costs through less wastage
- More motivated staff as they are empowered by having responsibility for quality

Drawbacks
- Cost of staff training
- Quality has to be part of the culture to work

Quality control- Quality is the job of the quality control manager. They spot check products at the end of the production line.
Drawbacks
- Higher managerial costs
- Higher wastage as faulty product aren't picked up until the end of the production process
- Creates an us and them culture as employees may feel that the quality control manager is checking up on them
- Lower customer satisfaction due to higher levels of faulty products being sent out

The sales process
1. Product knowledge
2. Speed and efficiency of service
3. Customer engagement
4. Responses to customer feedback
5. Post-sales service

The benefits of good customer service
- Better brand reputation
- More product trial
- Higher levels of repeat purchase
- Stronger brand loyalty
- Increased sales revenue

Automation- The use of machinery in production **Labour intensive-** A production process that requires lots of hours of labour
Cost per unit- This is the cost to produce one product
Productivity- The amount of finished products a worker is able to produce in a given period of time. The higher the amount, the lower the cost per unit. **Just in time-** A method of production where raw materials are delivered just in time for production **Just in case-** A method of production where buffer stock is kept just in case it is needed
Buffer stock- The minimum level of stock that a business holds
Lead time- The amount of time it takes an order to be delivered
Reorder level- This is the level at which a business will reorder raw materials
Procurement - getting the right supplies from the right supplier, at the right price and at the right time. Procurement is a vital component of business success, customers expect products to be available when they need them, and in the right quantity.
Logistics-making sure the correct products are procured and that they will arrive when needed. Logistics is a vital part of any businesses supply chain management. Logistics involves three main elements, transportation, storage and distribution.
Quality- making sure that products are made to a minimum standard expected by customers or better
Competitive advantage- Something that a business can do better than its competitors
Brand loyalty- When consumers try a brand and buy that to the exclusion of others
Sales revenue- Money from sales
Product trial- When a customer first tries a product

Theme 2

2.4 Making financial decisions
Gross profit = Revenue - cost of goods sold
Net profit= Gross profit- expenses
Gross profit margin(%)= Gross profit/revenue x 100
Net profit margin (%)= Net profit/revenue x 100
Average rate of return= Average profit/ cost of investment x 100

2.4.3 Understanding business performance
Market share= firms market share/size of the whole market x 100
Calculating a % change= Difference / original amount x 100
Revenue= Quantity sold x selling price
Averages= Add all amounts together/ number of years or months
Profit= Revenue – total cost
Net cash flow= Inflows- outflows
Total costs= fixed + variable costs
Closing balance = Opening balance + net cash flow

Organisational structures
Tall structure benefits
Opportunities for promotion
Small spans of control
Drawbacks
Communication takes longer and is poorer
Staff may feel overmanaged
Higher fixed costs from salaries

Flat structure benefits
More teamwork
More staff empowerment
Lower wages
Faster and more efficient communication

Drawbacks
Wider spans of control, managers might be stressed
Less opportunities for promotion

Communication
Barriers to effective communication- Jargon, excessive communication, insufficient communication, language barriers and time barriers
The importance of communication- Good communication means better customer service, more motivated employees and more efficient production which reduces costs
Different ways of working
Flexible working- Employees fulfil a number of hours in a month or year but can choose when as they do not have set hours

There are many different methods of training employees.
Formal training- such as courses and qualification
Informal training- sitting with colleagues to learn the role
Self learning- initiated by the employee themselves
Ongoing training- Delivered by the organisation
Performance reviews- The use of target setting to improve employee performance

Why businesses train and develop employees
Motivation- Investing in employees makes them feel loved which increases their motivation
Lower labour turnover- Happy employees are less likely to leave
Lower absenteeism- Happy employees are less likely to ring
in sick
Better quality products- Through increased motivation and staff training. Low levels of faulty products means lower costs for the business

Key terms
Gross profit- Profit left after the cost of goods sold has been taken away
Net profit- Profit that is left after both fixed and variable costs have been deducted **Gross profit margin-** This is the % of revenue that is turned into gross profit
Net profit margin- This is the % of revenue that is turned into net profit
Average rate of return- This is the average
yearly return (%) from an investment
Tall structure- A business structure with lots of layers in its hierarchy
Flat structure- A business structure that has few layers
Subordinate- Someone under the authority of someone else
Line manager- Someone who has authority over subordinates
Span of control- The number of people a manager is managing
Narrow span of control- The manager is managing less than five people
Wide span of control- The manager is managing more than five people
Hierarchy- The chain of command through which authority passes
Delegation- Giving a subordinate some of your authority
Empowerment- Giving employees power to make decisions which improves their motivation
Insufficient communication- Not enough communication
Excessive communication- Too much communication
Freelance contract- A person is hired for a specific project such as a wedding photographer
Remote working- Working from home

What is Abstraction

Abstraction

Abstraction is the process of removing unnecessary details and including only the relevant details.

It is a method of computational thinking that focuses on what is important when solving problems.

Road signs take away details that the driver doesn't need to see, whilst keeping the essential information.

Example of Abstraction

When you write a program to play a game involving dice with a computer, how does the computer “roll the dice”?

Algorithm:

- Create a variable to store the result
- Randomise a number between 1 and 6
- Set the number to be an integer
- Store the number inside the variable
- Display the data stored inside the variable

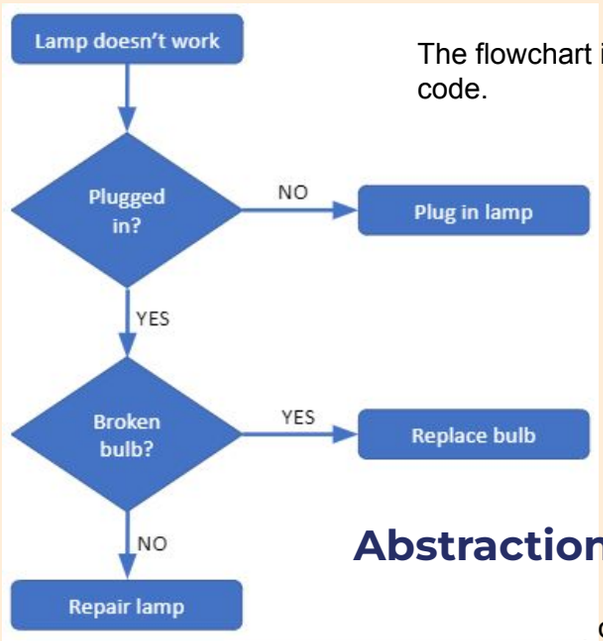
Abstraction:

- Randomise an integer between 1 and 6

Abstraction: Flowcharts

Flowcharts are another example of how we can use abstraction during program design.

The flowchart is an abstraction of the actual code.



Abstraction: Interface Design

ortant when designing the user interface of a sat-nav?

What is important to include in the display output?

What is less important?

Include

- Car location
- Road layout
- Additional icons for volume, time, battery life, etc.

Don’t include

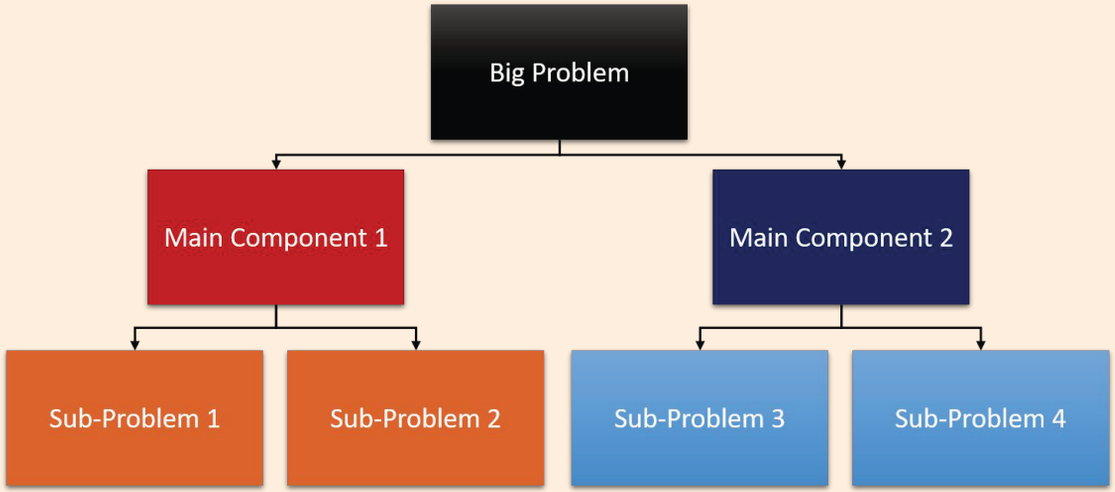
- Buildings
- Trees/countryside

Decomposition

What is Decomposition?

Decomposition means breaking a complex problem down into smaller, more manageable parts.

Dealing with many different stages of a problem at once is much more difficult than breaking it down into a number of smaller problems and solving them one at time.



Decomposition in daily life

There are many tasks that you do on a daily basis:

- Getting up in the morning
- Brushing your teeth
- Getting to school
- Doing your homework

These are complex tasks with many steps involved, but you break them down into smaller tasks and execute them without even thinking about it.

Even an everyday problem like crossing the road can be broken down into smaller sub-problems:

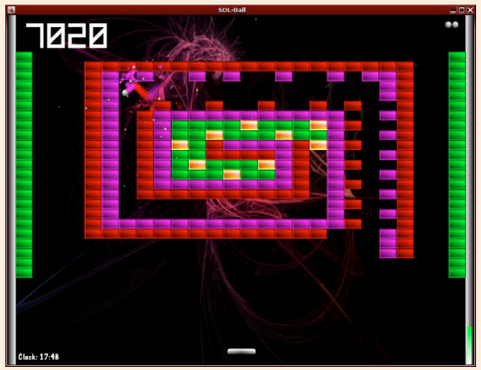
- Stop before crossing
- Look left and right
- Is the road clear?
- If not, press the crossing button
- Wait for the lights to turn red
- Cross when it is safe to do so

Breakout

How it works:

- A paddle controlled by the player moves along the bottom of the screen.
- The paddle can move left or right.
- A ball bounces off the paddle and is redirected towards the blocks.
- If the ball hits a block, it is removed from the screen.
- The aim is to remove all the blocks.
- If the ball leaves the bottom of the screen, the player loses a life.

How could we use decomposition to help us break down the tasks involved in programming this game?



Breaking down the problem:

- Display the paddle on the screen.
- Make it move left and right.
- Prevent it moving off the left and right edges of the screen.
- Display the ball on the screen.
- Get the ball moving.
- Display the blocks on the screen.
- Get collision detection working.
- Implement winning and losing.
- Add extras – flair, sounds, background, effects, graphics, etc.

Algorithms and Boolean Logic

What is an Algorithm?

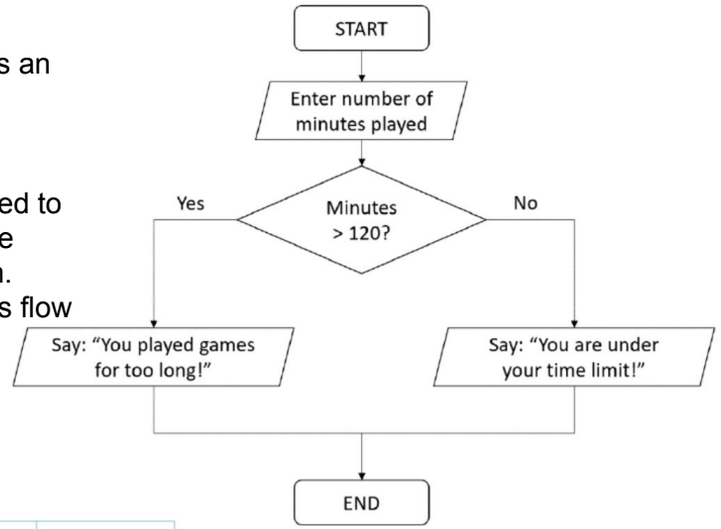
An algorithm is a logical, step-by-step set of instructions used to solve a problem.

Algorithms: Pseudocode vs Flowcharts

```
01  x = 0
02  while True
03      print x
04  endwhile
```

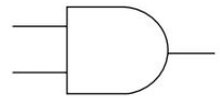
Pseudocode is not a programming language, it is a simple way of describing a set of instructions that does not have to use specific syntax. Writing in pseudocode is similar to writing in a programming language. Each step of the algorithm is written on a line of its own in sequence.

A **flowchart** is a diagram that shows an overview of a program. Flowcharts normally use standard symbols to represent the different types of instructions . These symbols are used to construct the flowchart and show the step-by-step solution to the problem. Flowcharts are sometimes known as flow diagrams.



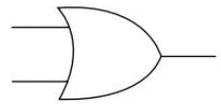
Flowchart Symbols

→	Line	▱	Input/ Output
▭	Process	◇	Decision
▭ with double bars	Sub program	⬭	Terminal

Boolean Operators	Logic Gate Symbol
AND *(Conjunction)*	

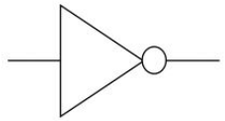
AND		
A	B	A AND B
0	0	0
0	1	0
1	0	0
1	1	1

An AND gate can be used on a gate with two inputs. AND tells us that both inputs have to be 1 in order for the output to be 1.

OR *(Disjunction)*	

OR		
A	B	A OR B
0	0	0
0	1	1
1	0	1
1	1	1

The OR gate has two inputs. One or both inputs must be 1 to output 1, otherwise it outputs 0.

NOT *(Negation)*	

NOT	
A	NOT A
0	1
1	0

A NOT gate has just one input. The output of the circuit will be the opposite of the input. If 0 is input, then the output is 1. If 1 is input, then 0 is output.

Topic A: Modern Technologies

What is an Ad Hoc Network?

A wireless **network** that transmits from computer to computer. Instead of using a central base station (access point) to which all computers must communicate, this peer-to-peer mode of operation can greatly extend the distance of the wireless **network**.

Tethering is the term used for broadcasting your phone's mobile signal as a Wi-Fi network, then hooking a laptop or any other Wi-Fi-enabled device up to it to connect to the internet.

What is Cloud Computing?

means a type of **Internet-based computing**, where different services including servers, storage and applications are delivered to an organization's computers and devices through the Internet.

Features and uses of cloud storage

- setting and sharing of access rights
- synchronisation of cloud and individual devices
- availability (24/7)
- scalability (getting more by renting/freeing to save money).

Features and uses of cloud computing

- online applications
- consistency of version between users (features, file types)
- single shared instance of a file
- collaboration tools/features.

Remote Working

Remote working is someone who is employed by a company, but **works** outside of a traditional office environment. This could **mean working** from a local coworking space, from home, at a coffee shop, or in a city across the world.

Changes to modern teams facilitated by modern technologies:

- world teams (not bound by geographical restrictions, diversity)
- multicultural
- inclusivity (facilitation of member's needs)
- 24/7/365 (no set work hours, team members in different time zones)
- Flexibility (remote working vs office based, permanent vs casual staff).

Positive and negative impacts of modern technologies on organisations:

- required infrastructure (communication technologies, devices, local and web-based platforms)
- demand on infrastructure of chosen tools/platforms
- availability of infrastructure
- 24/7 access
- security of distributed/ dispersed data
- collaboration
- inclusivity (age, health, additional needs, multicultural)
- accessibility (meeting legal obligations, provision requirements)
- remote working.

Positive and negative impacts of modern technologies on individuals:

- flexibility (home/remote working)
- working styles (choice of time, device, location)
- impact on individual mental wellbeing (depression, loneliness, self-confidence,
- separation from stressful environment, feel in control of own schedule, adjusted to meet needs of family, less time commuting).

A collaboration tool helps people to collaborate. The purpose of a collaboration tool is to support a group of two or more individuals to accomplish a common goal or objective. Such as Office 365, Google Apps, - Document sharing, Email, Shared message boards

Communication tools include mail, email, telephones, cell phones, smartphones, computers, video and web conferencing tools, social networking, as well as online collaboration and productivity platforms.

B Cyber Security / C Responsible Use

What is Cyber Security?

Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access

Why systems are attacked:

- fun/challenge
- industrial espionage
- financial gain
- personal attack
- disruption
- data/information theft.

Impact of security breach

- data loss
- damage to public image
- financial loss
- reduction in productivity
- downtime
- legal action.

External threats to digital systems and data security:

•unauthorised access/hacking (black hat)
•malware (virus, worms, botnet,, Trojan, ransomware, spyware)
•denial of service attacks
•phishing (emails, texts, phone calls)
•pharming
•social engineering
•shoulder surfing and 'man-in-the-middle' attacks.

Ransomware, is a type of malware that prevents users from accessing their system or personal files and demands ransom payment in order to regain access

Spyware is unwanted software that infiltrates your computing device, stealing your internet usage data and sensitive information. Spyware is classified as a type of malware

A botnet attack is a type of malicious attack that utilizes a series of connected computers to attack or take down a network, network device, website or an IT environment.

Encryption is the process of encoding a message or information in such a way that only authorized parties can access it and those who are not authorized cannot.

A **policy** is a set of ideas or plans that is used as a basis for making decisions, and is a written document in which a course or principle of action adopted or proposed by an organization or individual has to be followed.

Defining security parameters

- password policy (sets requirement of a password for a user)
- acceptable software/installation/usage policy
- parameters for device hardening

Environmental

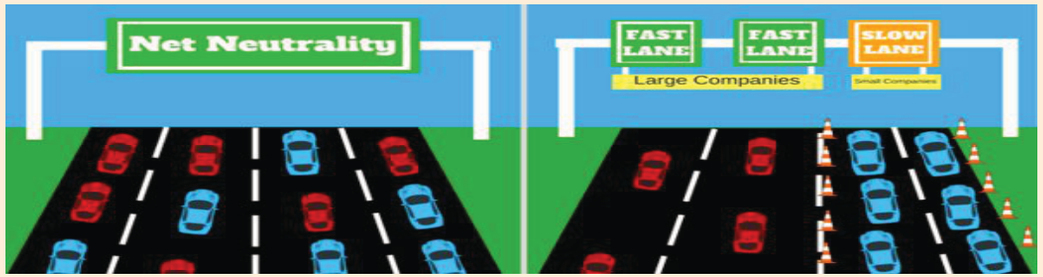
- impact of manufacturing, use, and disposal of it systems (energy, waste, rare materials)
- considerations when upgrading or replacing digital systems
- usage and settings policies (auto power off, power-saving settings, hard copy vs electronic distribution).

Disaster recovery policy

- who is responsible for what
- dos and don'ts for staff
- defining the backup process (what is backed up, scheduling, media)
- timeline for data recovery
- location alternative provision (hardware, software, personnel).

Net neutrality

Network neutrality is the principle that Internet service providers (ISPs) must treat all Internet communications equally, and not discriminate or charge differently based on user, content, website, platform, application, type of equipment, source address, destination address, or method of communication. With net neutrality, ISPs may not intentionally block, slow down, or charge money for specific online content.



C Legal / D Forms of Notation

Data protection principles

- lawful processing
- collected only for specific purpose
- only needed information is collected
- should be accurate
- kept only as long as is necessary
- data subject rights protected
- not transferred to countries with less protection.

Data and the use of the internet

- the right to be forgotten
- appropriate and legal use of cookies and other transactional data.

Dealing with intellectual property

- the importance of intellectual property in organisations
- methods of identifying/protecting intellectual property
- (trademarks, patents copyright)
- legal and ethical use of intellectual property (permissions, licensing, attribution).

Intellectual property

(IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce

Patents - a patent grants property rights on an invention, allowing the patent holder to exclude others from making, selling, or using the invention

A **trademark** (also written trade mark or trade-mark) is a type of intellectual property consisting of a recognizable sign, design, or expression which identifies products or services of a particular source from those of others

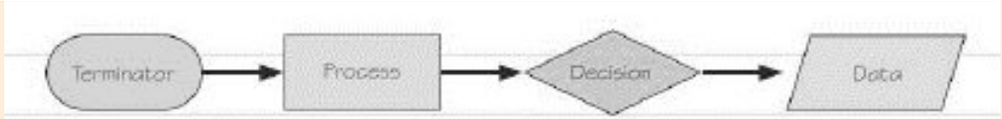
Copyright refers to the legal right of the owner of intellectual property. This means that the original creators of products and anyone they give authorization to are the only ones with the exclusive right to reproduce the work or stops anyone from copying or using the material

how organisations use different forms of notation to explain systems, data and information:

- data flow diagrams (DFD) - Entities, process and data store
- flowcharts
- system diagrams
- tables
- written information.

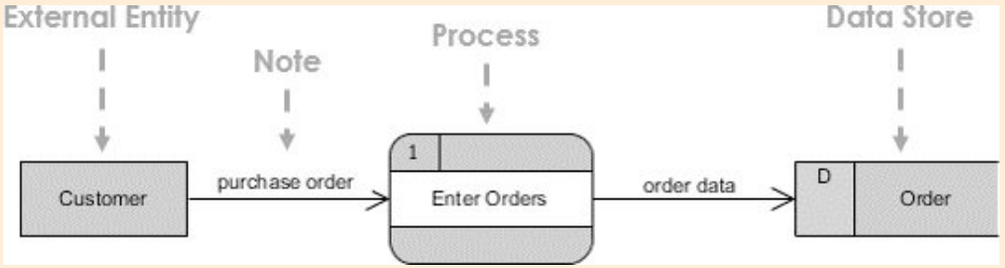
What is a Flow chart?

A flowchart is a graphic representation of a logic sequence, work or manufacturing process, organization chart, or similar formalized structure. The purpose of a flow chart is to provide people with a common language or reference point when dealing with a project or process.



What is a Data Flow Diagram?

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation.



What is a System Diagram?

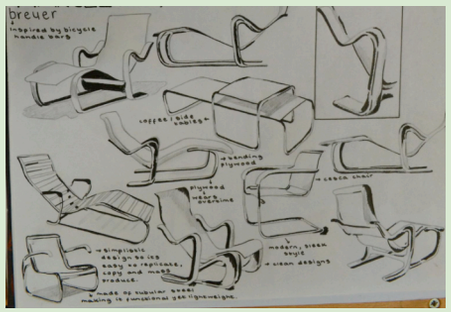
A system diagram is a visual model of a system, its components, and their interactions. They can be used to show the layout of office equipment. With supporting documentation, it can capture all the essential information of a system's design.

NEA Coursework Contexts

Identifying and investigating design possibilities. 10 marks
Contexts are a starting point to inform possible outcomes, situations to create design briefs.
Mind map the three contexts using TEAMMFC. Analyse all the contexts for pros and cons and possible out comes. Choose the context you want to work on. Interview possible clients. Users needs, Primary data, Secondary data. Investigate past and present designers and makers, evaluate existing products or compare high, mid and low cost existing products.

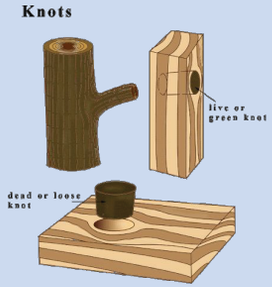
Developing a design brief and specification. 10 Marks
Design Brief is a concise description of the task the designer will undertake to solve the design problem or achieve what the client wants.
Design Specification is a set of requirements that the product must meet, essential and extra solutions that are desirable.
Also consider Environmental, social, economic, Health & Safety, anthropometrical and ergonomic issues, you can use TEAMMFC

Generating and developing design ideas. 30Marks
Communicating ideas - Formal 2D and 3D, Sketching, isometric, line techniques, colour, shadow, Electronic schematic diagrams. Annotated sketches, exploded Drawings.
Modelling - Card, paper, foam, toiles,
Prototypes - Low and High fidelity. Making decisions - usertesting, Focus Groups, A/B testing to choose designs, surveys and questionnaires, ask your client. Testing and Evaluating ideas, Refinement & modification.



Recap Revision

Indepth Knowledge of Timber Natural and manufactured
Toughness, flexibility, grain structure, strength, absorbency, surface finish, colour and hardness.
Natural timber is harvested from **deciduous** (hardwoods) and **coniferous** (softwood) trees. Natural timber is available in the following forms: **plank, board, strip, square, and dowel**. Natural timber can be identified by **weight, colour, grain, texture, durability and ease of working**.
Manufactured timbers are made from natural timbers and made from **particles/fibres or laminates**. Available in **standard sizes & forms**: plywood, MDF (Medium Density Fibreboard), chipboard, hardboard & veneered boards.
Defects: shrinkage, splits, shakes, knots, fungial attack.
Hardwoods: beech, oak, mahogany, balsa and jelutong.
Softwoods: scots pine, western red cedar and parana pine. Finishes are used to improve the aesthetic appeal.

