2021 SPRING 2
YEAR 11

EGGBUCKLAND COMMUNITY COLLEGE

KNOWLEDGE ORGANISER

Year 11

Knowledge Organiser

Spring 2021 - 2

Self Quizzing Question Stems

Knowledge

Can you list 3…?
Can you recall…?
How did ___ happen?
How is…?
How would you describe/explain?
What is…?
When did…? (When did it happen?)
Which one?
Who were the main…?
How would you show…?
Why did…?

Comprehension

Explain what is happening?
How would you classify…?
Which is the best answer?
Can you tell me in your own words?
What can you say about…?
How would you compare/contrast…?
How is ___ alike? How is it different?
What facts or ideas show…?
What is the main idea of…?

Application

How would you use…?
What examples can you find…?
How would you solve ___ using what you've learned?
How would you organise ___ to show…?
How would you show your understanding of…?
What approach would you use to…?
What other ways would you plan to…?
What would happen if…?
What faces would you select to show…?

Analysis

What are the parts or features of …?
How is ___ related to …?
Why do you think…?
What is the theme…?
What motive is there…?
Can you list the parts…?
What inference can you make…?
What conclusions can you draw…?
Can you identify the different parts of…?
What evidence can you find…?
Can you distinguish between…?

Synthesis

Do you agree with the actions/outcomes?
What is your opinion of…?
How would you prove?...disprove…?
Can you assess the value or importance…?
Would it be better if…?
Why did the characters choose to…?
What would you recommend…?
How would you rate…?
How could you determine…?
What choice would you have made…?
Why was it better that…?

Evaluation

What changes would you make to solve…?
How would you improve…?
What would happen if…?
Can you elaborate on the reason…?
Can you give an alternative…?
Can you invent…?
How could you change or modify the plot?
What way would you design…?
Suppose you could ___ what would you do?
Can you predict the outcome if…?
Can you construct a model of…?

Knowledge, Notes and Quizzes

Literacy mat

My work

Can I write in paragraphs?

The **TIPTOP** rule
You move onto a new paragraph when you change time, place, topic or person.

1. I always start an essay with **an introduction** which addresses the question.
2. I finish an essay with **a conclusion** to summarise the main points of my argument and to address the question again.
3. I use **connectives** in each paragraph to link my ideas and to put them in a logical order.

○Furthermore	○But	Meanwhile
○Whereas	○Since	Nonetheless
○Nevertheless	○Yet	However
○Alternatively	○Therefore	Although
○Consequently	○Besides	Moreover

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

- No slang *that lesson was ~~bangin'~~*
- No informal language *I'm ~~gonna~~ do my homework now*

❖Other things to consider:

- ✓ I am clear about the purpose of this piece of writing
- ✓ I know who my audience is
- ✓ I will use a suitable layout and text type

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar**.
- I have paragraphed my work using **TIPTOP**.
- My writing is suitable for the person I am writing for.

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock	I'd	They're	Who'll
Aren't	I'll	Wasn't	Who's
Can't	I'm	We'd	Why'd
Couldn't	Isn't	We'll	Why'll
Didn't	It'd	We're	Why's
Doesn't	It'll	Weren't	Won't
Don't	It's	What'd	Wouldn't
Hadn't	Mightn't	What'll	You'd
Hasn't	Mustn't	What's	You'll
Haven't	Shan't	When'd	You're
He'd	She'd	When'll	
He'll	She'll	When's	
He's	She's	Where'd	
How'd	Shouldn't	Where'll	
How'll	They'd	Where's	
How's	They'll	Who'd	

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object

- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: *for, and, nor, but, or, yet, so.*

- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as *because, since, after, although,* or *when* .

- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

	Meat/meet
Affect/effect	One/won
Bare/bear	Passed/past
Brake/break	Peace/piece
Buy/by	Practice (n)/practise (v)
For/four	Read/red
Flour/flower	Sea/see
Grate/great	Sight/site
Hair/hare	Son/sun
Hole/whole	To/too/two
Hour/our	Wait/weight
Knight/night	Weak/week
Know/no	Wear/where

What traffic light am I?
Is my punctuation accurate?

Literacy mat

Basics:

- Every sentence must start with a capital letter.
- Every sentence must finish with some form of punctuation: .?!
- Proper nouns need capital letters. These are **unique** people, places or things *e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.*
- When writing titles of works such as books, films or plays:
  - Capitalise the first word
  - Capitalise any main/important words
  - Don't capitalise minor words such as 'and', 'of' or 'the' *e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire*
- When writing speech:
  - ✓Go to a new line when a different person speaks *e.g. "Good morning" said the Headteacher.*
    "It's the afternoon!" replied the student.
  - ✓Each person's speech is marked with speech marks *e.g. "Walk on the left" said Mr Mathews.*

Can I spell accurately?

- Sound out the word
- Think about how it looks
- Think about a similar word
- Is there a memory sentence for this word? (e.g. big elephants cannot always use small exits)
- Find the word in a list –
  - Key words list
  - Frequently used words list
  - Your own word bank
- Look it up in a dictionary/spellchecker
- Ask a friend or teacher
- To learn it: look, cover, write , check
- Once you've solved it, add the correct spelling to your own word bank.

Can I use punctuation?

The Apostrophe

I always aim to use apostrophes correctly.