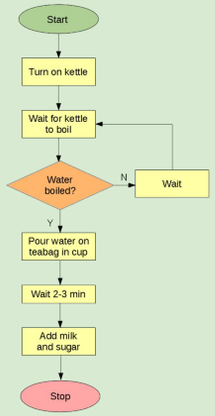


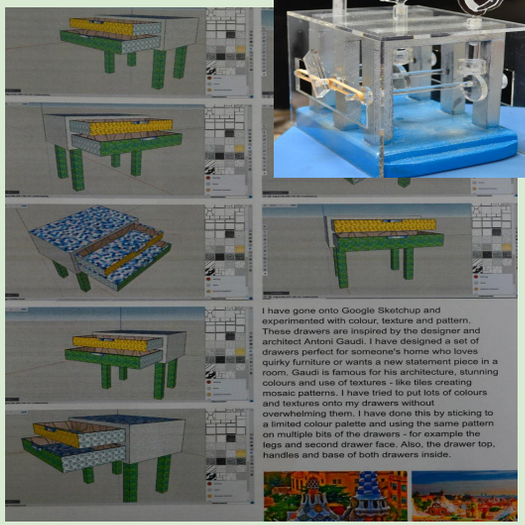
Shaping/joining Timber: Tools & equipment to mark out, hold, cut, shape, drill & form laminates of natural timbers and manufactured boards. The pillar drill, jigs and formers to ensure accuracy in the process of drilling, bending, cutting wood materials. Material joining can be **permanent or temporary**. Permanent joining, veneering, laminating and steam bending. Joints as **frame or box construction**. Frame: mitre, dowel, mortise and tenon, halving and bridle joint. **Box/carcass:** butt, lap, housing, dovetail & comb joint. **Adhesives:** PVA (wood to wood), contact adhesive & epoxy resin (wood to other materials). **Temporary**: screw (countersunk and round head) & knock down fittings.

Selecting Materials - Looking at Functionality, Environmental factors, Availability of materials, Cost (from raw materials, manufacturing, packaging, shipping costs as well as the selling price), Cultural Factors, as well as Social and Ethical factors, for examples FSC logo on wood. Aesthetics, Ergonomics, and need of customer and end of use/product life disposal and reclaiming.

NEA Coursework to Contexts

Manufacturing a prototype. 30 Marks
Production/Manufacturing Plan.
Final Formal Drawn or CAD Design.
Select and work with correct materials and components.
Measure, markout, accurately with out waste.
Use specialist tools and equipment, CAD/CAM to cut Materials. Shape, construct, add, reform materials to create quality outcome. Add surface treatments and finished to protect and give aesthetic appeal to the client.

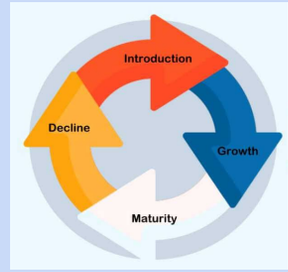




Analysing and evaluating design decisions and prototypes. 20 Marks
Evaluate the performance and suitability of the product
Evaluate against the design brief and see if it matches
Evaluate against the design specification to see if it meets the essential and desirable criteria
Ask your client for feedback
Make decisions about what needs to be improved
Implement the necessary modifications and changes to the design
Re-test and evaluate to check effectiveness of the changes

Recap Revision

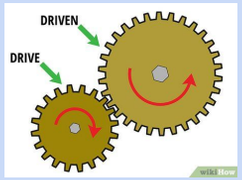
New and emerging technologies impact on industry, enterprise, sustainability, people, culture, society, environment, production techniques and systems.
CAD/CAM, The product life cycle,
Technology push- developments in materials and production, Market pull needs of the consumer.
Fair trade, Ecological footprint.

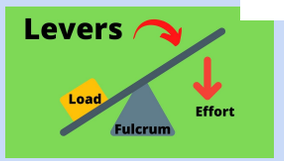


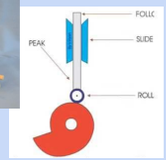
Developments in **modern and smart materials and technical textiles** - LCD, QTC, SMA, Materials that respond to the environment/stimulation - thermo-chromic, photo-chromic. Carbon Fibre, Kevlar, Phase changing materials - breathable, heat management. Nomex, Rhovyl,

How do **electronic systems and programmable components** work - input - process - output devices.
PIC used to control products/systems.
Programmable microcontrollers a miniature computer programmed to perform a specific task.

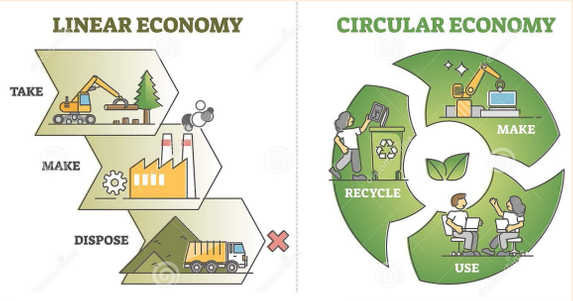
Function of **mechanical devices** for movement and force. Rotary, linear, oscillating, reciprocating movement. A lever pivots on a fulcrum. The input force is called effort and the output force is called the load. Linkages direct force and movement. Cams convert rotary motion to reciprocating motion. Gears transfer rotary motion. Belt drives transfer rotary motion. Rack and pinion convert rotary to linear motion.







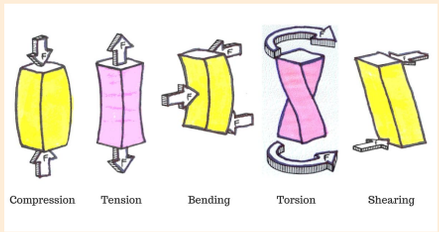
Revision Recap



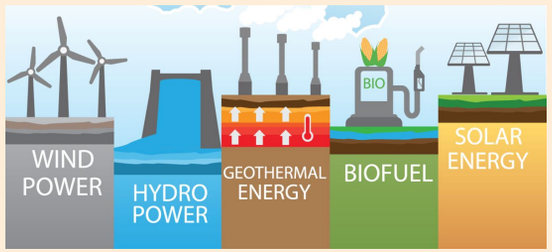
Linear and Circular Economy

The six R's of sustainability

Forces and stresses

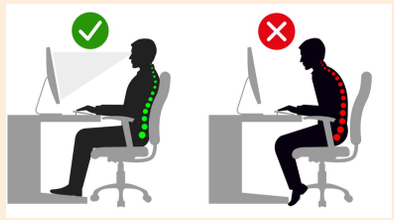


Generation of power, renewable and non renewable energy and how it is stored and used in the world.

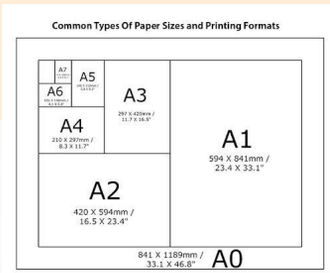


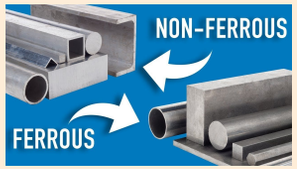
Investigating the work of others
Airbus, Apple, James Dyson, Philippe Starck, Matthew Williamson

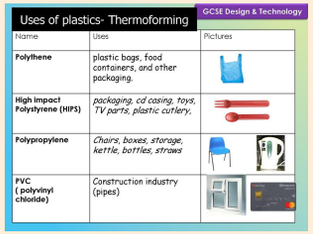
Evaluation and Analysis tools
TEAMMFC- target market, ergonomics, aesthetics, materials, manufacture, function, cost, Sustainability, society, ethical, Environmental issues

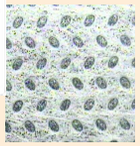


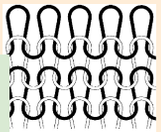
Scales of Production -one off, batch, mass and continuous production. **Culture & Societies** have different needs, wants and values.
Consumer choice and Legislation and **consumer rights** have to keep up with new technology, the latest is the Consumer Rights Act 2015.

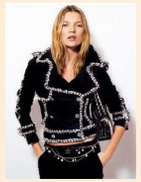












Paper and Board Products - Grams per square metre. ISO - standard size of paper. Lamination to protect paper products.

Metal products - Ferrous and nonferrous metals - ferrous with iron in them. Non ferrous without iron in them. Alloys are metals combined with other elements to improve properties.

Polymers - Thermoforming can be reheated many times and Theromosetting can only be heat and set once - Polymers are coloured in pellet form and then heated and shaped.

Natural and synthetic fibres & different types of fabrics. Natural fibres are plant (cotton, linen, bamboo), animal (wool) hair or insect (silk). Manufactured or synthetic fibres come from oil and coal. Microfibres are 100 times finer than human hair. We blend fibres to get different properties. Woven fabric stretches diagonally, knitted fabrics stretch in all directions, felted, non-woven fabrics do not stretch.

NEA1 - Food Investigation Task

NEA1 – Food Investigation Task - Overview

The investigation and writing of the report must not exceed **10 hours**.

A written or electronic report which will be **1500–2000 words**. This will be approximately **6–8 sides** of A4 or A3 equivalent. This includes all charts, annotation, practical results, etc.

The Food Investigation tasks will be released in **September** of the final year of assessment.

The Food Investigation task is marked out of **30** and this will be **15%** of the final GCSE grade.

Your teacher will be marking against the following three criteria:

- Section A: Research: 6 marks
- Section B: Investigation: 15 marks
- Section C: Analysis and evaluation: 9 marks.

Total: 30 marks.

NEA1 – Food Investigation Task - Key Terms

Analyse – to break down a task or question explaining the key words and what is required.
Hypothesis - an idea, prediction or explanation that you then test through investigation and experimentation.
Control – a standard of comparison for checking or verifying the results on an experiment.

Functional Properties

Thinking about each ingredient, What does the ingredient actually do?

Chemical Properties

How does it do it? What makes it happen?

Protein denaturation
Chemical bonds
Amino acids
Coagulation
Foam formation
Caramelisation
Dextrinisation
Gelatinisation
Emulsification
Aeration
Plasticity
Shortening
Enzymic browning
Oxidation
Chemical/Biological/ Mechanical
Gluten/Gliadin /Glutenin
Triglyceride
Saturated
Unsaturated
Monosaccharide
Disaccharide
Polysaccharide

Research - 6 marks

Background information on ingredients: Find out how the ingredients work within the recipe and why.
Aims - write some aims for the investigation linked to what you have found from your research. What are you trying to find out?
Plan the investigations - what are you going to do? How are you going to do it? Does it help you investigate your aims?
Fair testing - the methods must be the same for each experiment e.g. same cooking times/temps., same quantity of ingredients, same size etc.
Hypothesis - what do you predict will happen in each experiment/investigation? Think about what you have found out from your research to make accurate predictions.

Investigation - 15 marks

Investigate - carry out your experiments linked to your hypothesis. There should be a clear **aim** for each experiment - what is it that you want to find out?
Results - make sure you create your tables **before** you start your investigation so that you can easily and accurately record what is happening.
Record results using graphs, charts, tables, photographs - photographs must show what you did.
Findings - what did you find out from each experiment? You must fully explain what happened during your experiment. Use your results table to talk about what you found. Link your findings to your hypothesis - was it what you expected/predicted?

Analysis and Evaluation - 9 marks

Analyse and **interpret** the result of each investigation, describe how the results can be used in other practical food preparation and cooking sessions.
Evaluate the hypothesis and **justify** the findings - How is it the same or different from your hypothesis? Why might this have happened? Relate it to your research findings. **Explain** how the ingredients you used worked and why - if they didn't work how they should, why might this be?

NEA2 - Food Preparation Task

NEA2 – Food Preparation Task - Overview

The practical work and portfolio must not exceed **20 hours**. This includes a 3-hour practical session to make the three final dishes.

A written or electronic portfolio including photographic evidence. Photographic evidence of the three final dishes must be included. The report will be no more than **20 sides** of A4 or A3 equivalent.

The Food Preparation tasks will be released in **November** of the final year of assessment.

The Food Preparation task is marked out of **70** and this will be **35%** of the final GCSE grade.

Your teacher will be marking against the following five criteria:

- Section A: Researching the task: 6 marks
- Section B: Demonstrating technical skills: 18 marks
- Section C: Planning for the final menu: 8 marks
- Section D: Making the final dishes: 30 marks
- Section E: Analysis and evaluation: 8 marks.

Total: 70 marks.

NEA2 – Food Preparation Task - Key Terms

Menu – a selection of dishes.
Life stage – phases of development that people go through during their life, such as infancy, childhood, adolescence (teenagers), adulthood and the elderly.
Culinary tradition – ingredients or foods that are associated with a particular country or region.
Time plan – a step-by-step plan to follow when making the final dishes.
Dovetail - to fit together a variety of different stages into a plan (e.g. different stages of making different recipes).

Research - 6 Marks

Analyse the task - Explain what the brief is asking you to do.
Research - must be relevant and related to the; life stage, dietary group or culinary tradition.
Identify a range of dishes - annotate images that relate to the brief.
Select and justify - select a range of technical skills to be used when making different dishes. You must be able to explain why the skills chosen are relevant to the task.
Research analysis - summary of the task.

Analyse and Evaluate (8 Marks)

Carry out sensory evaluation and record results for all dishes including final menu.
Final dishes - carry out and record nutritional analysis, costing and identify improvements..

Demonstration - 18 Marks

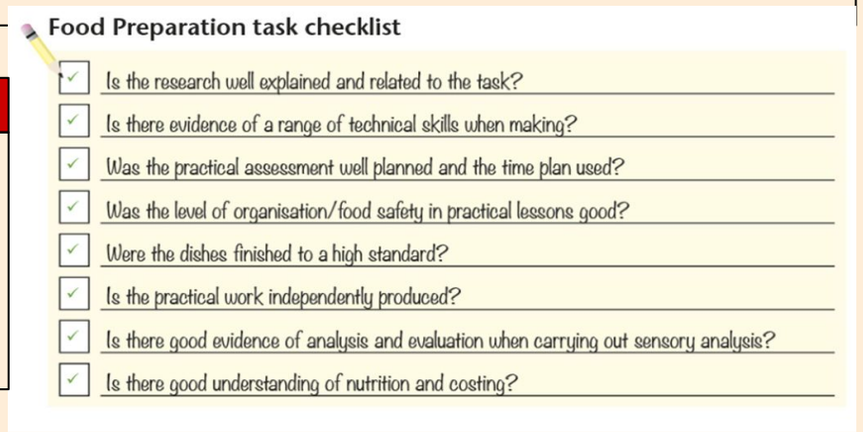
3-4 dishes to demonstrate your technical skills.
Select and use - appropriate equipment for different technical skills.
Food safety must be demonstrated - storage, preparation and cooking.
Identify technical skills - this must be done for each dish.
Photographic evidence is also required.

Planning Final Menu - 8 Marks

Provide an **explanation** and **justification** for the final three dished related to: Ingredients, processes, technical skills, nutrition, food provenance, cooking methods, portion size.
A **time plan** will be produced demonstrating **dovetailing** of different processes.
Demonstrate appropriate use of 3 hours to dovetail tasks to prepare, cook and present the final dishes.
Do not repeat any dishes from the previous skills demonstration.

Making final dishes - 30 Marks

3 hours to prepare, cook and present 3 dishes.
Select appropriate equipment for different technical skills.
Knowledge and application of food safety principles.
Selection, knowledge and use of ingredients when producing different dishes.



Written Examination

How the written exam is organised

At the end of the GCSE Food Preparation and Nutrition course you will take a written examination that lasts for **1 hour and 45 minutes**. It is designed to give you the opportunity to:

- demonstrate your knowledge and understanding of nutrition, food, cooking and preparation
- apply your knowledge and understanding of nutrition, food, cooking and preparation
- analyse and evaluate different aspects of nutrition, food, cooking and preparation including food you and others have made.

The examination is divided into two sections:

- **Section A:** This is worth 20 marks. It consists of 20 multiple-choice questions from different sections of the course.
- **Section B:** This is worth 80 marks. It consists of 5 questions of different styles from different sections of the course.

All of the examination questions must be answered.

What do you need to revise?

Nutrients - protein / fat / carbohydrates / vitamins / minerals / water.
Nutritional needs & health - making informed choices / energy needs / nutritional analysis / diet, nutrition & health
Cooking of food & heat transfer - why food is cooked / cooking methods / heat transfer
Functional & chemical properties of food - proteins / carbohydrates / fats / raising agents
Food spoilage & contamination - microorganisms, enzymes & food production / food spoilage / bacterial contamination.
Principles of food safety - buying, storing, preparing, cooking & serving food.
Factors affecting food choice - food choices / food labelling / marketing influences.
British and international cuisine.
Sensory evaluation.
Environmental impact & sustainability - food sources / the environment / sustainability of food
Processing & production - food production / technological developments.

Command words

Analyse
Comment
Compare
Consider
Contrast
Define
Describe
Discuss
Evaluate
Examine
Explain
Identify
Illustrate
Justify
Outline
State
Suggest
Summarise

Data response question

Definition	Example questions
A piece of data is given and you are asked specific questions about it, often with some extra questions around the topic that the data is about.	

Typical values	Per 45g serving with 125ml semi-skimmed milk	Per 100g (cereal only)
Energy	918kJ	1442kJ
	217kcal	340kcal
Protein	9.6g	11.6g
Carbohydrate	37.5g	67.8g
of which: sugars	6.3g	0.9g
Fat	3.2g	2.5g
of which: saturates	1.4g	0.5g
Fibre	5.3g	11.8g
Salt	0.2g	Trace

Look at the table of nutritional information about a whole wheat breakfast cereal:

a) How many kcal will 50g of cereal only provide? _____ kcal *(1 mark)*
b) What % of protein does the cereal only provide? _____ % *(1 mark)*
c) How many g of fat will a serving of the cereal with milk provide? _____ g *(1 mark)*
d) Why is there more sugar in the 45g serving of cereal with milk than in 100g of the cereal only? *(2 marks)*
e) Suggest two other foods that could be served with the cereal and milk to increase its nutritional value? *(2 marks)*

Structured question

Definition	Example questions
Some information is given, such as a recipe, diagram or photograph, and specific questions are asked about it. Mostly these are all fairly short, requiring a list of responses. Spaces are provided for your answers and the number of marks each part of the question is worth are given.	Food labels often have symbols or logos on them, such as the ones below:

A B C D

a) State what each of the logos above means:
A _____ *(1 mark)*
B _____ *(1 mark)*
C _____ *(1 mark)*
D _____ *(1 mark)*
b) Explain three ways in which symbols and logos on food labels help the consumer when they are choosing their food. *(3 marks)*
c) State five pieces of information that are mandatory (have to appear by law) on a food label. *(5 marks)*
d) Identify the meanings of the following:
Use-by dates _____ *(1 mark)*
Best-before dates _____ *(1 mark)*

Free response question

Definition	Example question
A question is given about a specific topic and it is up to you to plan how you are going to answer it. The command words that are typically used for this type of question include 'explain', 'describe', 'discuss', 'comment', 'consider', 'analyse' or 'evaluate'.	Tooth decay is a serious problem, especially for children. Discuss the causes and consequences of this diet-related disease and what can be done to prevent it. *(12 marks)*

Answering a free response, open-ended question

Free response questions are often worth quite a lot of marks, so it is important that you plan your answer carefully and don't wander off the topic or keep repeating the information you give.

Marks for examination questions are awarded using a **mark scheme**, at three different levels of response (how well the student answers the question):

- **high** level of response
- **intermediate** (middle/average) level of response
- **low** level of response.

Below you will find example answers for the tooth decay question given above. Take a look at AQA's mark scheme and see how marks are awarded. Decide which of the following you think is the best answer and why.

Response A:

PRODUCTION ROLES

Design roles

Key Word	Definition
Costume	The person that decides and imagines the costumes worn by characters in the play
Hair & Make up	The person that decides and imagines the hair and makeup for the characters in the play
Lighting	The person that decides what lighting the play needs to show the correct meaning
Set	Decides what scenery and backdrops will feature on the stage
Sound	Responsible for everything related to sound for a given production. This includes pre-recorded music, sound effects, live voices, musical instruments.

Colour connotations

Red	Passion, Love, Anger, Hate
Orange	Energy, Happiness, Vitality.
Yellow	Happiness, Hope, Deceit, Sun
Green	New Beginnings, Abundance, Nature, Jealousy.
Blue	Calm, Responsible, Sadness
Purple	Creativity, Royalty, Wealth.
Black	Mystery, Elegance, Evil, Death
Gray	Moody, Conservative, Formality

Set

Key Word	Definition
Cloth	A Backcloth/Backdrop hangs at the rear of a scene. A Star Cloth has lamps sewn through it which gives a magical starry sky effect.
Flat	A lightweight timber frame covered with scenic canvas, or plywood. Flats are used for easy-to-move backdrop
Gauze	Becomes transparent when the scene behind it is lit.
Ground plan	A scaled plan (overhead) view of the theatre stage area or of a set design
Modelbox	A box representing the walls of a theatre space in which cardboard scale models can be placed by the set designer.
Prop	(Properties) Items large and small which cannot be classified as scenery, electrics or wardrobe. Eg a briefcase, bag of sweets, a walking stick etc

Lighting

Key Word	Definition
Gobo	A thin metal plate with specific shapes cut out to produce a design which can then be projected by a spotlight.
Backlit	Light coming from upstage, behind scenery or actors, to sculpt and separate them from the background.
Blackout	The act of turning off (or fading out) stage lighting.
Gel	The coloured 'filters' placed in front of theatre lights to colour the beam.
Flood	A lantern that produces a broad spread of light across the stage
Spotlight	A lantern projecting a narrow, intense beam of light directly on to a place or person
Cross fade	Bringing another lighting state up to completely replace the current lighting state.

Sound

Live	Live sound/music. Eg orchestra, band etc
Pre recorded	Sound that has been prepared before the performance
Sound effects	Sounds used to enhance the performance or work with the performance. Eg Children playing to communicate the scene is outside

THEATRE STAGES

Promenade

To promenade means 'to walk'. Promenade theatre is when the audience stand or follow the actors through their performance.

Site Specific

Produced in non-theatre sites. Aims to engage with the meaning and history or creative impetus of the site/location.

Composite set

A stage setting where several locations are represented in the same space and isolated or highlighted by lightning each area separately.

Proscenium Arch

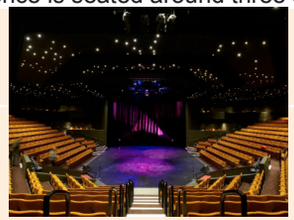
The audience sits in front of the stage. The audience views the stage as if looking at the action through a picture frame (the fourth wall)

In the Round

A theatre space in which the audience surrounds the acting area
Advantages: There are often a number of entrances. Special consideration needs to be given to furniture and scenery as audience sightlines can be blocked.

Thrust

A stage that extends into the auditorium so that the audience is seated around three sides

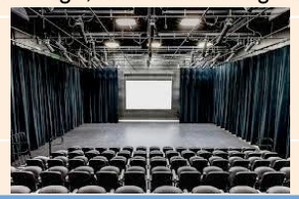


Traverse

The acting area is down the middle of the space, like a catwalk. The audience sits facing the acting area from two sides.

Black Box

A simple, open space consisting of four walls that are all painted black. It is a bare room with a movable seating area, a movable stage, and a flexible lighting system.



EVALUATING THEATRE

Characterisation Skills

Key Word	Definition
Character	The role the actor plays
Body Language	How you communicate your character's emotions through the use of your body
Character Intention	What you want the audience to think or feel about your character
Facial Expressions	How you communicate your character's emotion using your face
Gestures	Movements of a particular body part, often the hand, to display meaning
Physicality	How actors use their facial expressions, body language, walk amd stanze to show emotion, characteristics and age of their character
Red cross	An actor facing forward so the audience can see their facial expression and body language
Proxemics	The distance between the actor & actor, actor & audience or actor and object and what that communicates
Staying in role	Staying in role for the whole performance
Corpsing	Laughing, talking or breaking role when performing

Characterisation Skills

Key Word	Definition
Vocal skills	The way you use your voice to communicate your character's emotions.
Accent	The way you speak based on where you're from e.g. Scouse accent from Liverpool
Articulation	Clear and precise speech ensuring letters are clear
Projection	To speak loudly and clearly without shouting
Pace	The speed at which you talk e.g rushing and speaking quickly if you character is excited or scared
Volume	How loudly or quietly you speak

Written Structure

Key Word	Definition
Point	What was done? (Example of what happened in the moment)
Evidence	**How** was it done? (What skills & techniques were used?) **Why** was it done like that? (Justify & analyse your choices)
Evaluate	**What** was successful and **why**? (Reflect on the success of this moment) **How** could it be improved and why? (Give a suggestion of improvement. Justify your answer)
Audience	**What** was the **impact** on the audience? (What was your intention? How did the audience react?)

A Christmas Carol

Stave	GCSE English Literature Paper 1 Section B: 19th Century novel Plot
1	Scrooge is at work. Despite the Christmas Eve cold, he refuses to spend money on coals for the fire. Scrooge turns down his nephew, Fred's, invitation to his Christmas party. Scrooge is visited by the ghost of his dead partner, Jacob Marley.
2	He wakes and **the Ghost of Christmas Past** takes him on a journey. Invisible to those he watches, Scrooge revisits his childhood school days and his apprenticeship with a jolly merchant named Fezziwig, and his engagement to Belle.
3	**The Ghost of Christmas Present** shows Scrooge Christmas as it will happen that year. Scrooge watches the Cratchit family eat a tiny meal in their little home. He sees Bob Cratchit's crippled son, Tiny Tim, whose kindness and humility warm Scrooge's heart.
4	Through a sequence of scenes linked to an unnamed man's death**, the Ghost of Christmas Yet to Come** shows Scrooge that nobody mourns his death and the only emotion felt is one of happiness and relief. Scrooge, is keen to learn the lesson.
5	Scrooge rushes out onto the street hoping to share his newfound Christmas spirit. He sends a turkey to the Cratchit house and goes to Fred's party. As the years go by, he continues to celebrate Christmas with all his heart. He treats Tiny Tim as if he were his own child and gives gifts to the poor.

Context

1) <u>1824 –</u> Dickens' father is sent to jail for debt and Dickens has to give up his education until his father inherits some money and he goes to a private school.
2) Dickens was put to work in a warehouse. He had experience of poverty.
3) 1834 – Poor Law Amendment Act, which meant that the rich no longer had to pay taxes in order to help the poor. Workhouses were created which poor people would have to live and work in.
4) 1842 Report on Child Labour .The report's findings shocked society and led to safety legislation in mines and factories.



'A Christmas Carol' by Charles Dickens

Characters and key quotations

Ebenezer Scrooge:
1."he was a tight-fisted hand at the grindstone,…a squeezing, wrenching, grasping, scraping, clutching, covetous old sinner! Hard and sharp as flint, from which no steel had ever struck out generous fire; secret, and self-contained, and solitary as an oyster."
2."The cold within him froze his old features… He carried his own low temperature always about with him; he iced his office in the dog-days; and didn't thaw it one degree at Christmas."
Jacob Marley: "The chain he drew was clasped about his middle. It was long, and wound about him like a tail; and it was made…
of cash-boxes, keys, padlocks, ledgers, deeds, and heavy purses wrought in steel."
Fred: Scrooge's nephew
1."He had so heated himself with rapid walking in the fog and frost… that he was all in a glow;
Ghost of Christmas Past: A strange combination of young and old, wearing white robes and looking like a candle.
1. "It was a strange figure-like a child: yet not so like a child as like an old man…"

Ghost of Christmas Present: A portly, jovial gentleman surrounded by a warm glow. He shows Scrooge how things really are.
1. "Its dark brown curls were long and free; free as its genial face, its sparkling eye, its cheery voice, its unconstrained demeanour and its joyful air."

Ghost of Christmas Yet to Come
1. "Still the Ghost pointed with an unmoved finger to the head."
2. "The Phantom slowly, gravely, silently approached."

Fezziwig: Scrooge's ex-employer who is fair to all his employees and knows the true meaning of Christmas.
1. "Old Fezziwig…rubbed his hands; adjusted his capacious waistcoat; laughed all over himself, from his shoes to his organ of benevolence; and called out in a comfortable, oily, rich, fat, jovial voice:"

Mrs Cratchit: Bob's wife who is critical of Scrooge and how poorly he pays her husband.
1. "the founder of the feat indeed cried Mrs Cratchit reddening…I'd give him a piece of my mind to feast upon"
2. "an odious, stingy, hard, unfeeling man as Mr Scrooge"

Bob Cratchit: Scrooge's clerk who doesn't have much money. He loves his family and is happy and morally upright.
1. "the Founder of the Feast"
2. "…in came little Bob, the father…and his threadbare clothe darned up and brushed…and Tiny Tim upon his shoulder."

Tiny Tim: Bob's ill son whose story plays a part in inspiring Scrooge's transformation.
1. "Alas for Tiny Tim, he bore a little crutch."
2. "God bless us every one!"
3. "As good as gold."

Anthology Poetry

War Photographer
Content/summary

- Duffy was inspired to write this poem by her friendship with a war photographer. She was especially intrigued by the peculiar challenge faced by these people whose job requires them to record terrible, horrific events without being able to directly help their subjects.
- Duffy perhaps shares an affinity with these photojournalists - while they use the medium of photography to convey certain truths about the human condition, she uses words and language to do the same job. Throughout the poem, Duffy provokes us to consider our own response when confronted with the photographs that we regularly see in our newspaper supplements, and why so many of us have become desensitised to these images.
- By viewing this issue from the perspective of the photographer, she also reveals the difficulties of such an occupation. By the end of the poem, it is clear her subject straddles two vastly different worlds yet increasingly feels he belongs to neither.

Bayonet Charge
Content/summary
Bayonet Charge by Ted Hughes describes the few desperate moments of a soldier's charge against a defended position, dramatising the feelings of fear, dislocation and confusion.

While the soldier and the conflict are only described in general terms, meaning that the experience is universalised, Hughes may have been imagining his father's experience as one of the soldiers in the First World War, whose charges 'over the top' of the trenches have passed into legend.

Remains
Content/summary

- The poem is told anecdotally and begins with ‘On another occasion’, implying that this account is not the only unpleasant account the soldier has in his memory. He tells how he and ‘somebody else and somebody else’ opened fire on a looter who may or may not have been armed. They shot him dead and one of them put the man’s ‘guts back into his body’ before he’s carted away.
- Later the soldier thinks about the shooting every time he walks down the street. Then later again, when he returns home he is still haunted by the thought of what he has done. He tries drink and drugs to drown out the memory, but they do not work. The line ‘he’s here in my head when I close my eyes’ indicates this.
- The final lines show that the memory was not left behind in the place of war in a distant land, but is with the speaker all the time. He feels as though he will always have blood on his hands.

Exposure
Content/summary

- Wilfred Owen’s poem focuses on the misery felt by World War One soldiers waiting overnight in the trenches. Although nothing is happening and there is no fighting, there is still danger because they are exposed to the extreme cold and their wait through the night is terrifying. The eight **stanzas** are gripping because the speaker describes the trauma of living and struggling in such poor conditions. There is a sense of despair and of lost hope.
- The immediate and repeated use of the **pronouns** ‘our’ and ‘we’ show that Owen is describing a situation he was part of. The individual is sharing in the collective suffering and horror of the war. The poet has a sense of injustice about the way the soldiers are being treated. If being ‘exposed’ to gunfire does not kill them, then exposure to the brutal weather conditions might do. Alongside the more obvious meanings of the title, there is also the idea that Owen has set out to expose the conditions the soldiers have experienced to the world.

Paper 2 Q5: Article Writing

Before you start writing think about: PAF

Purpose – what are you trying to achieve?

Audience – who are you writing for?

Format – what are you being asked to write?

Vocabulary and tone need to be precisely match to task:

Modal verbs are used for advice: can, could, may, might, must, ought to, should, shall, will, would.

Informative/explanatory: after all; as can be expected; generally; namely; naturally; obviously.

Opinionated vocabulary: without a doubt; the fact is; clearly; it is vital that.

Anecdotal vocabulary: As a matter of fact; one incident that can be recalled; a great illustration of this was.

Connectives/Discourse Markers

Position
At the start
Firstly
Secondly
Thirdly
Next
Meanwhile
Subsequently
Finally
In conclusion

Emphasis
Importantly
Significantly In particular

Addition
Furthermore
Additionally
In addition
As well as

Contrast
Although
Whereas

Steps to success
- Think about the PAF
- Open with a welcome/greeting – e.g. 'Good afternoon ladies and gentlemen' or 'Fellow classmates'
- Outline what the speech will be about: 'I will talk to you about…
- Make 3/4 key points and expand on them.
- Conclusion to summarise ideas
- End acknowledging the audience: 'Thank you for listening'.
- CAFOREST techniques

Writer's Methods

Command

Alliteration & anecdotes

Facts

Opinions

Repetition, rhetorical questions, reader (direct address)

Emotive language and exaggeration

Statistics

Threes (rule of three)

The structure of the form, its sentences and paragraphs need to be carefully planned and written for effect.

Parts of a paragraph:

Topic sentence – tells the reader the main idea of what the paragraph will be about.

Supporting sentence 1 – gives specific details relating to the main idea.

Supporting sentence 2 – gives another set of specific details supporting the main idea.

Supporting sentence 3 – gives another set of specific details supporting the main idea.

Concluding sentence – refers to the topic sentence and sums up the main idea of the paragraph.

Sentence stems to learn:

-Research, funded by _____, has revealed that….
-Consequently, many people have found that…
-Differing variables must be considered…
-Perhaps it might be fair to….
-Often the challenges are numerous…
-Every year hundreds…
-Over recent decades many experts have…
-A reasonable conclusion might be…
-Critically important is…
-Despite definitions varying, it is possible to

Descriptive Writing Q5

Purpose: Reason you are writing
-You are writing to **describe, entertain and impress**.
-You want to show how impressively you can **describe the picture in front of you** and show the examiner you can **create imagery in your writing.**

Timings	
Planning	5 minutes
Writing description	30 minutes
Proof reading	5 minutes to proof-read

Assessment Objectives	
AO5	Communication and organisation. The structure of the description
A06	Technical accuracy-punctuation, sentence structure, ambitious vocabulary

Techniques to use

Show, don't tell	Try to use figures of speech to describe. Try to use expanded noun phrases, metaphors etc. Be more creative
Be like a camera	Start with a long shot of whole picture Zoom in on one are of the image Track across the image and zoom in on another area
Be in the image	Write in 1st person as if you are something in the image. Show us the image from your perspective.

Vocabulary:
What vocabulary should I try to use?

-Instead of 'dark' try… dim, unlit, black, inky, unilluminated, the abyss Instead of 'bright' try… dazzling, beaming, radiant, vivid, blazing

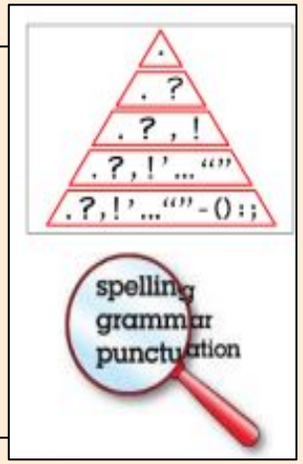
-Instead of 'happy' try… glad, joyous, contented, cheerful, blissful, euphoric

- Instead of 'sad' try: miserable, melancholic, despairing, dismal, forlorn, despondent Instead of 'eerie' try… unnerving, sinister, abnormal, strange, unsettling

-Instead of 'mysterious' try… secretive, enigmatic, peculiar, curious, inexplicable

Techniques to use:
Simile- Example: He was as timid as an urban fox.
Metaphor- Example: He was a night owl.
Pathetic Fallacy- Example: The sky became cloudy and darkness fell.
Personification-Example: The thorns gripped my shirt as I ran through.
Impressive Vocabulary-Example: Guile, Radiant, Irksome, Serpentine.
Noun, Adjective, Noun- Example: Blood red shoes
Alliteration- Example: Colin can't catch!
Sensory Language- Example: I could taste blood streaming from my lip
Extended Metaphor When a writer exploits a single metaphor or analogy at length throughout a poem or story.
Declarative A statement
Juxtaposition The fact of two things being placed closely together with contrasting effect

Vary Your Sentences:
Simple = one verb / very short - try a cluster of three for pace or tension!
Compound = and/but/or
Complex = subordination, commas or semicolons.
Use plenty of punctuation for pace and to add meaning.



Component 3

PROMOTION		
1.	**AIMS OF PROMOTION**	Build positive associations with the Enterprise, encourage customers to purchase products.
2.	**MEDIA**	A general term referring to a variety of different forms of communication including television, newspapers, magazines, websites & the internet.
3.	**MEDIUM**	The methods used to communicate with customers.
4.	**PROMOTIONAL MIX**	The range of techniques used to communicate with customers.
5.	**THE MESSAGE**	The features and benefits of the product, the range of products the business offers.
6.	**PROMOTIONAL BENEFITS**	Inform, remind & persuade customers.

ADVERTISING		
7.	**ADVERTISING**	Paying for space in media such as TV, magazines or on the internet.
9.	**METHODS OF ADVERTISING**	Moving images, print, ambient, digital, audio.

SOURCES OF REVENUE & COSTS		
1.	**REVENUE**	Income earned through product or service sales. It is calculated by **Price X Quantity Sold.**
2.	**OTHER SOURCES OF REVENUE**	Include interest paid on savings accounts, investment income from shares, rental income from renting out property, selling assets such as vehicles or machinery.
3.	**COSTS**	Financial outgoings that a business faces.
4.	**START-UP COSTS**	These are costs incurred when setting up a new business. Examples could include furnishings, logo design and equipment purchase.
5.	**RUNNING COSTS**	These are ongoing costs that the business faces on a daily basis. Examples include bills, wages & ingredients.
6.	**FIXED COSTS**	Costs that remain the same no matter how many products the business provides. Examples include rent, insurance payments & salaries.
7.	**VARIABLE COSTS**	These costs rise as output increases. This includes the cost of stock and wages.
8.	**TOTAL COSTS**	this is the sum total of fixed costs and total variable costs. **Total costs = Fixed costs + Variable costs**

FINANCING AN ENTERPRISE		
1.	**CAPITAL EXPENDITURE**	Involves the purchase of fixed assets such as machinery or buildings.
3.	**REVENUE EXPENDITURE**	Involves day-to-day expenditure of the business including inventories, utility bills, rent & wages.
4.	**INTERNAL SOURCES OF FINANCE**	Finance obtained from within the business including retained profit & selling assets.
5.	**RETAINED PROFIT**	Are profits retained within the business which can then finance business growth. There is no interest payable as with loans & the business has power over how this money should be spent.
6.	**SALE OF ASSETS**	Selling unused assets to improve cash flow.
7.	**EXTERNAL SOURCES OF FINANCE**	Finance obtained from outside the business including bank loans, leasing equipment, hire purchase, government grants, venture capital & peer to peer lending.
8.	**BANK LOAN**	An agreed amount of money that will be paid back over a period of time.
9.	**LEASING EQUIPMENT**	Enables a business to use expensive assets, such as machinery or vehicles without having to buy them.
10.	**HIRE PURCHASE**	an agreement that allows a business to purchase equipment or machinery in instalments. When the final payment is made the item is then owned by the business.
11.	**GOVERNMENT GRANTS**	payments from local or national governments which incentivise businesses to set up in an area of high unemployment.
12.	**VENTURE CAPITAL**	An individual or enterprise that seeks to invest in new business ventures.
13.	**PEER TO PEER LENDING**	a portal which allows people to invest in business start-ups through the internet.

Component 2

Generating ideas

- Mind mapping / thought showering new ideas [innovation]
- Look at a problem which needs solving – how can a new enter-prise solve this?
- Importing an idea from abroad that works in another country [goods or services in a new market]
- Adapting a current product or service [goods or services in a new context].
- Looking at what skills and attributes you have and how you, as an entrepreneur, can use them to build a new enterprise.

There also needs to be a **gap in the market** (a need for the product or service) otherwise it is unlikely the enterprise will be a great success.

Financial Aims

Plans that involve money based tar-gets are financial aims because they involve the enterprises finances.

Examples are 'to make a profit' and to 'achieve break even'. All entrepreneurs need to know what goods and services they're going to sell and be sure they're going to meet their customers wants and needs (market research is a must here!)

Non-Financial Aims

These are not linked money based targets, but are linked to other aspects of the enterprise such as strengthening brand image, building relationships with customers and suppliers or operating ethically.

Professionalism in a pitch

1. Greetings

•Introduce yourself and shake the hands of the entrepreneurs.

•Be polite and courteous throughout the pitch

2. Be Positive. You should be enthusiastic and excited

3. Rehearse your pitch! Remember the key points you want to get across

Why should enterprises keep in touch with customers?

-To keep them informed

-In an attempt to in-crease sales

Promotion - The publicizing of a product, organization, or venture so as to increase sales or public awareness.

How can enterprises keep in touch with customers?

Direct marketing - the business of selling products or services directly to the public

- text
- Emails
- Letters

Viral Marketing - consumers are encouraged to share information about a company's goods or services via the internet.

- billboards
- Web banners
- Radio
- TV
- Point of sale
- Via third party

When creating promotional material it is key that you consider:

How appropriate the content of the promotion is:

• Is it accurate?
• Is it complete?
• Is it clear?

How appropriate the appearance of the promotion is:

• Is the colour appropriate?
• Do the visual add to or hinder the message?
• Are the images supportive?
• Is the text easy to read?

Engaging, involving and catering for your audiences' needs

- Firstly you need to should consider your audiences interests
- Relate what you're doing to them
- Example: Cupcakes enterprise – do they have small children?
- Also consider asking yes/no questions, ask them to imagine something, use humour or give them a short exercise to complete to engage them.

Natural Hazards

Types of Plate Margins

Destructive Plate Margin

When the denser plate subducts beneath the other, friction causes it to **melt and become molten magma**. The magma forces its ways up to the surface to form a volcano. This margin is also responsible for **devastating earthquakes**.

Constructive Plate Margin

Here two plates are **moving apart** causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the **Mid Atlantic Ridge**.

Conservative Plate Margin

A conservative plate boundary occurs where plates **slide past each other** in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.

LIC -CS: Nepal (2015)

Causes
On 25 April 2015 a 7.8 earthquake struck Nepal in Asia. The focus was only eight kilometres deep and the epicentre was just 60 kilometres north-west from the capital Kathmandu.

Effects	**Management**
8,632 people died and 19,009 were injured. This made it the worst earthquake in Nepal in more than 80 years. In addition to this, hundreds of thousands of people were made homeless with entire villages flattened.	At the time Nepal did not have a robust way of dealing with earthquakes. The Government are also trying to build homes and structures which could withstand earthquakes.

Case Study: Typhoon Haiyan 2013

Causes
Started as a tropical depression on **2rd November 2013** and gained strength. Became a Category 5 **"super typhoon"** and made landfall on the Pacific islands of the Philippines.

Effects	**Management**
- Almost **6,500 deaths**. **- 130,000 homes destroyed.** - Water and sewage systems destroyed had caused **diseases**.	- The UN raised **£190m in aid**. - USA & UK **sent helicopter carrier ships** deliver aid remote areas. **- Education** on preparedness.

What is Climate Change?

Climate change is a large-scale, long-term shift in the planet's weather patterns or average temperatures. Earth has had tropical climates and ice ages many times in its 4.5 billion years.

Recent Evidence for climate change

Global temperature	Average global temperatures have increased by more than **0.6°C since 1950**.
Ice sheets & glaciers	Many of the world's glaciers and ice sheets are melting.
Sea Level Change	Average global **sea level has risen by 10-20cms** in the past 100 years. This is due to ice melting and thermal expansion.

Evidence of natural change

Orbital Changes	The Earth wobbles and tilts as it orbits.
Sun Spots	They increase the **amount of energy Earth receives** from the Sun.
Volcanic Eruptions	Volcanoes release large amounts of **dust containing gases**. These can **block sunlight.**

HIC - CS: Chile (2010)

Causes
The magnitude 8.8 earthquake occurred on 27 February 2010, at 03:34 a.m. local time. The epicentre was located at just offshore of Chile at a depth of about 35 km. The effects were strongly felt in the cities of Conception and Chillan, both about 100 km away. The event was felt as far away as Southern Peru, Bolivia and Buenos Aires (Argentina), and lasted up to 30 seconds.

Effects	**Management**
The total cost of earthquake was US$30 billion. Alongside this, 220,000 homes were completely destroyed,, as well as 4500 schools, 53 shipping ports and 56 hospitals. 500 people died, 12,000 people were injured and 800,000 people in total affected.	Swift response from all emergency services. Swift temporary repairs to Route 5 north—south highway to help trade distribution from Santiago capital. Power and water restored to 90% of homes within 10 days.

Changing Economic World

Development is an improvement in living standards through better use of resources.	
Economic	Economic growth through levels of industrialisation and use of technology.
Social	Improvement in people's standard of living. For example, clean water.
Environmental	Advances in the management and protection of the environment.

Resources	Natural Hazards
- Fuel sources such as oil. - Minerals and metals for fuel. **- Availability for timber**. - Access to **safe water**.	- Risk of tectonic hazards. - Benefits from **volcanic material** and **floodwater.** - Frequent hazards **undermines redevelopment**.
Climate	**Location/Terrain**
- Reliability of rainfall to benefit farming. **- Extreme climates** limit industry and affects health. - Climate can **attract tourists.**	**- Landlocked countries** may find trade difficulties. - Mountainous terrain makes farming difficult. **- Scenery attracts tourists**.

CS: Reducing the Development Gap In Jamaica

Creating a tourist economy	Positive multiplier effect
-In 2015, **2.12 million** visited. -Tourism **contributes 27% of GDP** and will increase to **38% by 2025**. -**130,000 jobs** rely on tourism. -**Global recession** 2008 caused a **decline in tourism**. Now tourism is beginning to recover.	-**Jobs from tourism** have meant **more money** has been spent in shops and other businesses. -Government has invested in **infrastructure** to support tourism. -**New sewage treatment** plants have reduced pollution.

Reducing the Global Development Gap

<u>Microfinance Loans</u> This involves people in LICs receiving smalls loans from traditional banks. + Loans enable people to begin their own businesses - Its not clear they can reduce poverty at a large scale.	<u>Foreign-direct investment</u> This is when one country buys property or infrastructure in another country. + Leads to better access to finance, technology & expertise. - Investment can come with strings attached that country's will need to comply with.
<u>Aid</u> This is given by one country to another as money or resources. + Improve literacy rates, building dams, improving agriculture. - Can be wasted by corrupt governments or they can become too reliant on aid.	<u>Debt Relief</u> This is when a country's debt is cancelled or interest rates are lowered. + Means more money can be spent on development. - Locals might not always get a say. Some aid can be tied under condition from donor country.
<u>Fair trade</u> This is a movement where farmers get a fair price for the goods produced. + Paid fairly so they can develop schools & health centres. -Only a tiny proportion of the extra money reaches producers.	<u>Technology</u> Includes tools, machines and affordable equipment that improve quality of life. + Renewable energy is less expensive and polluting. - Requires initial investment and skills in operating technology

UK in the wider world

- 5th largest GDP in the world
- in 2016, the UK was the tenth largest goods exporter in the world
- Changing political importance as a result of Brexit

Measuring development

Economic indicators	
Employment type	The proportion of the population working in primary, secondary, tertiary and quaternary industries.
Gross Domestic Product per capita	This is the total value of goods and services produced in a country per person, per year.
Gross National Income per capita	An average of gross national income per person, per year in US dollars.
Social indicators	
Infant mortality	The number of children who die before reaching 1 per 1000 babies born.
Literacy rate	The percentage of population over the age of 15 who can read and write.
Life expectancy	The average lifespan of someone born in that country.
Mixed indicators	
Human Development Index (HDI)	A number that uses life expectancy, education level and income per person.

The Living World

What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.

Ecosystem's Components

Abiotic	These are **non-living**, such as air, water, heat and rock.
Biotic	These are **living**, such as plants, insects, and animals.
Fauna	Animal life in a particular region.
Flora	Plant life in a particular region.

Issues related to biodiversity

Why are there high rates of biodiversity?

- Warm and wet climate encourages a wide range of vegetation to grow.
- There is rapid recycling of nutrients to speed plant growth.
- Most of the rainforest is untouched.

Main issues with biodiversity decline

- Keystone species (a species that are important of other species) are extremely important in the rainforest ecosystem. Humans are threatening these vital components.
- Decline in species could cause tribes being unable to survive.
- Plants & animals may become extinct.
- Key medical plants may become extinct.

Tropical Rainforests: Case Study Malaysia

Malaysia is a LIC country is south-east Asia. 67% of Malaysia is a tropical rainforest with 18% of it not being interfered with.

Adaptations to the rainforest

Orangutans	Large arms to swing & support in the tree canopy.
Drip Tips	Allows heavy rain to **run off leaves easily**.
Lianas	**Climbs** trees to reach sunlight at canopy.

Layers of the Rainforest

Emergent	Highest layer with trees reaching 50 metres.
Canopy	80% of life is found here as It receives most of the sunlight and rainfall.
U-Canopy	Consists of trees that reach 20 metres high.
Shrub Layer	Lowest layer with small trees that have adapted to living in the shade.

Impacts of deforestation

Economic development

+ Mining, farming and logging creates employment and tax income for government.
+ Products such as palm oil provide valuable income for countries.
- The loss of biodiversity will reduce tourism.

Soil erosion

- Once the land is exposed by deforestation, the soil is more vulnerable to rain.
- With no roots to bind soil together, soil can easily wash away.

Climate Change

-Trees are carbon 'sinks'. With greater deforestation comes more greenhouse emissions in the atmosphere.
-When trees are burnt, they release more carbon in the atmosphere. This will enhance the greenhouse effect.

Hot Desert: Case Study Thar Desert – India/Pakistan

The Thar Desert is located on the border between India and Pakistan in Southern Asia. With India soon becoming the most populated country in the world in the next five years. With this, more people will plan to live in the desert.

Climate of Hot Deserts

- **Very little rainfall** with less than **250 mm per year.**
- It might only **rain once every two to three years.**
- Temperate are **hot in the day** (45 °C) but are **cold at night** due to little cloud cover (5 °C).
- In winter, deserts can sometimes receive occasional frost and snow.

Major characteristics of hot deserts

- **Aridity** – hot deserts are extremely dry, with annual rainfall below **250 mm**.
- **Heat** – hot deserts rise over **40 degrees.**
- **Landscapes** – Some places have dunes, but most are **rocky** with **thorny bushes.**

Adaptations to the desert

Cactus	• **Large roots** to absorb water soon after rainfall. • **Needles** instead of leaves to reduce surface area and therefore **transpiration**.
Camels	• Hump for storing **fat (NOT water).** • **Wide feet** for walking on sand. • **Long eyelashes** to protect from sand.

Desert Interdependence

Different parts of the hot desert ecosystem **are closely linked together and depend on each other**, especially in a such a harsh environment.

Factors that affect health and wellbeing

Learning outcome A: Explore how factors can affect an individual's health and wellbeing positively or negatively.

Health and Wellbeing

Definition of health and wellbeing: a combination of physical health and social and emotional wellbeing, and not just the absence of disease or illness.

Physical Factors that can have positive or negative effects on health and wellbeing:

Inherited conditions – sickle cell disease, cystic fibrosis
Physical ill health – cardiovascular disease, obesity, type 2 diabetes
Mental ill health – anxiety, stress
Physical abilities
Sensory impairments

Lifestyle factors that can have positive or negative effects on health and wellbeing:

- Nutrition
- Physical activity
- Smoking
- Alcohol
- Substance misuse

A HOLISTIC APPROACH

1. **Physical health** comes from…
- Healthy body systems
- Regular exercise
- A healthy diet
- Regular sleep pattern
- Good personal hygiene

2. **Intellectual wellbeing** comes from keeping the brain healthy and active, through opportunities to…
- Concentrate
- Learn new skills and knowledge
- Communicate
- Solve problems

3. **Emotional wellbeing** comes from…
- Feeling safe and secure
- Being able to express all emotions
- Knowing how to deal with negative emotions
- Being respected by others
- Having positive self-concept

4. **Social wellbeing** comes from a person's relationships with others…
- Friendships and other positive social relationships
- Strong family relationships
- Relationships as part of a social group

Social factors that can have positive or negative effects on health and wellbeing:

- Supportive and unsupportive relationships with others
- Social inclusion and exclusion
- Bullying
- Discrimination.

Cultural factors that can have positive or negative effects on health and wellbeing:

- Religion
- Gender roles & identity, expectations,sexual orientation
- Community participation.

Economic factors that can have positive or negative effects on health and wellbeing:

- Employment situation
- Financial resources – income, inheritance, savings.

Environmental factors that can have positive or negative effects on health and wellbeing:

- Housing needs, conditions, location
- Home environment
- Exposure to pollution – air, noise and light.

The impact on physical, intellectual, emotional and social health and wellbeing of different types of **life event**:
Physical events / Relationship changes / Life circumstances.

Interpreting health indicators

Learning outcome B: Explore how physiological indicators are used to measure health and how lifestyle choices determine physical health.

Physiological Data

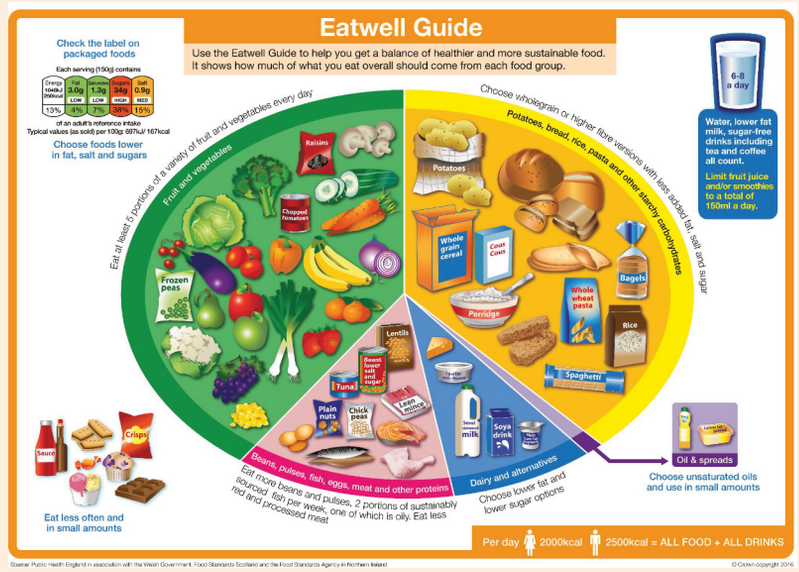
Pulse - Measures the number of heart contractions in one minute.
Blood pressure - Measures the pressure of blood as it circulates in the body.
BMI - Indicates proportion of body fat using measurements of a person's height and weight.

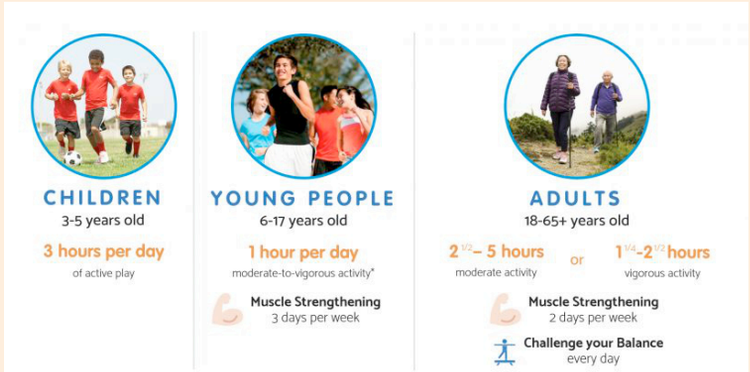
Interpretation of physiological data according to published guidelines:

- Resting heart rate (pulse) – normal range 60 to 100 bpm
- Heart rate (pulse) recovery after exercise – the heart's ability to return to normal levels after physical activity is a good indicator of fitness
- Blood pressure – low blood pressure 90/60mmHg or lower, ideal blood pressure between 90/60mmHg and 120/80mmHg, pre-high between120/80mmHg and 140/90mmHg, high blood pressure 140/90mmHg or higher
- Body mass index (BMI) – underweight below 18.5 kg/m2 , healthy weight between 18.5 kg/m2 and 24.9 kg/m2 , overweight between 25 kg/m2 and 29.9 kg/m2 , obese between 30 kg/m2 and 39.9 kg/m2 , severely obese 40 kg/m2 or above.

Interpretation of lifestyle data according to published guidelines:

- Nutrition – the Eatwell Guide
- Physical activity – UK Chief Medical Officers' Physical Activity Guidelines
- Smoking – UK Chief Medical Officers' Smoking Guidelines
- Alcohol – UK Chief Medical Officers' Alcohol Guidelines
- Substance misuse.





Pulse Rate

High pulse rate leads to: Dizziness / heart attack / stroke / high blood pressure.

Ways to lower pulse rate: Exercise / healthy diet / lower stress levels / stopping smoking.

Blood Pressure

High blood pressure leads to: Heart disease / kidney disease / stroke / dementia.

Low blood pressure can lead to: Dizziness.

High blood pressure can be caused by: Diet, lifestyle, lack of exercise, stress, being overweight.

BMI (Body Mass Index)

High BMI leads to: Heart disease / high blood pressure / diabetes type 2 / stroke

Low BMI leads to: anemia / osteoporosis / weak immune system.

Person-centred approach to improving health and wellbeing

Learning outcome C: Explore the use of the person-centred approach in health and social care settings and explore recommendations and actions that are aimed at improving health and wellbeing, alongside support available for achieving this.

Person-centred approach

- Needs – to reduce health risks
- Wishes – their preferences and choices
- Circumstances – to include age, ability, location, living conditions, support, physical and emotional health.

Importance of a person-centred approach for individuals:

- Makes them more comfortable with recommendations, advice and treatment
- Gives them more confidence in recommendations, advice and treatment
- Ensures their unique and personal needs are met
- Increases the support available to more vulnerable individuals
- Improves their independence
- They are more likely to follow recommendations/actions to improve their health
- They are more motivated to behave in ways that positively benefit their health
- They feel happier and more positive about their health and wellbeing.

The benefits of a person-centred approach for health and social care workers and services:

- It improves job satisfaction for health and social care workers
- It saves time for health and social care services
- It saves money for health and social care services
- It reduces complaints about health and social care services and workers.

Recommendations for helping to improve health and wellbeing:

- Improving resting heart rate and recovery rate after exercise
- Improving blood pressure
- Maintaining a healthy weight
- Eating a balanced diet
- Getting enough physical activity
- Quitting smoking
- Sensible alcohol consumption
- Stopping substance misuse.

Types of Support

- **Formal support** from professionals, trained volunteers, support groups and charities.
- **Informal support** from friends, family, neighbours, community and work colleagues.

Barriers to Following Recommendations

Definition of barriers: something unique to the health and social care system that prevents an individual accessing a service.

Potential barriers as appropriate to the individual and the recommendation:

- Physical barriers
- Barriers to people with sensory disability
- Barriers to people with different social and cultural backgrounds
- Barriers to people that speak English as an additional language or those who have language or speech impairments
- Geographical barriers
- Resource barriers for service provider
- Financial barriers.

Obstacles to Following Recommendations

Definition of obstacles: something personal to an individual that blocks a person moving forward or when action is prevented or made difficult.

Potential obstacles as appropriate to the individual and the recommendation:

- Emotional/psychological
- Time constraints
- Availability of resources
- Unachievable targets
- Lack of support.

American West

	1830-51	1851-76	1876-95
The Natives	The Natives were first forced West by the Removal Act - this led to events like the Trail of Tears. Once Natives were on the Great Plains they roamed free and lived a Nomadic lifestyle. They utilised the horse, buffalo and tipi to help them survive.	The Natives moved onto reservations which led to conflict when the US government broke their treaties. The reservations started to destroy their way of life, prohibiting them from living nomadically and forcing them to use the Indian agency.	The government try to exterminate natives. They started by killing off the buffalo in the 1870s and 80s. This made Natives reliant of food provided by the agency. The government then started to shut the reservations forcing natives onto smaller, harsher areas of land.
People Moving West	**1830s -** The Oregon trail was opened and widely used in travelling to the West. They were many problems in moving like those experienced by the Donner Party. **1846/7**- **Mormon** migration led by Brigham to the Great Salt Lake. He came up with many solutions to their problems like the Winter Quarters **1848/9**- **Gold** discovered in California, this led to mass migration and law and order problems	**1862- Homestead Act**- Cheap land was targeted at ex-soldiers in an attempt to force white settlers West. 160 acres could be given out to potential migrants. **1869- Transcontinental Railroad** - this helped in the movement of settlers. It also helped by the farmers and cattle ranchers in developing their industries. **1873- Timber Culture act**- A further 160 acres was offered to Homesteaders if they planted trees on half of the new land.	**1879- Exoduster movement-** Black Americans moved West to Kansas to escape racism in the Deep South. The journey and conditions were harsh. **1893- Oklahoma land rush-** 8 million acres opened up for settlement. This land had been freed up by the Dawes Act that closed reservations in the South.
Cattle Ranching	**1850-** Cattle ranching starts in Texas. It was stuck and could move North due the Homesteaders and was too far away from markets due to the 'Long Drive'.	**1866 - Goodnight** took the industry to Forts in the West **1867**- **Abilene**- First Cowtown **1870**- 'Open range' Beef bonanza	**1881**- **Ok Corral**- Gunfight between cowboys and miners **1880s**-Severe Winter-decline in industry **1892**- **Johnson County War** - Conflict between ranchers and Homesteaders
US Gov't policy	**1830- Indian Removal Act**- Natives forced West onto the Great Plains **1834- Trade and Intercourse Act**- Permanent Frontier (Boundary line) **1851- Indian Appropriations Act and the Fort Laramie Treaty (1851) -** moved to reservations	**1862**- **Little Crow's War - Plains War** **1864- Sand Creek massacre - Plains War** **1866-68- Red Cloud's war - Plains War** **1868- Second Fort Laramie Treaty**- New Sioux Reservation - led to conflict when gold discovered	**1876- Battle of Little Bighorn**- Custer defeated led to 'extermination policies' **1883-** Buffalo exterminated **1887- Dawes Act-** Shutting reservations **1890- Wounded Knee Massacre**- Frontier closed. End of the way of life.
Law and Order	**Early law enforcement 1830-50** Pinkerton detective agency founded, mining courts and community laws	**1850s-1870s** Vigilance committees, Marshalls, Sheriffs, Marshalls corruption, gangs.	**1880s - onward** Many fights between ranchers and homesteaders. Attitudes change after Johnson County War.

Early Elizabethan England, 1558-1603

Key Topic 1: Early challenges

Early Problems:

- Legitimacy
- Gender
- Religion (Protestant/ Catholics)
- Financial weakness (£300,000 debt)
- Foreign threat (France and Spain both Catholic and powerful)
- Mary Queen of Scots (legitimate catholic heir and Centre of Catholic plots.).

Religious settlement (1559):

The religious settlement was Elizabeth's attempt to try keep a compromise between Catholics and Protestants. She created a new church and created clear guidelines for the new religion. They included:

- **The Act of Uniformity**: state the appearance of church and services.
- **The Act of Supremacy**: Elizabeth made Supreme Governor
- **Royal Injunctions** - rules for services

Challenges to Religious Settlement:

Catholic: ⅓ Nobility were Catholic with high percentage in the North. They also had backing from abroad and the Pope. Catholics hated the removal of the meaning of mass and the Pope.Many became Recusants holding private services.

Puritans: The Vestment and Crucifix controversies were a threat to Elizabeth as many Bishops threatened to resign if she didn't remove further Catholic parts.

Key Topic 2: 1569-1588 Later challenges

Challenges at home (Catholic plots):

- **Revolt of Northern Earls** (1569-70) Northern Threat
- 1571 **Elizabeth excommunicated** by the Pope
- **The Ridolfi Plot** (1571): Significant threat from Spain and influence MQoS, Norfolk executed.
- 1574 The **Pope sends Jesuit priests** to England
- **The Throckmorton Plot** (1583) - Significant French and Spanish support, continued influence of MQoS.
- **The Babington Plot** (1586): Significant as letters were discovered that led to execution of MQoS in 1587.

Relations with Spain:

- Catholic **Phillip II had supported plots** against Elizabeth
- Catholics in England were turning against Elizabeth with **high levels of Recusants** (secret Mass)
- **Trade rivals**- Spanish control of the **Netherlands** led Elizabeth to intervene to protect Dutch Protestants.
- **Privateering**- The likes of Francis Drake angered Phillip by competing in the 'New World'
- **Raid of Cadiz** (1587). - embarrassed and delayed Phillip

The Armada (1588):

English Victory due to leadership (Howard, Hawkins and Drake), tactics (fireships) breaking Spanish crescent formation and superior English ships. Strengthened England's foreign policy and enhanced Elizabeth's authority

Key Topic 3: Golden Age?

Society- Strict social hierarchy with the poor and rich leading very different lives. Hobbies and pastimes for both classes but theatre popular with all. Growing Merchant class.

Education- Low but growing levels of literacy. Education for rich boys with growth in Grammar schools. Universities available as well as tutors

The Poor- high levels of poverty due to inflation and poor harvests. Fear of the poor (Vagabonds) Introduced policies for the deserving poor (1576 Poor Relief Act)

Exploration: Drake's circumnavigation (1577-80)
Walter Raleigh- explored the New World. Tried and Failed to colonise Virginia due to lack of preparation , Native attacks and War with Spain.

History Exam Technique

Paper 1: Crime and Whitechapel	Paper 2: American West and Elizabeth	Paper 3: Weimar and Nazi Germany
Describe two features (4 marks) Clear feature One piece of knowledge Clear feature Another piece of knowledge	**AW: Give two consequences of (4+4 marks)** Clear consequence Supporting knowledge about it Another clear consequence Supporting knowledge about it	**Give two things you can infer (4 marks)** Infer means something you can work out DO NOT REPEAT THE SOURCE.
How useful are sources A and B (8 marks) What does the source show about the topic? What knowledge do you have that shows its useful? Does the provenance make it more/less useful? **Repeat for source B in separate paragraph**	**AW: Write a narrative account (8 marks)** Try discuss three events in order -Give detail about each one (date etc) -Explain how the events link together -Have a clear finish to your narrative	**Explain why (12 marks)** 3x PEE paragraph Give the reason why clearly in first sentence Give knowledge to backup the reason Explain in detail why that factor impacted it
Follow up enquiry (4 marks) Detail in the source you would pick out Question you could ask that's related to the topic. Source you could use (E.g. Local newspaper) Explain how the source would help answer your question	**AW: Explain the importance (8+8 marks)** You answer **two** out of a **choice of three** Give the importance clearly in your first sentence Give supporting detail to explain why it was important. **Give at least two different reasons for each one.**	**How useful are sources B and C (8 marks)** What does the source show about the topic? What knowledge do you have thats shows its useful? Does the provenance make it more/less useful? **Repeat for source C in separate paragraph**
Similarity or difference (4 marks) What was it like in the first time period What was it like in the Second time period Explain how or why it was similar or different	**EEE: Describe two features (4 marks)** Clear feature One piece of knowledge Clear feature Another piece of knowledge	**How are interpretations 1 and 2 different (4 marks)** What does interpretation 1 say? (QUOTE) What does interpretation 2 say? (QUOTE) Explain how they are different
Explain why (12 marks) 3x PEE paragraph Give the reason **why** clearly in first sentence Give knowledge to backup the reason Explain in detail **why** that factor impacted it	**EEE: Explain why (12 marks)** 3x PEE paragraph Give the reason why clearly in first sentence Give knowledge to backup the reason Explain in detail why that factor impacted it	**Why are interpretations 1 and 2 different (4 marks)** **They use different sources as evidence.** Then match up the two interpretations to the two sources. (QUOTE FROM BOTH)
How far do you agree essay (16 marks) Intro (judgement) Paragraphs to Agree and Disagree (weight argument), Conclusion.	**EEE: How far do you agree essay (16 marks)** Intro (judgement) Paragraphs to Agree and Disagree (weight argument), Conclusion.	**How far do you agree with int. 2 (16 marks)** Intro- summarise the interpretations (judgement) Reasons agree and disagree with int.1 Reasons agree and disagree with int.2 Conclusion - Which one do you agree with most?

Graphs

Topic/skill	Definition	Topic/skill	Definition
y = mX + C	The equation given to a straight line. m is the gradient and c is the y intercept	Distance-Time Graphs	You can find the speed from the gradient of the line (Distance ÷ Time) The steeper the line, the quicker the speed. A horizontal line means the object is not moving (stationary).
Quadratic Graph	A 'U-shaped' curve called a parabola. The equation is of the form y=ax2+bx+c, where ,a, b and c are numbers, a≠0. If a<0 , the parabola is upside down.	Exponential Graph	The equation is of the form $y=a^x$, where a is a number called the base. If a>1 the graph increases. If 0<a<1, the graph decreases. The graph has an asymptote which is the x-axis. The y-intercept of the graph $y=a^x$ is (0,1)
Cubic Graph	The equation is of the form $y=ax^3+k$, where k is a number. If a>0, the curve is increasing. If a<0, the curve is decreasing.	Turning Point of a Quadratic	A turning point is the point where a quadratic turns. On a positive parabola, the turning point is called a minimum. On a negative parabola, the turning point is called a maximum.
Reciprocal Graph	The equation is of the form $y=\frac{a}{x}$, where a is a number and x≠0 The graph has asymptotes on the x-axis and y-axis	Velocity-Time Graphs	You can find the acceleration from the gradient of the line (Change in Velocity ÷ Time) The steeper the line, the quicker the acceleration. A horizontal line represents no acceleration, meaning a constant velocity. The area under the graph is the distance.
Roots of a Quadratic	A root is a solution. The roots of a quadratic are the -intercepts of the quadratic graph.	Area Under a Curve	To find the area under a curve, split it up into simpler shapes – such as rectangles, triangles and trapeziums – that approximate the area.
Tangent to a Curve	A straight line that touches a curve at exactly one point.	Gradient of a Curve	The gradient of a curve at a point is the same as the gradient of the tangent at that point.
Equation of a Circle	The equation of a circle, centre (0,0), radius r, is: $x^2+y^2=r^2$	Simultaneous Equations	A set of two or more equations, each involving two or more variables (letters). The solutions to simultaneous equations satisfy both/all of the equations and are the coordinates of where the lines would cross on a graph

Algebra

Topic/skill	Definition	Topic/skill	Definition
Equation	A statement showing that two expressions are equal	Expand	To expand a bracket, multiply each term in one bracket by each term in the next bracket. For questions with three brackets multiply each term in the solution to multiplying the first two brackets by each term in the third bracket.
Expression	A mathematical statement written using symbols, numbers or letters,	Factorise	Write an expression as a product of its factors by dividing through by the HCF and introducing brackets (The opposite of expanding)
Identity	An equation that is true for all values of the variables An identity uses the symbol: ≡	Factorise a quadratic	Create 2 brackets which multiply together to create the quadratic.
Formula	Shows the relationship between two or more variables	Complete the square	A method used to change the form of the equation so that it can be solved.
Rearranging Formulae	Use inverse operations on both sides of the formula (balancing method) until you find the expression for the letter.	Quadratic formula	A formulawhich can be used to find the solutions of a quadratic (see formula sheet)
Algebraic Fraction	A fraction whose numerator or denominator is an algebraic expressions (or both).	Function	An expression that defines the relationship between one variable and another.
Adding/ Subtracting Algebraic Fractions	For $\frac{a}{b} + \frac{c}{d}$, the common denominator is b x d	Multiplying Algebraic Fractions	Multiply the numerators together and the denominators together.

Reasoning

Topic/skill	Definition	Topic/skill	Definition
Direct Proportion	If two quantities are in direct proportion, as one increases, the other increases by the same percentage.	Circle theorems	- Angles in a semi-circle have a right angle at the circumference. - Opposite angles in a cyclic quadrilateral add up to 180°. - The angle at the centre is twice the angle at the circumference. - Angles in the same segment are equal. - A tangent is perpendicular to the radius at the point of contact. - Tangents from an external point are equal in length.
Inverse Proportion	If two quantities are inversely proportional, as one increases, the other decreases by the same percentage.	Pythagoras' Theorem	The squares on the shorter two sides add to make the square on the hypotenuse (See formula sheet)
Proportionality formulae	Direct: $y = kx$ or $y \propto x$ Inverse: $y = \frac{k}{x}$ or $y \propto \frac{1}{x}$	Trigonometry	The Sine ratio describes the relationship between the opposite side to the angle and the hypotenuse. The Cosine ratio describes the relationship between the adjacent side to the angle and the hypotenuse The Tan ratio describes the relationship between the opposite side to the angle and the adjacent side.
Interior angle	The total angle within a polygon	Linear sequence (nth term)	A sequence where there is a common difference between each term. The nth term describes the common difference and the starting point of the sequence.
Exterior angle	The complement of the interior angle. (Interior + exterior = 180 degrees)	Quadratic sequence	A sequence where the difference between each term increase/decreases by a common amount.

Maths communication

Topic/skill	Definition	Topic/skill	Definition
Congruent Shapes	Shapes are congruent if they are identical - same shape and same size. Shapes can be rotated or reflected but still be congruent.	Product rule for counting	To find the total number of outcomes, multiply the outcomes of each event together.
Congruent Triangles	4 ways of proving that two triangles are congruent: 1. SSS (Side, Side, Side) 2. RHS (Right angle, Hypotenuse, Side) 3. SAS (Side, Angle, Side) 4. ASA (Angle, Side, Angle) or AAS ASS does not prove congruency.	Transformations	Reflection - Give the equation of the mirror line Rotation - Describe the rotation with an angle of turn, direction clockwise/anti-clockwise) and a centre of rotation (Give coordinates) Translation - Describe how the shape has moved with a column vector Enlargement - Describe the enlargement with a scale factor and centre of enlargement
Similar Shapes	Shapes are similar if they are the same shape but different sizes. The proportion of the matching sides must be the same, meaning the ratios of corresponding sides are all equal.	Venn diagram	Two or three overlapping circles showing the relationships between sets of data.
Column Vector	In a column vector, the top number moves left (-) or right (+) and the bottom number moves up (+) or down (-)	Sample space	A table used to show all possible outcomes
Magnitude	Magnitude is defined as the length of a vector.	Trigonometric graphs	Sine graph - Starts at 0, period of 360, max of 1, min of -1 Cosine graph - Starts at 1, period of 360, max of 1, min of -1 Tan graph - Starts at 0, period of 180 (-90 to 90), max and min are infinite, assymptotes every 180 degrees.
Parallel Vectors	Parallel vectors are multiples of each other.	Transforming graphs	f(x) + c = Vertical translationupwards f(x + c) = Horizontal translation to the left af(x) = Vertical stretch f(ax) = Horizontal stretch of 1/a -f(x) = reflection over the x axis f(-x) = reflection over the y axis
Collinear Vectors	Collinear vectors are vectors that are on the same line. To show that two vectors are collinear, show that one vector is a multiple of the other (parallel) AND that both vectors share a point.		
Resultant Vector	The resultant vector is the vector that results from adding two or more vectors together. The resultant can also be shown by lining up the head of one vector with the tail of the other.		

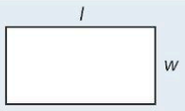
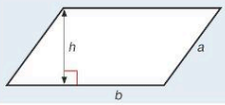
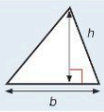
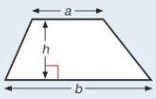
Need To Know Formulae

edexcel

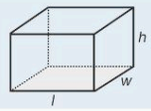
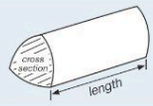
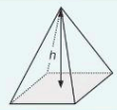
Edexcel GCSE (9-1) Maths: need-to-know formulae

www.edexcel.com/gcsemathsformulae

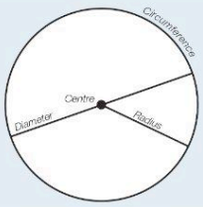
Areas

Rectangle = $l \times w$	
Parallelogram = $b \times h$	
Triangle = $\frac{1}{2} b \times h$	
Trapezium = $\frac{1}{2}(a + b)h$	

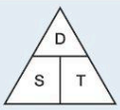
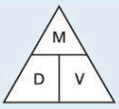
Volumes

Cuboid = $l \times w \times h$	
Prism = area of cross section × length	
Cylinder = $\pi r^2 h$	
Volume of pyramid = $\frac{1}{3}$ × area of base × h	

Circles

Circumference = π × diameter, $C = \pi d$	
Circumference = $2 \times \pi \times$ radius, $C = 2\pi r$	
Area of a circle = π x radius squared $A = \pi r^2$	

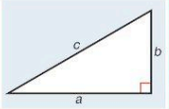
Compound measures

Speed speed = $\frac{\text{distance}}{\text{time}}$	
Density density = $\frac{\text{mass}}{\text{volume}}$	
Pressure pressure = $\frac{\text{force}}{\text{area}}$	

Pythagoras

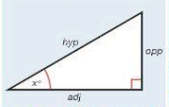
Pythagoras' Theorem

For a right-angled triangle, $a^2 + b^2 = c^2$



Trigonometric ratios (*new to F*)

$\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$

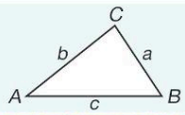


Trigonometric formulae

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

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

Area of triangle = $\frac{1}{2} ab \sin C$



Quadratic equations

The Quadratic Equation

The solutions of $ax^2 + bx + c = 0$, where $a \neq 0$, are given by $x = \frac{-b \pm \sqrt{(b^2 - 4ac)}}{2a}$

Foundation tier formulae | Higher tier formulae

R093 Exam Topic Area 1

Topic areas covered in the entire exam	
1.1	Media Sectors and Audiences
1.2	Job roles in the media industry
2.1	How style, content and layout are linked to the purpose
2.2	Client requirements and how they are defined
2.3	Audience demographics and segmentation
2.4	Research methods, sources and types of data
2.5	Media codes used to convey meaning, create impact and/or engage audiences
3.1	Work planning
3.2	Documents used to support ideas generation
3.3	Documents used to design and plan media products
3.4	Legal issues that affect media
4.1	Distribution platforms and media to reach audiences
4.2	Properties and formats of media files

Traditional Media

Film	TV	Radio	Publishing
CGI	Soaps	News	Newspapers
SFX	TV Series	Weather	Magazines
VFX	Chat Shows	Adverts	Leaflets

New Media

Computer Games	Interactive Media	Internet	Digital Publishing
Consoles	Websites	Websites	eBooks
Computers	Kiosks	Social Media	Comics
Smart Devices	Apps	Streaming Media	Video Podcasts

Job Roles Description

Sector	Roles in different areas, e.g. TV, computer games
Medium/Platform	Roles in different products e.g. online content, print publishing
Production Phase	Roles for specific phases e.g. pre production, post production
Skill Type	Roles which require a specific skill e.g. creative, technical
Seniority	Roles for different stages e.g. junior, mid level, senior

R093 Exam Topic Area 2

PURPOSE	
ADVERTISE	**Selling** a product to the consumer.
INFORM	The **sharing** of information with the consumer.
EDUCATE	**Teach** new information to the consumer.
ENTERTAIN	Providing **enjoyment** for the consumer.
INFLUENCE	**Encouraging** people to follow a viewpoint

TASK main piece of work
ACTIVITY things to do to complete the task
WORKFLOW the order to complete tasks

LOCATION RECCE scouting the location before production. Check lighting, sound, camera shots, risk assessment etc.

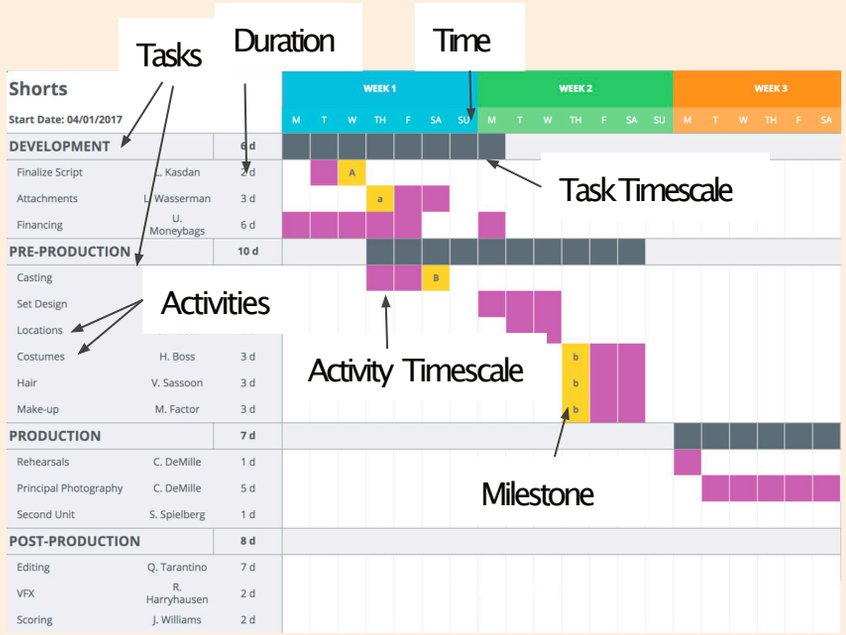
TYPES OF RESEARCH			
PRIMARY	Questionnaire	Focus Group	Interview
SECONDARY	Websites	Reports	Books
QUALITATIVE	Focus Group	Interviews	
QUANTITATIVE	Surveys	Statistics	

TECHNICAL CODES		SYMBOLIC CODES	
Microphones type	Directional, Cardioid, bi-directional	**Mise en Scene**	Background, light, costume, actors etc
Diegetic/Non Diegetic	The sound is seen or implied e.g. speech	**Environment/Atmosphere**	Quiet and isolated, busy street
Non Diegetic	The sound is not seen or implied e.g. background music	**Body Language and Facial Expressions**	Emotions can be conveyed in different ways using body or facial expression
Camera Shots/Angles/Movement	Close up. High angle. Pan.	**Colour**	Meaning through colour e.g. red = danger
Lighting Techniques	Direction, high key, low key	**Musical symbolism**	Genre, pace, tempo, timbre
Video Techniques	Jump cut, fade, pace	**Written Codes**	Use of language to convey meaning
Navigation/Interaction	Use of buttons, clicks, swipes	**Typography**	Font type, size, emphasis (bold, italic etc)
Animation	3D, 2D, stop motion	**Movement**	Camera and actor movement conveys meaning
Gaming conventions	Object properties, triggers, interactions	**Images**	Conveying meanings through imagery

R093 Exam Topic Area 3 and 4

DOCUMENT	PURPOSE	CONTENT
MIND MAPS	• **Quickly** generate outline ideas • **Link** or **connect** aspects of ideas • **Initial** meeting	**Central node** (main theme) **Sub-nodes** (with branches) **Topics** (keywords) **Images** (icons) **Colour**
MOOD BOARDS	• Visual tool used to **inspire ideas** on a new project • Identify the **theme** • **NOT** to show what product will look like	**Images** (photographs, graphics, logos) **Colours** (and scheme) **Text** (fonts, styles, quotes) **Textures** / fabrics **Sound** & video clips (only for digital) **Annotate to justify your choice**
VISUALISATION DIAGRAMS	• Visually share ideas to client (image) • Visualise final ideas	**Images** (graphics, logos) **Colours** (scheme) **Text** (fonts, style, text examples, titles, size, position) **Annotate to justify your choices** **Dimensions**
SCRIPTS SCAN ME	• Provide **dialogue** for actors so they know what to say • Provide details about **actions** • Provide **directions** for actors and production crew	**Slugline** (INT / EXT Location Time) **Direction** (what happens in scene) **Character names** (centred) **Dialogue** between characters (centred) **Transition** (fade in/out, fade to black, wipe etc)
STORYBOARDS SCAN ME	• Visual plan on a **timeline** for a moving image • Plan out the **camera shots/angles for crew**	**Camera shots** (close up, mid, long) **Camera movement** (pan, tilt, zoom) **Camera angles** (over the shoulder, low / high angle) **Timings / durations**. **Location**. **Sound**. **Scene numbers**. **3 of the above in each box under the sketch.**

ANATOMY OF A WORK PLAN



FILE FORMATS + COMPRESSION

IMAGE	VIDEO	AUDIO
.jpg *Lossy*	.mp4 *Lossy*	.mp3 Lossy
.tiff *Non*	.avi *Non*	.wav Non

LEGISLATION

TERM	© ® ™	CLASSIFICATION	DATA PROTECTION
MEANING	Copyright Registered Trademark	Age restrictions	Protect the data of users

Environment Theme 2

Je m'inquiète beaucoup de – I'm really worried about **Le problème le plus grave est (que)** – the most serious problem is (that)	**la déforestation** – deforestation **la pluie acide** – acid rain **les marées noires** – oil spills **la surpopulation** – overpopulation **les espèces d'extinction** – threatened/endangered species **la destruction des forêts** – destruction of woods/forests **il y a trop de déchets dans les rues** – there's too much litter/rubbish in the streets **il y a trop de circulation** – there's too much traffic **la circulation cause beaucoup de bruit** – the noise causes a lot of noise **il y a trop d'usines** – there are too many factories **il n'y a pas d'espaces verts** – there are no green spaces **les gens ne recyclent pas** – people don't recycle

cela cause – it causes jam
c'est nocif – it's harmful
Un embouteillage – a traffic
menacer – to threaten
le carburant - fuel
accuser - to blame
une amende – a fine
une usine – a factory

un tremblement de terre – an earthquake
un ouragan – a hurricane
les inondations - floods
une tempête de neige – a snowstorm
un tremblement – a tremor
un incendie (de forêt) – a (forest) fire

Pour protéger l'environnement/ la planète – to protect the environment/ the planet	**il (ne) faut (pas)** – you must(n't) Il faut - you must	**éteindre la lumière** – turn off the light **prendre une douche au lieu d'un bain** – shower instead of having a bath **séparer les déchets** – separate the rubbish **recycler le plastique et le verre** – recycle plastic and glass **débrancher les appareils électriques** – unplug electrical appliances **économiser de l'énergie** – save energy **fermer le robinet** – turn off the tap **faire de son mieux** – do everything possible **gaspiller de l'eau** – waste water **utiliser des sacs en plastique** – use plastic bags

À mon avis, il y a tant de problèmes environnementaux	In my opinion there are so many environmental problems
mais je pense que le problème le plus grave est	but I think that the most serious problem is
c'est nocif	it's harmful
Les usines et les embouteillages	Factories and traffic jams
Acheter des produits verts.	To buy eco-friendly products
étant donné que cela cause les espèces menacées et	because it causes endangered animals and
J'ai organisé un événement pour recueillir des fonds.	I organised an event to raise money.
Pour protéger la planète	To protect the planet
Moi, je vais essayer d'utiliser moins d' énergie.	I'm going to try to use less energy.
Je vais faire de mon mieux.	I'm going to do everything possible.

Social Issues Theme 2

Homelessness and Inequality	
unemployment	le chômage
poverty	la pauvreté
homeless person	le sans-abi / SDF
equal	Égal
war	la guerre
to bully, harass	harceler
bullying, harassment	le harcèlement
immigrant	l'immigré (m)
to worry	s'inquiéter
demonstration	la manifestation
peace	la paix
grateful	reconnaissant
refugee	le réfugié
to tolerate, put up with	supporter
witness	le témoin

Healthy lifestyles	
to be well	aller bien
to be better	aller mieux
to stop	(s') arrêter
happiness	le bonheur
to relax	se détendre
to become	devenir
fit	en bonne forme
in good health	en bonne santé
balanced	Équilibré
green area	l'espace vert (m)
to avoid	Éviter
fitness	la forme
strong	fort

Helping people	
charity	l'association caritative
equality	l'égalité (f)
to look after	garder
medicine	le médicament
voluntary work	le travail bénévole
guilty	coupable
advice	le conseil
enquiry	l'enquête (f)
to lead	mener
disadvantaged people	les personnes défavorisées (f)
care	le soin
tattoo	le tatouage

une organisation caritative – a charity
SIDA– AIDS
la fumée – the smoke
une maison de retraite – old people's home
l'odeur – the smell

mort - dead
le travail bénévole / le bénévolat – voluntary work
un fumeur – a smoker
une campagne – a campaign
un voleur – a thief
le développement – development

Local Area and Social Issues (con't)

Il n'est pas juste qu'il y ait autant d'inégalités sociales dans le monde.	It's not fair that there's so much social inequality in the world.
De plus, c'est terrible qu'il y ait autant de personnes obèses et autant de toxicomanes dans ma ville.	In addition, it's terrible that there are so many obese people and so many drug addicts in my city.
Je ne bois jamais d'alcool parce que c'est un gaspillage d'argent	I never drink alcohol because it's a waste of money
mais mes amis en boivent tous les week-ends.	but my friends drink it every weekend.
et vous fait vous sentir comme un adulte.	and makes you feel like an adult.
Le pire, c'est que je fume des cigarettes et	The worst thing is that I smoke cigarettes and
c'est très dommageable pour la santé.	it's very damaging to your health.
C'est nocif pour les poumons	It harms your lungs
et ça provoque une forte dépendance physique	and causes a strong, physical dependence
mais je ne peux pas m'arrêter	but I can't stop

Adjectives to describe your town	
noise	le bruit
noisy	bruyant
quiet	calme
clean, tidy	propre
lively	animé
famous	célèbre
poor	pauvre
dirty	sale
overcrowded	surchargé

L'avantage principal de vivre en ville c'est qu'	The best thing about living in the city is that
À mon avis, la vie en ville est très stressante	In my opinion life is very hectic in the city
et c'est pourquoi je préférerais vivre à la campagne.	therefore I would prefer to live in the countryside.
Il me semble qu'il y a beaucoup de chômage	It seems that there is a lot of unemployment
on peut profiter du plein air.	you can enjoy the fresh air.
Si c'était possible, je changerais beaucoup de choses de ma ville.	If it were possible I would change a lot of things in my city.
Par exemple, je réduirais la pollution et	For example I would reduce pollution and
je planterais plus d'arbres car	I would plant more trees because
dans le passé, elle était très industrielle.	in the past it was very industrial.

Marriage & Partnership - Theme 1

Mon partenaire idéal.../ ma partenaire idéale - my ideal partner **Ma personne idéale…** - my ideal person	**serait** – would be	+ adjectives (physical description/personality)
	aurait – would have	+ descriptions (hair/eyes/age)
	respecterait mes opinions - would respect my opinions **partagerait mes centres d'intérêts** – would share my interests **travaillerait dur** – would work hard **gagnerait beaucoup d'argent** – would earn a lot of money **passerait du temps avec moi** – would spend time with me	
Nous vivrions... - we would live **Nous serions heureux** – we would be happy **Nous aurions beaucoup d'enfants**– we would have lots of children		

Mon partenaire idéal serait assez grand	My ideal partner would be quite tall
mais l'apparence n'est pas vraiment importante pour moi.	but appearance isn't really important to me.
et nous serions heureux.	And we would be happy.

À mon avis, le mariage - In my opinion marriage	**est important** – is important	**Car-** because	**il y a plus de stabilité familiale** – there is more family stability **je suis religieux / religieuse** – I am religious **j'aimerais avoir des enfants** – I would like to have children **j'ai toujours rêvé d'avoir un grand mariage** – I've always dreamed of having a big wedding **c'est une bonne façon de prouver son amour** – it's a good way of showing love
	n'est pas important – is not important		**je préférerais vivre ensemble** – I would prefer to live together **ce n'est pas nécessaire pour avoir une famille**– it's not necessary in order to have a family

Je n'ai pas le temps et les études sont plus importantes	I don't have time and my studies are more important
Cependant, à l'avenir, je me marierai.	however, in the future, I'm going to get married.
À mon avis, le mariage est important	In my opinion, marriage is important
parce que c'est une bonne façon de prouver son amour	because it's a good way of showing love
et j'aimerais avoir des enfants	and I would like to have children
bien que d'autres disent que ce n'est pas nécessaire pour avoir une famille.	although others say that it's not necessary in order to have a family.

Role Play & Photocard Exam Essentials

Role Play

Questions

Avez vous … ?- do you have…?
(Est-ce qu')il y a… ?- is there…?
Que penses-tu de…? - what do you think of…?
À quelle heure est/are… - at what time is/are…
…est à quelle heure? - what time is the…?
Où est / où sont… - where is /are…?
Il y a une reduction? - is there a reduction
C'est combien - how much is it?
C'est loin? - is it far?
Quel jour? - which day?
Quelles sont les heures d'ouverture - what are the opening hours?
Tu aimes…? - do you like…?

Statements

Je veux/je voudrais - I want/would like
Une table près de la porte - a table near to the table
Ça s'écrit - that's spelt
Près d'ici - near to here
Reserver une chambre - to reserve a room
Avec balcon/douche/un grand lit - with a balcony/shower/double bed
Pour deux/trois personnes - for 2/3 people
C'est ouvert tous les jours à/de… it's open everyday at/from…?.
Je voyage en- I'm travelling/ I travel by
Ça ferme à… - that/it closes at…
Je ne m'entends avec - I don't get on well with
Je m'entends avec - I get on well with

To avoid!

Je préfère - instead use **j'aime/j'adore**
Récent - instead use **hier / la semaine dernière**

Photocard

To start off

Dans l'image	In the image
Il y a…	There is/ are
veo…	I see
Puedo ver …	You can see
En primer plano…	In the foreground
Al fondo ..	In the background
À la gauche..	to the left
A la droite..	to the right
Près de ..	close to

Weather

C'est en été /hiver	it's in summer/winter
Il y a du soleil	it's sunny
Il pleut	it's raining

What's there?

Il y a un homme/une femme- there is a man/woman
(**des hommes/des femmes**) - some men/women

Une famille	a family
Des personnes	some people
Beaucoup de gens	lots of people
Des bâtiments	some buildings
Des arbres	some trees

What are they doing?

ils/elles sont en train de… - they are in the process of…
il/elle est en train de… - he/she is in the process of…
manger/regarder/parler/faire - eating/watching/speaking/doing

Remember: PALMO (person, activity, location, mood, opinion)

Remember: ADore = answer, develop- opinion, reason, extend (with tenses)

Travel & Tourism Theme 2

Sample sentences (key phrases/verbs in bold)	
Cada año voy de vacaciones a España **porque** hace mucho sol y calor.	Every year I go on holiday to Spain **because** it is very sunny and hot.
Creo que las vacaciones son importantes **porque te ayudan a** desconectar.	I believe that holidays are important **because they help you** to disconnect
El año pasado fui a Grecia con mis padres pero **hubiera preferido** ir con mis amigos,	Last year I went to Greece with my parents but **I would have preferred** to go with my friends,
Tomé el sol y jugué al tenis en la playa	I sunbathed and I played tennis on the beach.
Desafortunadamente no **había** piscina ni restaurante en el hotel.	**Unfortunately there wasn't** a swimming pool or restaurant at the hotel.
Lo mejor fue cuando visitamos la catedral. Fue emocionante.	**The best thing** was when we visited the cathedral. It was exciting.
Si tuviera más dinero **iría** a Australia. Tengo ganas de ver Sydney. **Siempre he soñado** con visitar la casa de la Ópera.	**If I had** more money I would go to Australia. I want to see Sydney. **I have always dreamed of** visiting the Opera House.
El año que viene voy a ir a Francia con mis amigos.	Next year I am going to go to France with my friends.

Additional vocabulary	
viaje	journey
vuelo	flight
alojamiento	accommodation
albergue juvenil	Youth hostel
parador	parador
pensión	B and B
ascensor	lift
disponible	available
libre	Free (available)
limpio	clean
llave	key

media pensión	Half board
pensión completa	Full board
saco de dormir	Sleeping bag
retraso	delay
instalaciones	facilities
mar	sea
playa	beach
parque temático	theme park

bonito / hermoso	pretty / beautiful
feo	ugly
grande	big
pequeño	small
turístico	touristy
industrial	industrial
ruidoso	noisy
sucio	dirty

Local Area & Environment: Theme 2

Sample phrases (key words in bold)	
Me chifla mi barrio porque **hay** mucho para los habitantes.	**I really love** my neighbourhood because **there's** a lot for the residents.
Por ejemplo, **se puede** nadar en el mar, ir a la playa o **ir de compras** ya que **hay** un centro comercial grande.	For example, **you can** swim in the sea, go to the beach or **go shopping** as **there's** a big shopping centre.
En mi pueblo hay un castillo histórico y una iglesia muy interesante. También hay un lago **donde se puede** hacer esquí acuático.	**In my village there is** a historic castle and a very interesting church. Also there is a lake **where you can** do water skiing.
Desafortunadamente no hay piscina. ¡**Qué** lástima! **Me chifla** hacer natación!	Unfortunately there isn't a swimming pool. **What a** shame! **I love** going swimming!

Me preocupa el medio ambiente. **No hay que** malgastar el agua.	**I am concerned** about the environment. **You shouldn't** waste water.
Diría que la polución es el problema más grave	**I would say that** pollution is the most serious problem
Reciclo papel y vidrio cada semana por ejemplo ayer reciclé dos botellas. **Es necesario que** reciclemos.	**I recycle** paper and glass every week for example yesterday I recycled 2 bottles. **It is necessary that** we recycle.
Voy al colegio a pie cada día **en vez de** usar el coche	I go to school on foot every day **instead of** using the car

aumentar	to increase
beneficar	to benefit
dañar	to damage
encender	to switch on
faltar	to lack
gastar	to spend
proteger	to protect
utilizar	to use
injusto	unjust

medio ambiente	environment
extranjero	abroad
ladrón	robber
ley	law
libertad	freedom
pobre / pobreza	poor / poverty
basura	rubbish

cambio climático	climate change
cartón	cardboard
culpa	blame
gobierno	government
pila	battery
reciclaje	recycling
naturaleza	nature
habitantes	inhabitants
renovable	renewable

nublado	cloudy
relámpago	lightening
seco	dry
sombra	shady
tormenta	storm
viento	wind
ir a pie	to go on foot
billete de ida (y vuelta)	single (return) ticket

invierno	winter
primavera	spring
otoño	autumn
verano	summer
hace calor	it is hot
hace sol	it is sunny
hace frío	it is cold
lluvia	rain
nieve	snow

Culture & Traditions, Future Hopes

Creo que las corridas de toros son crueles y **estoy en contra**	I believe bullfights are cruel and **I am against them**
Se comen **más** pescado y legumbres	They eat **more** fish and vegetables
Hay fiestas que **no existen** en Inglaterra **como** las procesiones de la Semana Santa.	There are festivals which **don't exist** in England **like** the Holy Week processions.
Hay / Había desfiles / fuegos artificiales	There are / there were processions / fireworks
¡**Qué** interesante!	**How** interesting!

Cuando sea mayor, quiero casarme porque quiero una familia.	**When I am older**, I want to get married because I want a family.

¡Hola! Me llamo Pablo y **vivo en** Skegness **que está** en el este de Inglaterra	Hello! My name is Pablo and **I live in** Skegness **which is** in the east of England
en la costa **la cuál** es muy bonita y siempre **hace buen tiempo**.	on the coast **which** is really pretty and **it's** always **nice weather**.
Vivo con mi familia en una casa **adosada** en **las afueras**	I live with my family in a **terraced** house in **the suburbs**
pero mis abuelos viven en una granja **en el campo**.	but my grandparents live on a farm **in the countryside**.
Hay un jardín, un garaje y una cocina moderna en mi casa **pero**	**There's** a garden, a garage and a modern kitchen in my house **but**
mi dormitorio es **mi habitación preferida** porque tengo todos mis libros y música **allí**.	my bedroom is **my favourite room** because I have all my books and music **there**.
Mi cama está **al lado de** la ventana y mi televisión está **enfrente de** mi sofá.	My bed is **next to** the window and my television is **opposite** my sofa.
Me gusta mi casa **ya que** es cómoda. En el futuro **me gustaría** vivir en Francia porque **es más** interesante.	I like my house **as** it's comfortable. In the future **I would like** to live in France because **it is more** interesting.

ciudad	town
edificio	building
campo	countryside
pueblo	village
puerto	port
lugar	place
aeropuerto	airport
aparcamiento	parking
ayuntamiento	town hall

Shopping, Town, School - Themes 2 & 3

mezquita	mosque	sala de fiestas	Night club
museo	museum	teatro	theatre
parque infantil	playgrou nd	tienda	shop
plaza de toros	bullring	bonito / hermoso	pretty / beautiful
plaza	square	feo	ugly
polideportivo	Sports centre	grande	big
residencia para ancianos	Old peoples home	pequeño	small
iglesia	church	turístico	touristy
mercado	market	industrial	industrial
biblioteca	library	ruidoso	noisy
bolera	bowling	sucio	dirty
centro comercial	shopping centre		

Quisiera / Me gustaría un jersey grande por favor	I would like a big jumper please
Una mesa para dos	A table for two
¿Cómo se escribe tu apellido?	How do you spell your surname?
¿Qué talla/ tamaño tienes/llevas/usas?	What size?
¿De qué color?	What colour?
¿Cuánto es?	How much is it?
¡Qué elegante!	How elegant

Tenemos que llevar uniforme. **Está prohibido** llevar piercings y eso no es justo.	**We have** to wear a uniform. **It is forbidden** to wear piercings and that is unfair

conseguir	to get, to achieve
dejar de	to leave / to stop
esperar	to hope
evitar	to avoid
tomar un año libre/sabático	to take a gap year
(ciber)acoso	bullying
alumnos	pupils
comportamiento	behaviour
olvidar	to forget

comida basura / rápida	junk /fast food
ropa	clothes
bañador	swimsuit
bolso	bag
camisa	shirt
pantalones cortos	short (trousers)
vaqueros	jeans
vestido	dress
zapatos	shoes
guantes	gloves
maquillaje	makeup
juguete	toy
recibo	receipt
rebajas	sales
caja	till
vendedor	shop assistant
precio	price
talla	size

Term 3: Role Play & Photocard Exam Essentials

Role Play

Questions

¿Tienes… ?- do you have…?
¿Hay… / qué hay?- is there…/ what is there?
¿Qué piensas de…? - what do you think of…?
¿a qué hora es/son… - at what time is/are…
¿dónde está/están? - where is/are…?
¿hay una reducción? - is there a reduction
¿cuánto cuesta…/cuánto es?- how much does … cost? /How much is…?
¿está lejos? - is it far?
¿te gusta? - do you like?
¿te gustaria…?- would you like?

Statements

Pienso que... Creo que…- *I think that.*
Cuesta___euros... - *It costs____ euros*
Hay... - *There is/are*
Dura.... horas/días…- *It lasts... hours/days*
A las tres/cuatro/cinco... *-At three/four/five o'clock*
Normalmente.../Generalmente... - *Normally/Generally*
Es.../Son…- *It is/they are*
Me gusta/me gustan... *-I like*
No me gusta/no me gustan…- *I don't like*
Odio/detesto…- *I hate*
No puedo…- *I can't*
Lo siento.../Perdona..- . *I am sorry*

Photocard

To start off

En la photo	In the photo
Hay …	There is/ are
Je vois…	I see
On peut voir…	**You can see**
Au premier plan…	In the foreground
Au deuxième plan..	In the background
A la izquierda…	to the left
A la derecha.	to the right
Cerca de ..	close to

Weather

Hace sol	it's sunny
Está lloviendo	it's raining

What's there?

Hay un hombre/ una mujer - there is a man/woman

Una familia	a family
Unas personas	some people
Mucha gente	lots of people
Unos edificios	some buildings
Unos árboles	some trees

What are they doing?

Está(n) hablando/discutiendo/sonriendo/riendo/jugando
he/she (they) are talking/arguing/smiling/laughing/playing

Remember: PALMO (person, activity, location, mood, opinion)

Remember: ADore - Answer, Develop - opinion, reason, extend (with tenses)

Component 2 - Music skills development

A1 Professional skills for the music industry
- time management
- self-discipline
- working with others o correct and safe use of equipment
- identifying resources required
- auditing existing skills and maintaining a development plan

A2 Planning and communicating music skills development
- Planning development processes
- Strategies for skills development
- Managing equipment and resources

Methods of capturing musical development, such as:
- digital or traditional portfolios, including studio track sheets, production notes, rehearsal diaries, screenshots, key milestone performances and reviews from others
- recorded auditions
- compositional sketches
- raw recordings
- drafts
- application of effects
- initial mixes.

Having a clear and organised approach to communicating:
- key points in the process are referenced and in a logical order
- images, videos and recordings are clear
- written commentary supports the quality of work.

Sharing and commenting on work:
- social media, e.g. Soundcloud™, Facebook™, YouTube™
- jam sessions, improvisation sessions, mixtapes, demos, sharing samples, remixing and reworking, white label, remote collaboration.

B1 Development of technical music skills and techniques

Development processes:
- individual development routines
- identifies technical exercises for development
- includes setting goals
- includes monitoring and tracking of progress.

Careers in the Music Industry:
Performer: Sing, play instruments or record their own music this can be as part of a band or a solo act
Composer: Write music for TV, film or live performance. Composers will often work alone and be hired by media companies to create music for their film/tv show or advertisement.
Songwriter: Create music and lyrics for other artists to record. They can sometimes work with composers to create full tracks together
Music Therapist: use music to help their clients achieve therapeutic goals
Producer: Mix, edit and lead the creative and technical aspects of recordings. They are in charge of the recording studio and edit the recordings to make the song sound polished and fully formed.
Session Musician: expert studio players who are hired on a short-term basis to record backing tracks for recording artists
DJ: play a mix of preexisting music to a live crowd or on a radio station
Music Teacher: teach students how to understand, create and perform music
Peripatetic Teacher: teach one specific instrument to a high standard
Talent Relations: Engage with musicians to get the to perform at your event or for your cause/employer
Sound Engineer: assembling, operating and maintaining the technical equipment used to record, amplify, enhance, mix or reproduce sound
Event Manager: plan and organise live music events e.g. gigs & festivals
Publicist: promote and market a band or artist
Music Journalist: write for media about new releases or live performances, this can be in a blog or social media post, a magazine or in formal print media.

B2 Development of music skills and techniques
Developing musical skills appropriate to style and context, such as:
- timing and phrasing, using rhythm and pitch in the creation or recreation of music, using equipment, instrumentation or software appropriately, expression, combining instruments/sounds, health and safety in the use of equipment and/or instruments.

Applying skills development to the creation of content/material:
- creative intentions, skills needed, stylistic accuracy, creation of content/material.

Music performance: tuning (if appropriate), learning repertoire, physical preparation and exercises, instrumental or vocal technique, practise routines e.g. scales, following accompaniment, stage presence.

Creating original music: exploring and extending ideas, using structure effectively, using rhythmic and melodic patterns, development of harmony.

Music production: using software instruments, using audio and software tools, manipulation techniques, inputting and editing audio, using effects, structuring music

Component 3 - Music theory

Instrumentation

Brass: trumpet, tuba, trombone, french horn
Woodwind: flute, clarinet, saxophone, bassoon, bass clarinet, piccolo, oboe
Strings: violin, viola, cello, double bass, harp
Percussion: drums, tambourine, xylophone, glockenspiel, piano,
Technology - turntable, synthesiser

Instrument techniques
Strings: plucking (pizzicato), arco (playing with a bow), strumming, slap bass
Percussion: drum rolls, shaking, plucking, scraping, striking
Woodwind: pitch bend, flutter tongue, double tonguing
Brass: playing with a mute, hand slide, double tonguing,
Vocals: vibrato, scat singing, pitch bend,

Ensemble types:
Duet - 2 performers
Trio - 3 performers
Quartet - 4 performers
Band - lead guitar, rhythm guitar, bass guitar, drums, vocalist
Jazz band - rhythm section (drums, piano, guitar etc) and melodic section (brass, vocals, saxophone)

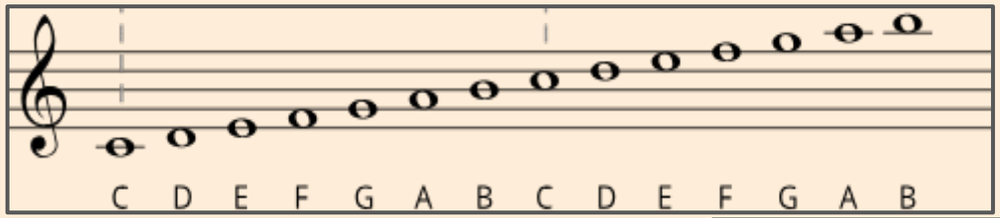
Timbre: the sound/tone of an instrument

Electronic sound effects

Reverb: electronically produced echo effect
Phaser: electronic sound processor used to filter a signal by creating peaks and troughs in the frequency
Delay: time based audio effect creating a repetition of the original
Distortion: modifying the original sound and altering the quality

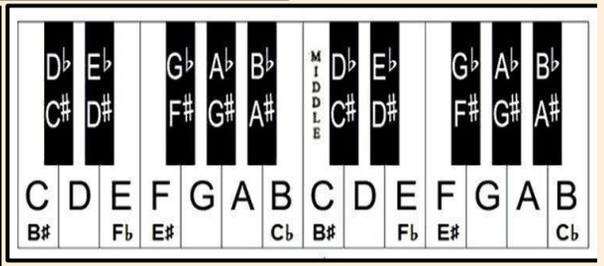
Texture

Solo: 1 performer
Homophonic: same rhythm, different pitches (harmony)
Monophonic: 1 part/all doing the same thing
Polyphonic: playing different pitches and rhythms together
Unison: everyone doing the same thing at the same time



Structure/Form

Strophic form: song structure - e.g. verse, chorus etc.
12 bar blues: chord pattern of I I I I, IV IV I I, V IV I I
Through-composed: all verses have a different melody
ABACADA: returning to the original section each time
AB: Binary form - 2 contrasting sections
ABA: Ternary form - 3 sections, repeat of section A



Melody - main tune in a piece of music

Tonality - key of the music
Major: happy/cheerful/positive feel
Minor: sad/sinister/dark feel
Atonal: no sense of key

Scales
Semitone (S): closest distance between two notes C-C# or E-F
Tone (T): 2 semitones e.g. C-D or E-F#
Major scale: 8 notes in the pattern of T T S T T T S
E.g. C D E F G A B C
Minor scale: 8 notes in the pattern of T S T T S T½ S
E.g. A B C D E F G# A
C major blues scales: C Eb F Gb G Bb C
Pentatonic scale: 5 notes in the pattern of 1st 2nd 3rd 5th 6th

Melodic techniques
Conjunct: melody that moves stepwise (notes close to one another)
Disjunct: melody that moves in leaps (notes not next to each other)
Chromatic: music created with notes outside the key of the music
Diatonic: music created using the notes from the key of the music
Repetition: using the idea again
Ostinato: continuously repeated pattern of notes
Sequence: same thing repeated at a higher/lower pitch
Ornamentation: decorations to a melody, e.g. trill
Motif: a short musical idea on which a piece can be built
Riff: repeated pattern that forms the basis for a piece
Hook: catchy and memorable part of a song
Improvisation: making the music up as you go along

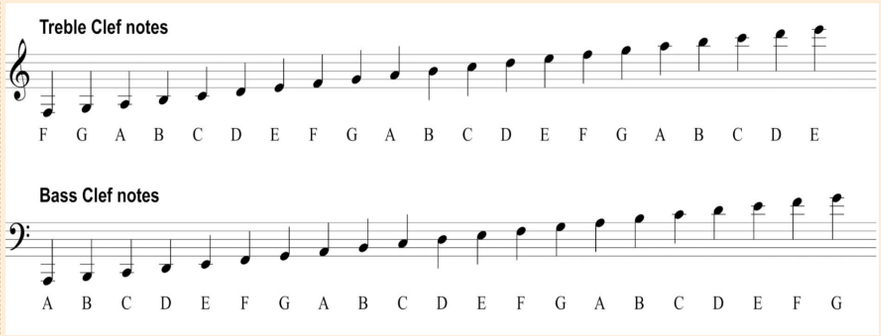
Rhythmic techniques

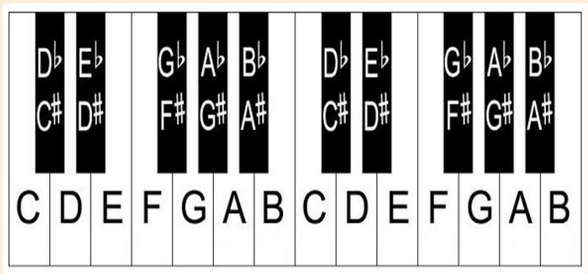
Metre: how many beats in a bar
BPM: Speed - beats per minute
Syncopation: emphasis on the off beat in a bar
Polyrhythms: different rhythms playing together
Hemiolas: playing 3 beats in the time of 2
Rhythmic displacement: repeating an idea, but putting emphasis on different beats each time

Harmony

Major triad: 3 notes of a major chord (Root + 4st + 3st)
Minor triad: 3 notes of a minor chord (Root + 3st + 4st)
Power chord: 2 note chord (root and 5th)
7th chord: triad + 7th note of the scale
Broken chords: notes of the chords play separately
Arpeggios: 1st, 3rd, 5th, octave

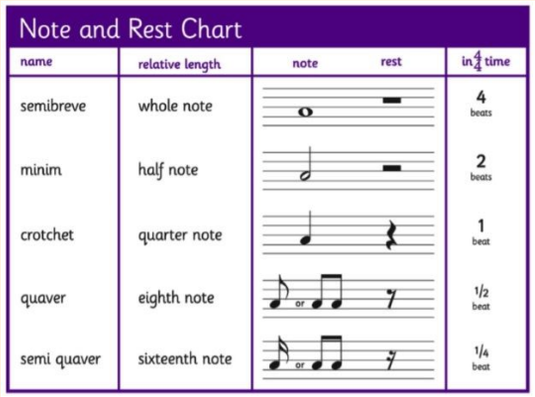
Music - Production





Sonic features

Instrumentation: instruments used and their techniques
Timbre: sounds the instruments make
Texture: number of parts and how they play
Production: technology and techniques used



GarageBand

Shortcuts
The shortcut button on Garageband is Command (cmd ⌘) on mac keyboards, and the windows key ( ) on PCs

Hold Command - Pencil tool (Create tool)
Hold Command + Z - Backspace (Undo last action)
Hold Command + T - Cut note clip at playhead
Hold Alt and drag - Copy
Drag from bottom of note clip - Extend or make shorter
Drag from top of note clip - Loop (copies)

Garageband Piano Roll number of boxes

16 boxes

8 boxes

4 boxes

2 boxes

1 box

Tips

- Before you begin a new project, it is often a good idea to **arrange your track:**
  Go to Track > Show arrangement track
  Press the plus button to add a section
  Click on your new section and rename it what you want to it be called
- Use the **quantise function** to put things in time for you:
  Just highlight the notes, and click the Q button on the right hand side of the piano roll
- **Colour code your tracks** to be able to navigate your project easier:
  Right click the instrument track and select “Assign track colour”
- Use the **loop** function to continually repeat a certain section:
  Drag the yellow bar above the instrument tracks across the section you want to loop

- When inputting chords remember this formula for major and minor:
  Major: Root, up 4 semitones, up 3 semitones
  Minor: Root, up 3 semitones, up 4 semitones

Production

Sampling: taking an element of a pre-existing recording and manipulating this for use in your own composition

FX: stands for ‘effects’. Used to mix music, add interest, and create different types of sounds

Looping: a section of music that repeats itself continuously

Quantise: moving notes on a DAW to ensure timing accuracy

Sequencing: putting sections of a piece or ordering a series of actions within a piece of music in a DAW

Turntablism: Using DJ equipment to manipulate sounds, create new music, sound effects, mixes and other beats

Automation: setting DAW up to perform tasks automatically

The Basics part 1

EXAMPLE PROJECT CHECKLIST

1. Front cover
2. Mind-Map
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7.Own Shoot C.Sheets

8.Photoshop Edits / Adjustments (Screenshots & Variations)

9. Reshoots
10. Photography Display Ideas
11.Final Ideas
12.Layout Ideas
13. Final Layout
14.Project Evaluation

VISUAL ELEMENTS


LINE

TEXTURE


SHAPE

FORM


COLOUR

SPACE

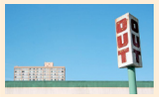

LIGHT & SHADOW

FOCUS

COMPOSITION


RULE OF THIRDS

LEADING LINES


BALANCING ELEMENTS



SYMMETRY


VIEWPOINT

S SHAPE

DEPTH


DIAGONALS
FRAMING

USEFUL KEYBOARD SHORTCUTS
For Google Drive & Photoshop CS6

Google Drive

Cmd > Shift > 4 = Screenshot

Cmd > X = Cut

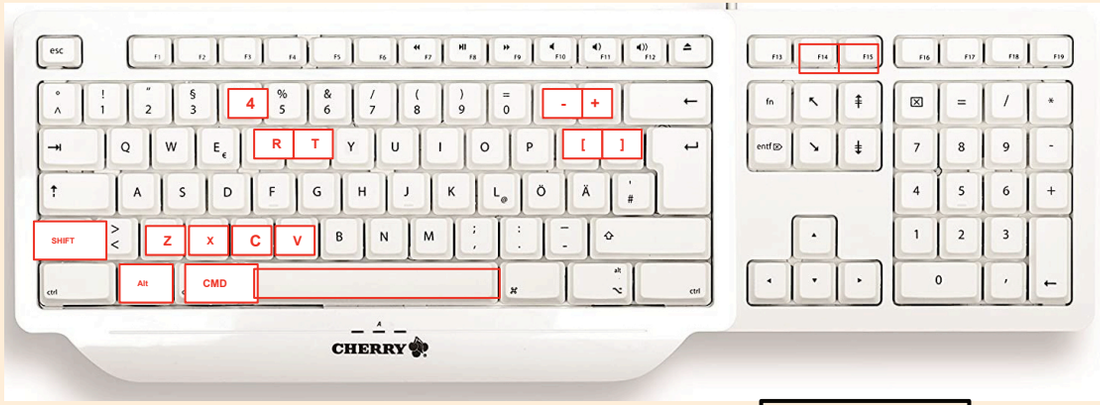
Cmd > C = Copy

F14 & F15 = Brightness

Alt > 3 = # symbol

Hold Shift = When resizing an image

Cmd > V = Paste



Cmd > Alt > Z = Multiple Undo

Cmd > + = Zoom In

Cmd > T = Transform

[ ] Brackets = Tool size up & down

Cmd > R = Ruler

Cmd > - = Zoom Out

Hold Spacebar = Manoeuvre with mouse

Cmd > Z = Undo

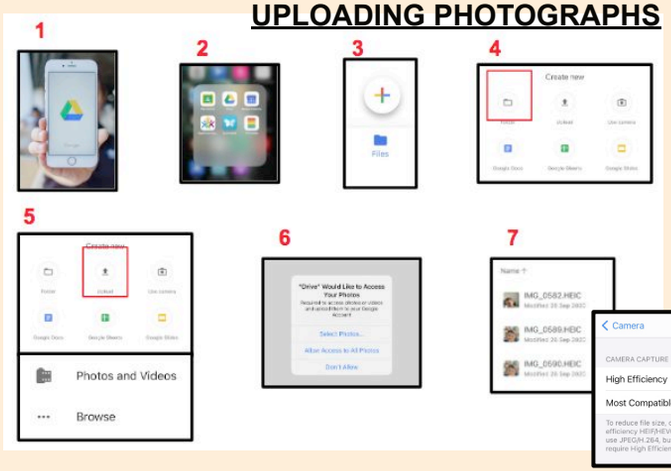
The Basics part 2

USING A CAMERA

1) Shutter Release button
2) Mode Dial (for Auto/Manual)
3) Settings Dial
4) On/Off switch
5) Flash Button

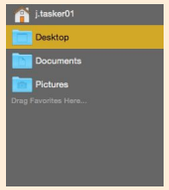
6) Display button (look at settings)
7) LED screen view (for TRIPOD)
8) Viewfinder
9) Playback button
10) Menu button

UPLOADING PHOTOGRAPHS



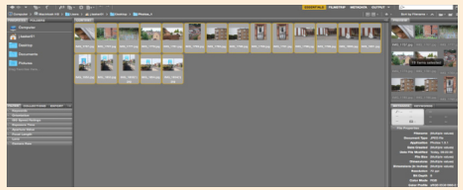
1) Download App
2) Open App / Login
3) Files then Plus icon
4) Create folder
5) Click upload - Photos
6) Allow access to photos
7) Change to JPEG

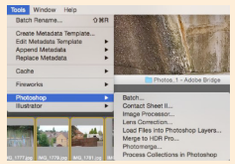
CREATING CONTACT SHEETS - ADOBE BRIDGE



1) Having successfully downloaded your pictures from your Camera. Load up **Adobe Bridge** and select your **Desktop** (on the left hand side)

2) Once you have selected your **Desktop**, find the **folder** containing your images from your shoot. Hold down **cmd and click** on the images you want in your contact sheet

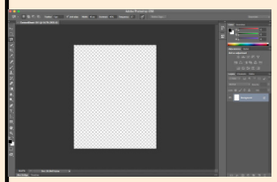


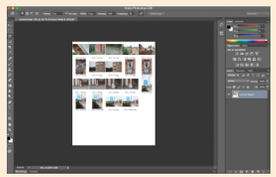


3) On the top bar go up **to 'Tools' > 'Photoshop' > 'Contact Sheet II'** and click (this will load up Photoshop)

4) On Photoshop, this message will come onto your screen. Halfway down just make sure you change **the Resolution** to '**pixels/inch'**

Units > cm / Width: 20.32 / Height: 25.4 / Resolution: 300 pixels/inch





2) Be patient; this screen will start to load up**. Do not click anything** until you can see your image thumbnails.
This is what your contact sheet should eventually look like
Save to **Desktop** and the **Format should be JPEG**.

Photography GCSE Being a Year 11 & Exam Prep

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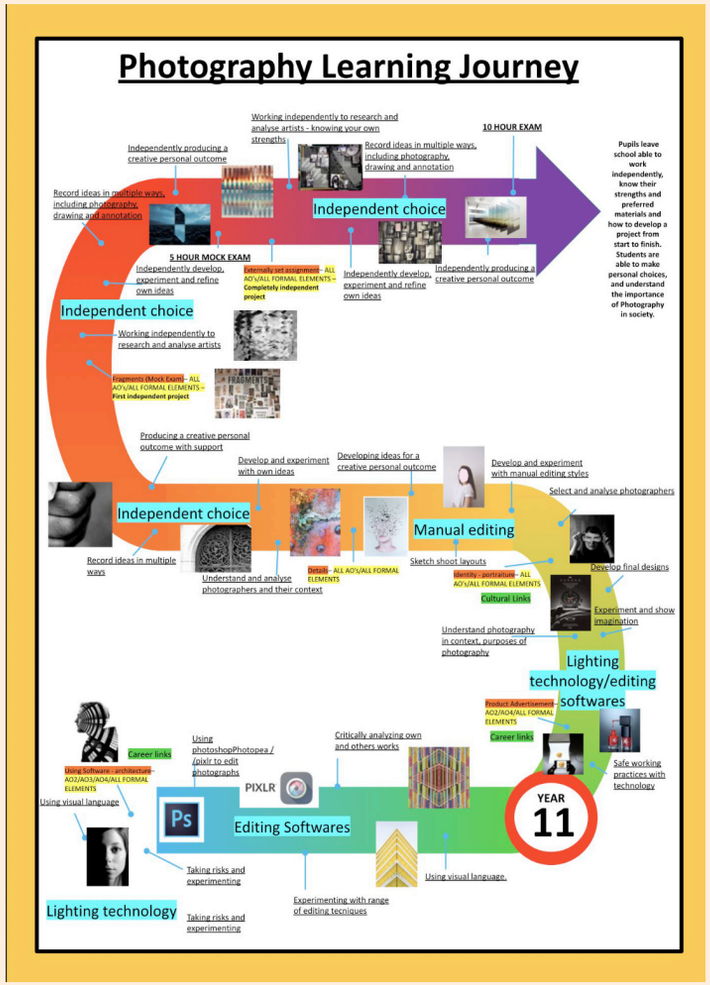


Externally Set Task (Unit 2 - Worth 40%)

Using the skills, knowledge and understanding you have developed over your coursework you will be expected to create a project based on a starting point given to you by OCR.

Your Digital Sketchbook for Externally Set Task will be completed from 2nd Jan up until the 1st day of the exam (usually at the start of May).
This will include:-

- 1. **Front cover** (Name, Theme Title, Unit)
- 2. **MIND MAP** with visuals linked to chosen theme
- 3. **Statement of Intent** (Chosen Theme & Initial Ideas)
- 4. **Photographer research** x 2 Photographer(s) (min)
- 5. Photographer – 1 **Written & Visual Analysis** (for each)
- 6. **Photographer Recreations** / C.Sheets (2 for each)
- 7. **Initial Photoshop Edit Steps** slide (link to style)
- 8. **START TAKING PHOTOS FOR EXAM** [5+ shoots]
- 9. Create **VISUAL ANALYSIS OF OWN** WORK(S)
- 10. **PRACTICE FINAL Photoshop Edits** / Adjustments

10 HOUR EXAM

- 11. **Photoshop / Lightroom** – ANNOTATE AS YOU GO
- 12. **Screenshot all edits on Photoshop and annotate** (every time you do something new)
- 13. Photography **DISPLAY IDEAS (3+ Examples)**
- 14. Finalised **LAYOUT & FINAL DISPLAY** PRESENTATION Edits (Linked to your artists / photographers)
- 15. **Present FINAL PIECES (LARGE SLIDES)**
- 16. Full written **PROJECT EVALUATION 500+ words**

Unit 1: Reducing the Risk of Sports Injuries

Topic 1 - Different factors which influence the risk and severity of injury

Extrinsic factors

- Type of activity
- Coaching/Instructing/Leading
  - Knowledge of techniques/rules/regulations
  - Experience
  - Communication
  - Supervision/ Ethical Standards/Behaviour
- Environmental factors
  - Weather / temperature conditions
    Playing surface (natural and artificial) and surrounding area
  - Human interaction
    - Other performers/participants/Officials/ Spectators
- Equipment
  - Protective equipment/Performance equipment/Clothing/ Footwear

Topic 1 - Different factors which influence the risk and severity of injury

Intrinsic factors

- Individual Variables
  - Age / Gender / Experience / Weight / Fitness levels / Technique & Ability / Nutrition & Hydration / Medical Conditions / Sleep / Previous or Recurring Injuries
- Psychological factors
  - Motivation / Arousal / Anxiety & Stress / Confidence / Aggression - Direct & Channelled
- Reasons for Aggression
  - Level of Performance / Retaliation / Pressures to win (performer/Coach/Spectators) / Decisions of Officials / Performance Enhancing Drugs
- Mental Strategies
  - Mental Rehearsal / Imagery / Selective Attention

Key Terms

***Extrinsic*:** Risks from outside the body
-***Intrinsic*:** Risks from within the body
-***Protective equipment*:** Equipment used in sport to protect the body
-***Performance equipment***: Equipment needed to perform the sport
-***Posture*:** Position the body is held in
-***Aggression*:** Intention to cause harm
-***Heart rate*:** Number of beats per minute
-***Strain*:** Injury to muscles
-***Sprain*:** Injury to ligaments

Warm up

- **Key Components**
  - Pulse raiser / Mobility / Dynamic Stretching / Skill Rehearsal
- **Physiological benefits**
  - Increased Muscle temp / Increased heart rate / Increased flexibility of muscles & joints / Increased pliability of ligaments & tendons / Increased blood flow & oxygen to muscles / Increased speed of muscle contractions
- **Psychological benefits**
  - Heighten arousal levels / Improve concentration & focus / Increased motivation / Increased confidence / Mental rehearsal

Cool down

- **Key Components**
  - Pulse lowering / Stretching
- **Physiological benefits**
  - Lowers heart & breathing rate / Lowers body temp / Circulates blood & oxygen / Helps prevent blood pooling / Removes waste products such as lactic acid / Reduces risk of Delayed Onset of Muscle Soreness (DOMS)

Unit 1: Reducing the Risk of Sports Injuries

Topic 3 - Different types and causes of sports injuries

Acute injuries - *caused as a result of sudden trauma with immediate pain.*

- **Strains**
  - Torn muscle or tendon
- **Sprains**
  - Torn ligaments
  - Anterior Cruciate Ligament (ACL)
- **Skin Damage**
  - Abrasions/Grazes
  - Cuts/Lacerations
  - Contusions (bruises)
  - Blisters
- **Fractures**
  - Open
  - Closed
- **Head injuries**
  - Concussion
  - Link to Dementia & Alzheimer's

Chronic injuries - *result of overuse and continuous stress on an area that develops over time.*

- **Tendonitis**
  - Achilles / Rotator cuff / Patellar
- **Epicondylitis**
  - Lateral epicondylitis (Tennis elbow)
  - Medial epicondylitis (Golfers elbow)
- **Shin splints**
- **Stress fractures**

Topic 4 - Reducing risk, treatment and rehabilitation of sports injuries and medical conditions

Measures taken before and during participation

- **Safety Checks**
  - Risk assessments
  - Characteristics of individual/group
  - Group size
- **Strategies to reduce risk of injuries**
  - Medicals
  - Screening
  - National Governing Body (NGB) policies
- **Emergency Action Plans (EAPs)**
  - Emergency personnel (First aider / coach)
  - Emergency communication (telephone / emergency numbers)
  - Emergency equipment (First aid kits / evacuation chair)

Responses and treatment to injuries and medical conditions

- **SALTAPS** (See / Ask / Look / Touch / Active / Passive / Strength)
- **DRABC** (Danger / Response / Airway / Breathing / Circulation)
- **Recovery position**
  - Unconscious performers who are breathing
- **PRICE** (Protection / Rest / Ice / Compression / Elevate)
- Use of X-rays to detect injury
- **Treatments/therapies**
  - Massage / Ultrasound / Electrotherapy / Hydrotherapy / Cryotherapy / Contrast therapy / Painkillers / Support (taping & bandaging) / Immobilisation (Cast, splint & sling)
- **Psychological effects of injuries**

Key Terms - -***Ligament***: Connects bone to bone -***Tendon***: Connects muscle to bone -***Hazard***: Something that can cause harm -***Risk***: Likelihood of hazard causing harm -I***mmobilisation***: To reduce movement of a body part to promote proper healing -***Dislocation***: Bones are forced from their normal positions -***Stress fracture***: Tiny cracks in a bone as a result of overuse

Unit 1: Reducing the Risk of Sports Injuries

Topic 5 - Causes, symptoms and treatment of medical conditions

Diabetes

- **Overview and differences** of Type 1 & Type 2 diabetes
  - Age/ Gender
- **Common symptoms of Type 1 & Type 2**
  - Increased thirst / Urinating more often / Extreme tiredness / Weight loss / Cuts take a long time to heal
- **Treatment of Type 1 & Type 2**
  - Insulin & Glucose / Lifestyle changes / Diet / Exercise
  - **Hypoglycemia (Hypos)** - Low blood sugar
  - **Hyperglycemia** - High blood sugar

Topic 5 - Causes, symptoms and treatment of medical conditions

Asthma

- **Causes/triggers of asthma**
  - Environment
  - Exercise
- **Common symptoms of asthma**
  - Coughing / Wheezing / Shortness of breath / Tightness in the chest
- **Treatment**
  - Reassurance/Inhalers

Topic 5 - Causes, symptoms and treatment of medical conditions

Epilepsy

- **Overview of epilepsy**
  - Seizures
- **Common causes / triggers of epilepsy**
  - Severe head injuries
  - Anxiety / Stress
  - Tiredness / Lack of sleep
- **Common symptoms of seizures**
  - Eyes/Mouth/Limbs
- **Treatment**
  - Anti-epileptic drugs (AEDs)/Ketogenic diet

Topic 5 - Causes, symptoms and treatment of medical conditions

Sudden Cardiac Arrest (SCA)

- **Causes of SCA**
  - Underlying genetic heart conditions
  - Sudden trauma
- **Symptoms of SCA**
  - Unconscious/Breathing difficulties
- **Treatment for SCA**
  - Defibrillators
  - Lifestyle changes

Topic 5 - Causes, symptoms and treatment of medical conditions

Hypothermia

- **Causes of hypothermia**
  - Body temp below 35C / Prolonged exposure to cold/wet conditions
- **Symptoms of hypothermia**
  - Shivering / blue lips & skin / slurred speech / tiredness / confusion / slow breathing
- **Treatment for hypothermia**
  - Remove wet clothing / wrap in blankets / cover head

Heat exhaustion

- **Causes of heat exhaustion**
  - Body temp of 38C or above / Strenuous physical activity / Not enough water intake
- **Symptoms of heat exhaustion**
  - Excessive sweating / Headache & dizziness / Thirst / Feeling or being sick / Rapid pulse & breathing
- **Treatment for heat exhaustion**
  - Move to a cool place / Cool skin / Drink plenty of water

Dehydration

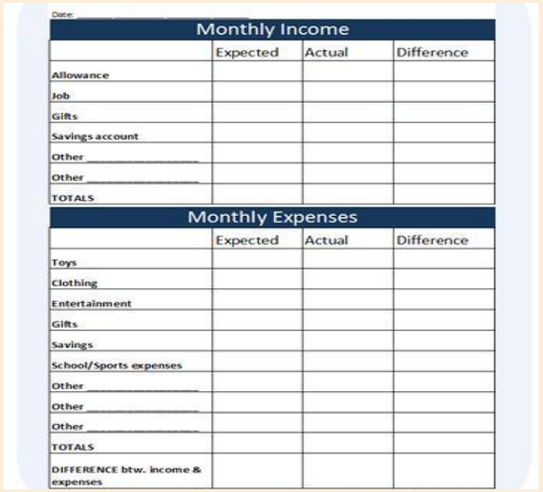
- **Causes of dehydration**
  - Loss of bodily fluids
- **Symptoms of dehydration**
  - Thirst / Fatigue / Dark urine / Dry mouth
- **Treatment for dehydration**
  - Drink plenty of water / Rehydration sachets

Personal Finance

Financial awareness key terms:	
Saving(s):	the money one has saved, especially through a bank or official scheme
Budget	A budget is a spending plan based on income and expenses. In other words, it's an estimate of how much money you'll make and spend over a certain period of time, such as a month or year.
Loan:	A loan is something that is borrowed, often money, which has to be paid back with interest
Debt:	Loans and debt can be explained together. Like a loan, a debt is money that you owe someone that needs to be paid back.
Interest:	Interest has two sides: it's either something you pay when someone lends you money or something that you earn when you lend money to someone else.
Credit/Credit Card:	Credit lets you buy something without having to pay for it right away. For example, if you use a credit card to buy a new bike that costs $200, the money doesn't come out of your bank account. Instead the credit card company pays for the bike.
Taxes:	Taxes are payments that go to the government for the work that it does, such as improving schools and fixing roads. They're taken right from your paycheck and the amount you pay depends on how much money you make.
Investment	An investment is something that you spend money on, which you believe will earn you even more money (a profit) down the line.
Mortgage:	is an agreement between you (the borrower) and a mortgage lender to buy or refinance a home without having all the cash upfront.

Term 1a: Why is being financially aware important?

Students who learn to manage their finances early often become adults who are better equipped to live independently. By teaching students to make good financial decisions, they learn to pay down debt or avoid it altogether. They can learn to budget so they know how much money they can or can't spend.
Students who learn to navigate the world of debt and credit will tend to have more money for savings, which can help pay for large expenses without relying on credit, and they can set aside money for retirement accounts.



Date: _____

Monthly Income			
	Expected	Actual	Difference
Allowance			
Job			
Gifts			
Savings account			
Other _____			
Other _____			
TOTALS			

Monthly Expenses			
	Expected	Actual	Difference
Toys			
Clothing			
Entertainment			
Gifts			
Savings			
School/Sports expenses			
Other _____			
Other _____			
Other _____			
TOTALS			
DIFFERENCE btw. income & expenses			

Healthy Lifestyles

Healthy Lifestyle	
Smear Test	Cervical screening (a smear test) checks the health of your cervix. The cervix is the opening to your womb from your vagina.It's not a test for cancer, it's a test to help prevent cancer.All women and people with a cervix aged 25 to 64 should be invited by letter
Importanc e of Sleep	Most teens need about 8 to 10 hours of sleep each night. Getting the right amount of sleep is important for anyone who wants to do well
Physical well-being	Adolescents ages 6 through 17 years should do 60 minutes (1 hour) or more of moderate-to-vigorous intensity physical activity each day, including daily aerobic – and activities that strengthen bones (like running or jumping) – 3 days each week, and that build muscles (like climbing or doing push-ups) – 3 days each week.
Mental Health	Mental health is the health of your mind, thoughts and emotions. Mental health is something that everyone has, just like everyone has physical health. This means that mental health is something that everyone can take care of. In the same way that you take care of your physical body, you can look after your mental wellbeing through the choices you make about your lifestyle and environment.
Unhealthy Lifestyle	
Gambling	Gambling comes in many forms – card games, lottery tickets, apps, video games and sports bets. At present, teen gambling addictions are more common among males, although females are becoming more involved in teenage gambling. Some signs of a pathological teen gambler include: Likes the rush felt when gambling. Takes money, but then makes desperate attempts to stay in the game by writing IOUs- Will try almost anything to stay in the game.
Alcohol Abuse	Alcohol is a depressant, which means it slows the function of the central nervous system. Alcohol actually blocks some of the messages trying to get to the brain. This alters a person's perceptions, emotions, movement, vision, and hearing.
Drug Use	Drug abuse can impact the brain’s ability to function in the short term as well as prevent proper growth and development in the long term.Substance abuse affects teen brain development by: Interfering with neurotransmitters and damaging connections within the brain.Reducing the ability to experience pleasure. Creating problems with memory. Causing missed opportunities during a period of heightened learning potential.

Relationships & Aspirations/Careers

Relationships	
Pornography Dangers	Pornography's unrealistic depiction of bodies, sex, and relationships can skew a young person's views about intimacy.Pornography more often depicts relationships as meaningless and sexual gratification as the priority.
Revenge Porn	Revenge Porn refers to the sharing of explicit or sexual, images or videos, without the consent of the person in the image. This is an issue among people of all ages from children as young as 11 to much older adults.On the 13th April 2015 Section 33 of the Criminal Justice and Courts Act 2015 came into force. This created a new criminal offence of disclosing private sexual photographs and films with intent to cause distress.The act criminalises sharing private, sexual images or films containing scenes that would not usually be seen in public.
Catfishing	Catfishing refers to when a person takes information and images, typically from other people, and uses them to create a new identity for themselves. In some cases, a catfisher steals another individual's complete identity—including their image, date of birth, and geographical location—and pretends that it is their own. The catfisher then uses this identity to trick other people into associating with them or doing business online. Cyberbullying involves repeated attempts to embarrass, humiliate, or harm someone using online resources. Catfishing is therefore a form of cyberbullying because the target is harmed as the catfisher plays games with their mind.
Sexual Harrassment	Sexual harassment is a form of unlawful discrimination under the Equality Act 2010. The law says it's sexual harassment if the behaviour is either meant to, or has the effect of: violating your dignity, or creating an intimidating, hostile, degrading, humiliating or offensive environment
Aspirations & Careers	
Volunteering	Volunteering is often thought of as a selfless act — one where you give up your time for a worthy cause without being paid. Employers and universities really look for this on peoples CV's because it shows you are a selfless person.
Extra Curricular	Extracurricular activities are endeavours a person pursues outside of school and work. Job candidates can include these activities on their CVs to show their relevant skills and interesting personality traits. Extracurricular activities can also help you add substance to your CV if you lack extensive work experience.

Relationships & Families/Crime & Punishment

Relationships and families: Key Terms	
Cohabitation	A couple living together without being married/in civil partnership.
Compassion	Sympathy and concern for the suffering of others.
Contraception	Precautions taken to prevent pregnancy and to protect against contracting or transmitting STIs (sexually transmitted infections).
Extended family	Family unit comprising two parents and their children, but also grandparents, cousins etc.
Family planning	Planning when to have a family and how big a family to have by use of birth control practices and/or contraception.
Gender discrimination	Acting on prejudices against someone because of their gender.
Gender equality	Belief that all genders have equal status and value, so discrimination against any is wrong.
Gender prejudice	Negative thoughts, feelings or beliefs about a person or group based on their gender.
Heterosexuality	Being physically/sexually attracted to persons of the opposite gender.
Homosexuality	Being physically/sexually attracted to persons of the same gender.
Nuclear family	Family unit made up of two parents and their child(ren).
Polygamy	The practice of having multiple spouses (wives and/or husbands).
Procreation	Having a child; seen as a duty in many religions.

Crime and Punishment: Key Terms	
Community service	Punishment involving the criminal doing a set number of hours of physical labour/work in their local community.
Corporal punishment	Punishment in which physical pain is inflicted on the criminal.
Death penalty	Capital punishment; the execution of a criminal which is sanctioned by the state.
Deterrence	Aim of punishment; the threat of punishment as a way to put a person off committing crime (eg knowing they could go to prison if they steal).
Evil intentions	Having the desire to deliberately cause suffering or harm to another.
Hate crime	A crime committed because of prejudice views about a person or group.
Principle of utility	The concept of acting out of the greater good for the most people.
Reformation	Aim of punishment; helping the criminal see how and why their behaviour was wrong, so that their mindset changes for the better.
Retribution	Aim of punishment; getting the criminal back for their crimes.
Unjust law	A legal requirement within a society that is believed to be unfair; a cause of crime if a person believes they cannot follow (or must act against) a law they believe is unjust.
Upbringing	The environment a child lives in, and the instructions they receive, while they are growing up; can be a cause of crime.

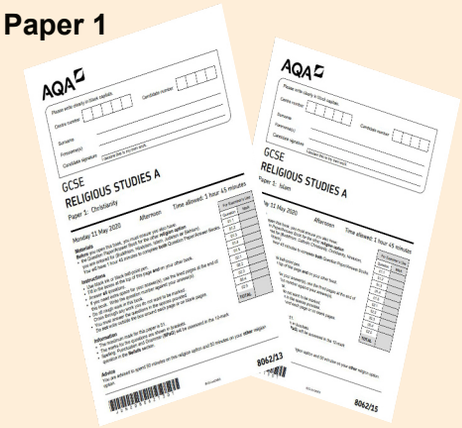
Human Rights & Social Justice/God & Revelation

Human Rights and Social Justice: Key Terms	
Discrimination	Actions that come from prejudice attitudes.
Equality	Belief that everyone is equal in value and worth.
Exploitation	Treating and paying people unfairly; benefitting disproportionately from the work they've done.
Fair pay	Payment that is appropriate for the work done.
Freedom of religious expression	The right to freely practice religion without discrimination or punishment; e.g. being able to freely attend your place of worship or being allowed space / time to pray in the workplace.
Human rights	The rights a person should be entitled to simply because they are a human being, eg education, fair treatment etc.
Interest	Money paid back on loans in addition to the original amount borrowed.
People trafficking	Illegal transport of people from one country or area to another, often resulting in forced labour or sexual exploitation.
Positive discrimination/action	Positive discrimination is favouring a person or group to try and rectify negative treatment in the past; it is unlawful in the UK according to the Equality Act 2010. Positive action is putting things in place to help overcome disadvantage, or to meet the needs of protected groups / people with protected characteristics, in order to help them fully participate in an activity or workplace.
Social justice	Bringing justice to society so that all people have the same opportunities, and can take advantage of them; includes projects to improve the life situation of those who may be disadvantaged, eg by educational support.

The Existence of God and Revelation: Key Terms	
Design argument	An argument suggesting that proof of God's existence can be seen through the evidence of 'design' in the world; also known as the teleological argument.
Enlightenment	A state of spiritual awakening and the gaining of a deeper understanding of reality.
First cause argument	An argument suggesting that God's existence can be proved by logical argument and the evidence of a universal chain of causes and effects. Therefore, the universe requires an uncaused cause at the start, which must be God.
General revelation	Indirect revelation; the idea of being able to see something of God through nature and scriptures which are readily available in everyday experience.
Immanent	A characteristic of God; the belief that God is present and involved in the world, (eg through special revelations/miracles).
Impersonal	A characteristic of God; the belief that God is beyond human understanding.
Personal	A characteristic of God; belief that humans can build relationships with God.
Revelation	When God is revealed to humans; can be special or general.
Special revelation	Direct revelation; God being revealed directly to an individual or group through experiences such as visions.
Transcendent	A characteristic of God; belief that God is outside space and time.
Vision	An experience of seeing/experiencing something in the imagination or through a dream.

Exam Paper Information

Paper 1

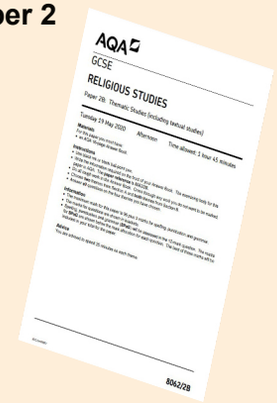


LENGTH
1 hour and 45 minutes
Spent 25 minutes on each section

CONTENT
Christian Beliefs and Practice
Islamic Beliefs and Practice

Marks	Advice	Time
1	Tick the box with the correct answer	30 sec
2	Give **two** simple points (bullet points are accepted)	30 sec
4	Give **two** developed points	4 mins
5	Give **two** developed points and a reference to religious texts (Remember to use the correct phrase: “In the Bible it says/In the Qur’an it says”)	5 mins
12	Give a brief introduction - “I am going to argue that…” Give evidence for/against the statement, including evidence from religious texts and make use of religious concepts Give arguments against the evidence you have presented DO NOT GIVE non-religious arguments Give a reasoned conclusion	15 mins

Paper 2

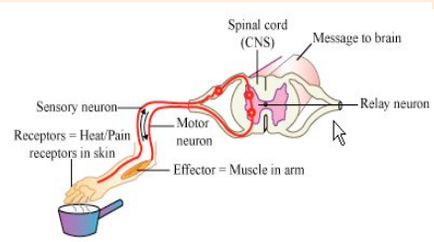


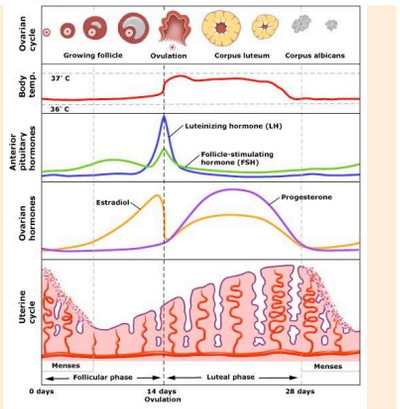
LENGTH
1 hour and 45 minutes
Spend 25 minutes on each section

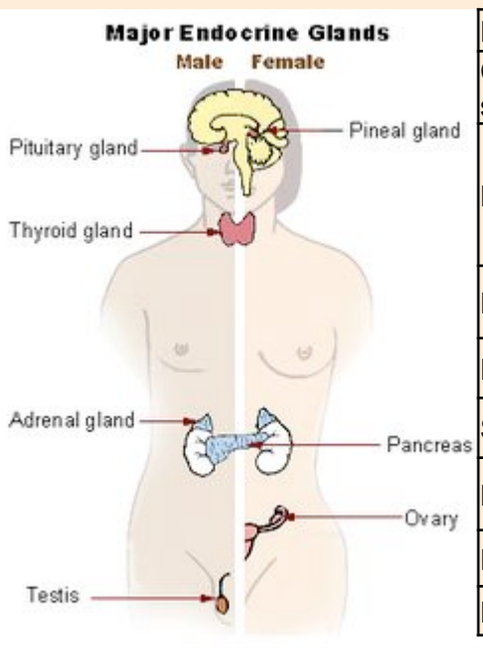
CONTENT
St. Mark’s Gospel
Themes

Marks	Advice	Time
1	Write the letter next to the correct answer	30 sec
2	Give **two** simple points (bullet points are accepted)	30 sec
4	Give **two** developed points	4 mins
5	Give **two** developed points and a reference to religious texts (Remember to use the correct phrase: “In the Bible it says/In the Qur’an it says”)	5 mins
12	Give a brief introduction - “I am going to argue that…” Give evidence for/against the statement, including evidence from religious texts and make use of religious concepts Give arguments against the evidence you have presented Give non-religious arguments as part of your evidence Give a reasoned conclusion	15 mins

Control of the Body







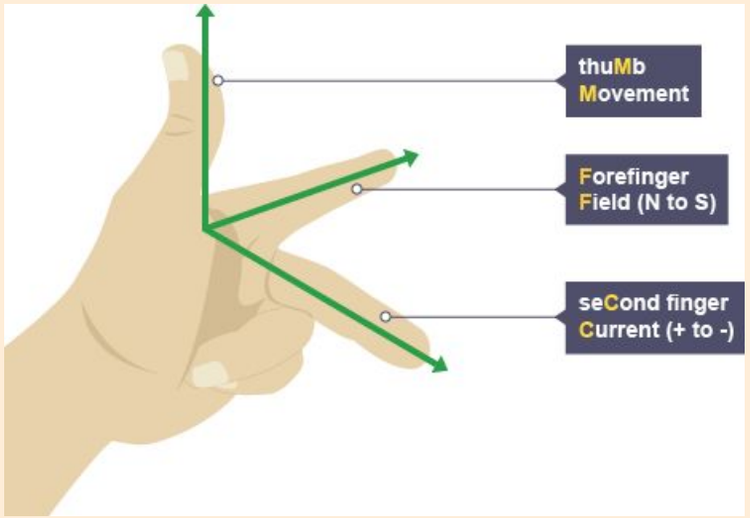
Homeostasis	The maintenance of a constant internal environment
Central nervous system (CNS)	The brain and spinal cord. Sometimes referred to as the coordinator
Neurones	Nerve cells – they link receptors and effectors to the CNS. Sensory neurons carry impulses from receptors to the CNS, relay neurons carry an impulse within the CNS and motor neurons carry the impulse from the CNS to an effector
Receptor	A cell or group of cells that detect a change and generate a nervous impulse
Effector	A muscle or gland that brings about a response
Synapse	A gap between neurones
Neurotransmitters	Chemicals which diffuse across the synapse and initiate a nervous impulse in the next neurone
Reflex response	An automatic response that you do not think about
Reflex Arc	The pathway of neurons in a reflex arc

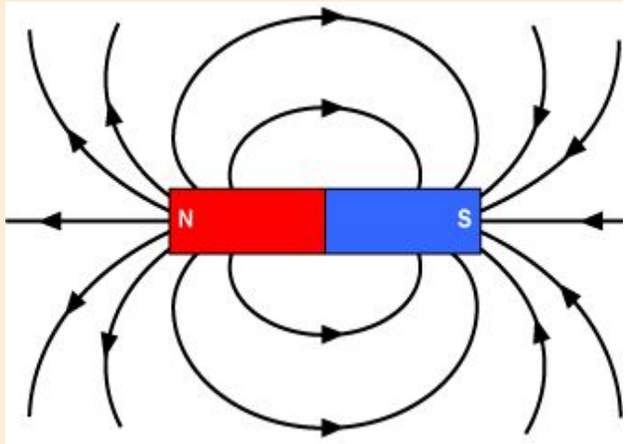
Gland	A structure in the body that produces hormones
Pituitary Gland	The master gland in your brain that produces a number of hormones, including TSH, FSH and LH
Insulin	A hormone produced in your pancreas that lowers blood glucose by converting it into glycogen and storing it in the liver
Glycogen	An insoluble molecule made from many glucose molecules
Glucagon	A hormone produced in the pancreas that raises blood glucose by breaking down glycogen stored in the liver
Negative feedback (HT Only)	A homeostatic mechanism by which the body detects a change and makes an adjustment to return itself to normal
Type I Diabetes	A medical condition that usually develops in younger people, preventing the production of insulin
Type II Diabetes	A medical condition that usually develops in later life, preventing the person producing enough insulin or preventing cells from responding to insulin

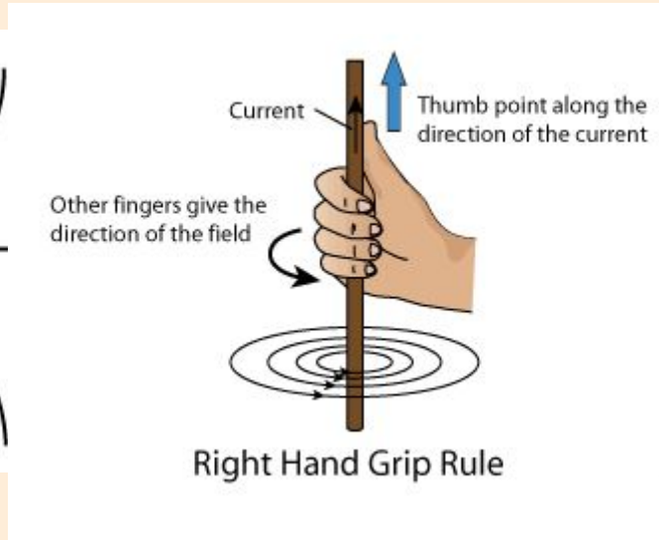
Oestrogen	A female sex hormone produced in the ovaries that controls puberty and prepares the uterus for pregnancy.
Progesterone	A female sex hormone produced in the ovaries that prepares the uterus for pregnancy.
Testosterone	A male sex hormone produced in the testes that controls puberty.
Follicle stimulating hormone (FSH)	A hormone produced by the pituitary gland that causes an ovum to mature in an ovary and the production of oestrogen.
Follicle	A structure in an ovary in which an ovum (egg) matures.
Lutenising hormone (LH)	A hormone produced by the pituitary gland that stimulates ovulation.
Contraception	Hormonal or non-hormonal methods of preventing pregnancy, including oral contraceptives, injection, implant or skin patch, barrier methods, intrauterine devices, spermicidal agents, abstaining and surgical methods
IVF	In Vitro Fertilisation uses hormones to stimulate the maturation of eggs which are collected and fertilized outside of the body before the embryos are implanted into the uterus.

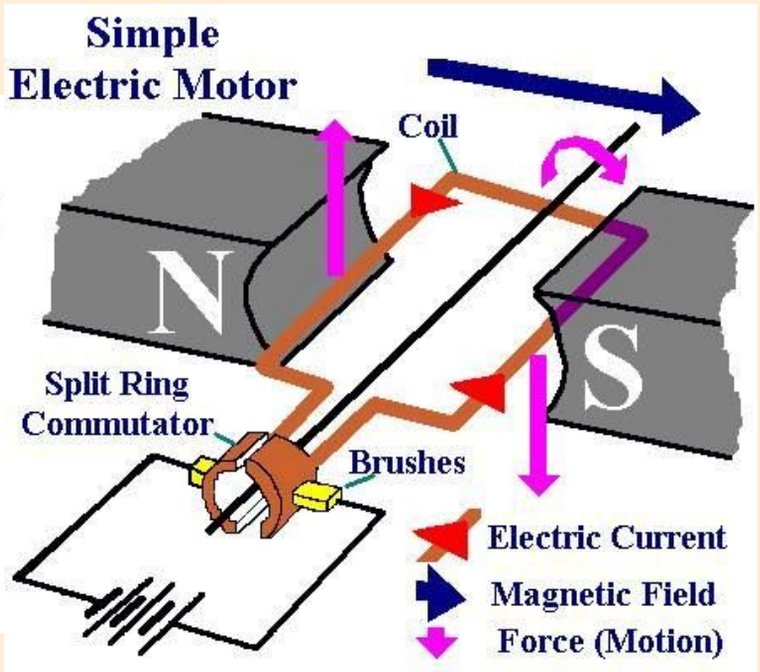
Magnetism

Magnetic	Materials that are attracted by a magnet.
Permanent magnet	A magnet which produces its own magnetic field. It always has a north and a south pole.
Induced magnet	A magnet which becomes magnetic when it is placed in a magnetic field.
Right-hand grip rule	A way to work out the direction of the magnetic field in a current-carrying wire if you know the direction of the current.
Solenoid	A solenoid is a long coil of wire.
Flux density	The number of lines of magnetic flux in a given area. F=B x I x L Force = magnetic flux density x current x length
Motor effect	The force produced between a conductor carrying a current within a magnetic field and the magnet producing the field.



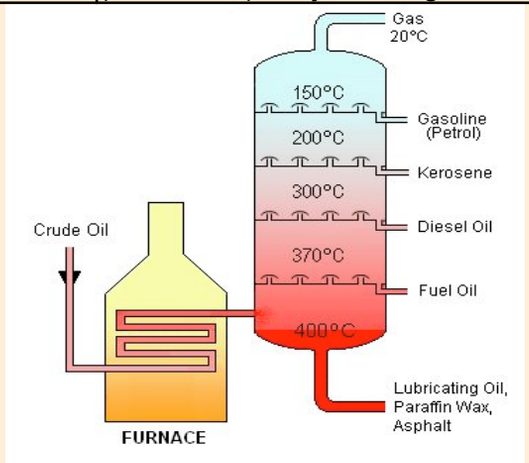


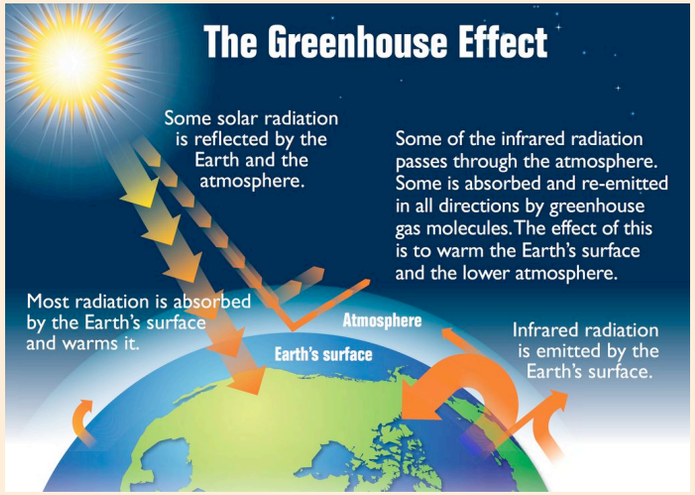




Organic and Earth Chemistry

Hydrocarbon	A compound containing hydrogen and oxygen only.
Alkanes	A homologous series of saturated hydrocarbons with the general formula C_nH_{2n+2}.
Saturated	A molecule that only contains single covalent bonds. It contains no double covalent bonds.
Homologous Series	A family of compounds with the same general formula and similar chemical properties.
Fractional Distillation	A method used to separate miscible liquids with different boiling points.
Fraction	A mixture of molecules with similar boiling points.
Complete Combustion	When a substance burns with a good supply of oxygen.
Flammability	How easily a substance catches fire; the more flammable, the more easily it catches fire.
Viscosity	How easily a liquid flows; the higher the viscosity the less easily it flows.
Alkenes	A homologous series of unsaturated hydrocarbons with the general formula C_nH_{2n}.
Unsaturated	A molecule that contains one or more double covalent bonds.
Polymer	A long chain molecule in which lots of small molecules (monomers) are joined together.

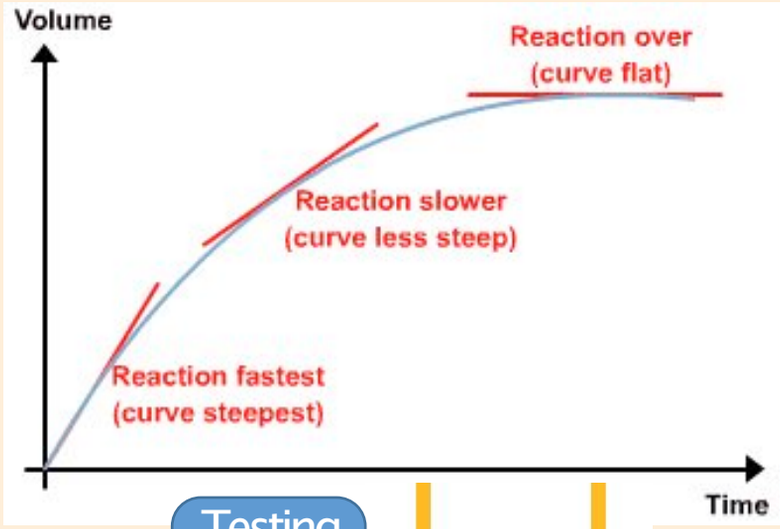


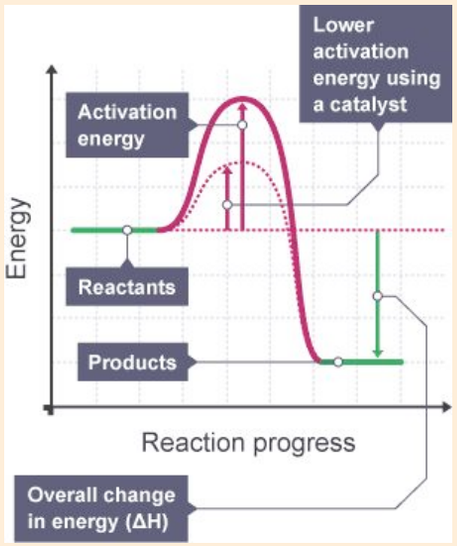


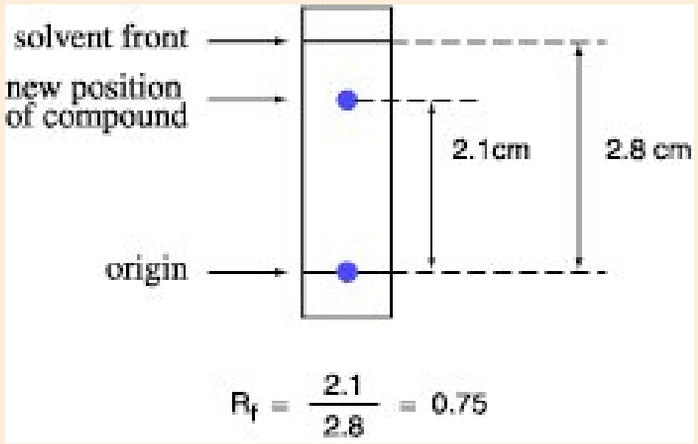
Greenhouse gas	A gas that absorbs long wavelength infrared radiation given off by the Earth but does not absorb the suns radiation.
Global warming	An increase in the temperature of the Earths surface.
Carbon footprint	The amount of carbon dioxide and other greenhouse gases given out over the full life cycle of a product, service or event.
Carbon neutral	Fuels and processes whose use results in zero net release of greenhouse gases to the atmosphere.
Finite resource	A resource that cannot be replaced once it has been used.
Renewable resource	A resource that we can replace once we have used it.
Sustainable development	Using resources to meet the needs of people today without preventing people in the future from meeting theirs.
Life cycle assessment	An examination of the impact of a product on the environment throughout its life.
Ore	A rock from which a metal can be extracted for profit.
Phytomining	The use of plants to absorb metal compounds from soil as part of metal extraction.
Bioleaching	The use of dilute acid to produce soluble metal compounds from insoluble metal compounds.
Leachate	A solution produced by leaching or bioleaching.

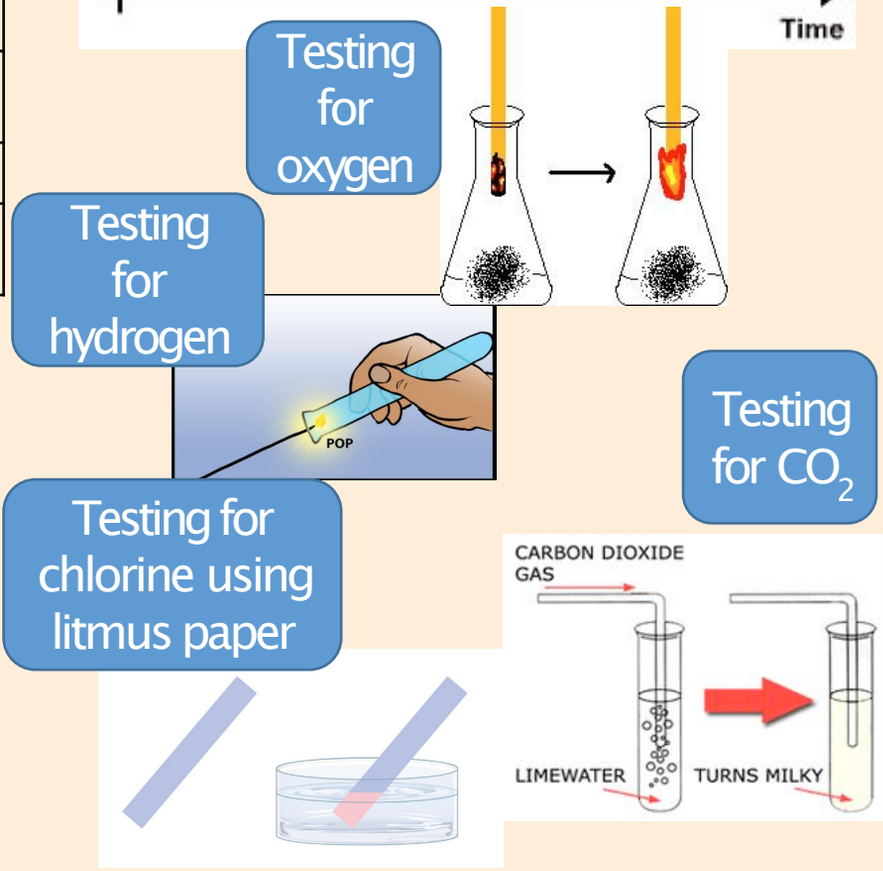
Rates and Chemical Analysis

Rate of reaction	The speed at which a reaction takes place. This can be worked out in two ways: Mean rate of reaction = quantity of reactant used ÷ time Mean rate of reaction = quantity of product formed ÷ time
Activation energy	The minimum energy particles must have to react
Catalyst	A substance that speeds up a chemical reaction by lowering the activation energy
Enzymes	Molecules that act as catalysts in biological systems
Closed system	A system where no substances can get in or out
Reverse reaction	When the products of a reaction can react to produce the reactants
Dynamic equilibrium	System where both the forward and reverse reactions are taking place simultaneously and at the same rate
Pure substance	A single element or compound that is not mixed with any other substance.
Formulation	A mixture that has been designed as a useful product.
Chromatography	A technique that can be used to separate mixtures and the identify substances.





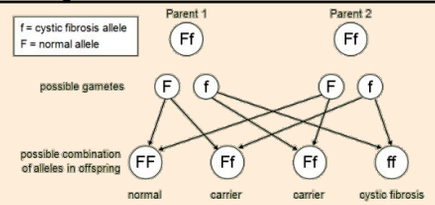




Variation and Ecology

Asexual reproduction	Reproduction involving one parent, giving genetically identical offspring
Selective breeding	A process by which humans have chosen organisms to breed together to develop desirable characteristics
Artificial selection	Another name for selective breeding
Meiosis	Cell replication that produces four non-identical cells with half the number of chromosomes.
Genome	One copy of all DNA found in your diploid body cells
Genetic Engineering	Modifying the genome of an organism to give a desired characteristic
Evolution	The theory first proposed by Charles Darwin that the different species found today formed as a result of the accumulation of small advantages that were passed on through generations
Double helix	The characteristic spiral structure of DNA
Gene	A section of DNA
Chromosome	A bundle of DNA
Mutation	A permanent change to the DNA, which may be advantages, disadvantageous or have no effect
Alleles	Two versions of the same gene, one from each parent
Genotype	The genetic make-up of an organism represented by letters
Phenotype	The physical characteristics of an organism
Homozygous	Two of the same alleles
Heterozygous	Two different alleles
Cystic Fibrosis (CF)	A genetic disorder in which sufferers inherit recessive alleles from both parents and have excess mucus in their lungs
Polydactyly	A genetic disorder caused by a dominant allele in which sufferers have extra fingers or toes

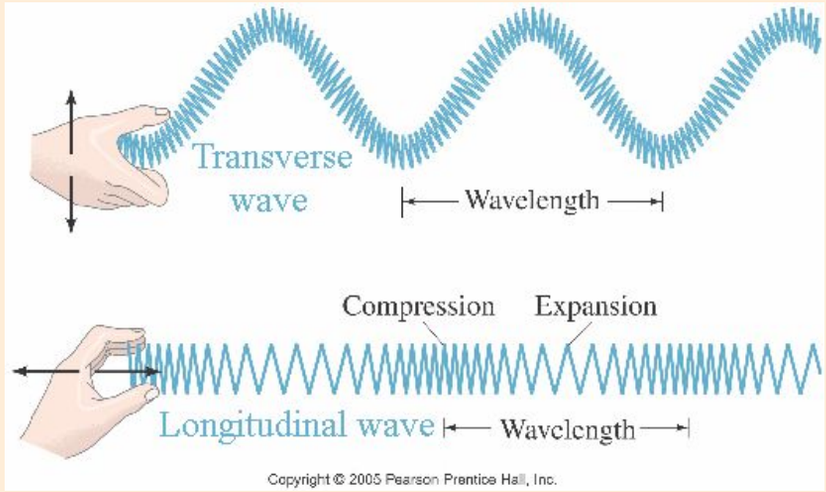
		Mother	
		X	X
Father	X	XX	XX
	Y	XY	XY



Population	The total number of organisms of the same species in an area.
Community	Populations of different species living in the same area.
Competition	The contest between organisms for resources.
Interdependence	All the organisms in a community depend upon each other.
Abiotic	The non-living parts of the environment.
Biotic	The living parts of the environment.
Invasive species	An organism that is not native and causes negative effects.
Ecosystem	The interaction of a community of living organisms and the non-living parts of the environment.
Structural adaptation	An advantage to an organism as a result of the way it is formed eg streamlining.
Behavioural adaptation	An advantage to an organism as a result of its behavior.
Functional adaptation	An advantage to an organism as a result of a process eg venom.
Extremophile	An organism that lives in an extreme environment.
Sampling	Recording a small amount of information to make wider conclusions.
Quadrat	A square frame used in sampling.
Transect	A line along which systematic sampling occurs.
Producer	An organism that photosynthesises eg plant.
Biomass	A resource made from living organisms.
Consumer	An organism which eats other organisms. Primary consumers eat plants, secondary consumers eat herbivores, tertiary consumers eatc carnivores.
Biodiversity	A measure of the different species present in a community.
Sustainable	An activity that can continue without damaging the environment.
Conservation	Protecting an ecosystem or species from reduced numbers and often extinction.

Waves

Transverse wave	A wave in which the vibration causing the wave is at right angles to the direction of energy transfer.
Longitudinal wave	A wave in which the vibration causing the wave is parallel to the direction of energy transfer.
Amplitude	The height of the wave measured from the middle (the undisturbed position of the water).
Wavelength	The distance from a point on one wave to the equivalent point on the next wave.
Frequency	The number of waves produced each second. It is also the number of waves passing a point each second.
Period	The time taken to produce one wave.
Angle of refraction	The angle between the refracted ray and the normal.



$v = f \times \lambda$. velocity = frequency x wavelength.