There are two main reasons why we use apostrophes: for possession and to replace a letter or letters

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	""	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	( )	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession

(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.

- The dog's bone
- The boy's homework
- Jones's bakery
- Yesterday's lesson

However, if it is plural (more than one), an apostrophe comes after the 's'.

- The dogs' bones
- The boys' homework
- Joneses' bakeries (lots of Jones families)
- Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:

- **There** shows position *Your seat is over there*
- **Their shows that 'they' own something** *Their blazers are navy blue*
- **They're** is short for **they are** as in *They're revising every day*

ITS

Note: its, which shows that something owns something (like our, his etc), does not take an apostrophe: *the dog ate **its** bone and we ate **our** dinner*

Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:

- **Your** is possessive as in *this is your pen*
- **You're** is short for you are as in *you're coming over to my house*

Art and Design – Coast : GM

Present – a collection of experiments, drawings and outcomes, including digital explorations, based on The Coast, inspired by Van Gogh, Tom Phillips, Rex Ray and Kara Walker.

FORMAL ELEMENTS;

LINE – what lines can you create, what tools could you use?

SHAPE – Lines join to become shapes, what are the basic shapes you can see?

TONE – adding dark and light to show depth

FORM – Tone creates the illusion of 3D

SPACE – the shape surrounding the object is just as important

COLOUR - Primary? Secondary? Harmonious/ complementary? Why?

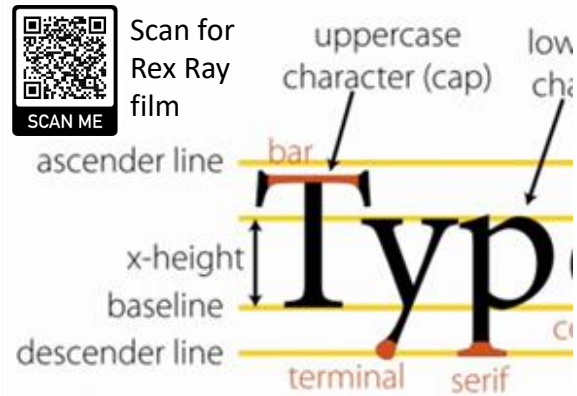
PATTERN – repeated line, shape colour etc.

TEXTURE – the feel of something

Don't forget to use your **literacy booklet** to support your analysis and tasks. It has key words and definitions too.
Use your draft book to write notes first

Scan for Rex Ray film

SCAN ME



ENSURE YOU UPLOAD YOUR WORK TO THE CORRECT ASSIGNMENT

SCAN ME

The Tate Glossary

- ✓ WOW Zine of drawing styles linked to theme with
- ✓ Experiments- Drawing/ mark making.
- ✓ Drawing from observation
- ✓ Own Photographs
- ✓ Artist 1 Van Gogh.
- ✓ Experiments-typography, silhouettes, text, book page, words.
- ✓ Experiments Paint
- ✓ Mini outcome
- ✓ Artist 2 Tom Philips
- ✓ Mind map double page
- ✓ Techniques and collage.
- ✓ Analysis
- ✓ Mini outcome
- ❑ Artist 3 &4 Kara Walker/ Rex Ray
- ❑ Analysis
- ❑ Mini outcomes
- ❑ Plan for refined outcome
- ❑ Further experiments
- ❑ Outcome
- ❑ Reflection/ Evaluation.

Art and Design – Fine Art : Portfolio

Present – a collection of experiments, drawings and outcomes, including digital explorations, based on your project – Vibrant Colour.

SCAN ME

The Tate Glossary

FORMAL ELEMENTS;

LINE – what lines can you create, what tools could you use?

SHAPE – Lines join to become shapes, what are the basic shapes you can see?

TONE – adding dark and light to show depth

FORM – Tone creates the illusion of 3D

SPACE – the shape surrounding the object is just as important

COLOUR - Primary? Secondary? Harmonious/ complementary? Why?

PATTERN – repeated line, shape colour etc.

TEXTURE – the feel of something

Explore Processes:
Mono printing, Collagraph printing, Paint Techniques, Mark making, Fabric transfer, Mixed media, Collage, Photoshop, DSLR, Pinhole, Paper cut outs, Ceramics, Sun prints, Wax resist.

Explore Materials:
Water colour paint, Inks, Stencils, Acrylic, Pencil and pen, Fabric, Photoshop, DSLR Camera, Pinhole Camera, Mono printing/collagraph equipment, clay, wax.

Don't forget to use your **literacy booklet** to support your analysis and tasks. It has key words and definitions too.
Use your draft book to write notes first

SCAN ME

Scan for Rex Ray film

- ✓ WOW page of collage linked to theme
- ✓ Mindmap double page
- ✓ Drawing from observation
- ✓ Photos
- ✓ Artist 1
- ✓ Experiments
- ✓ Analysis
- ✓ Mini outcome
- ✓ Artist 2
- ✓ Experiments
- ✓ Analysis
- ✓ *Mini outcome*
- ❑ ***Plan for final outcome***
- ❑ ***Further experiments***
- ❑ ***Practise outcome***
- ❑ ***Outcome***
- ❑ ***Reflection***

ENSURE YOU UPLOAD YOUR WORK TO THE CORRECT ASSIGNMENT

Business Studies – Unit 5: Marketing and Unit 6: Finance

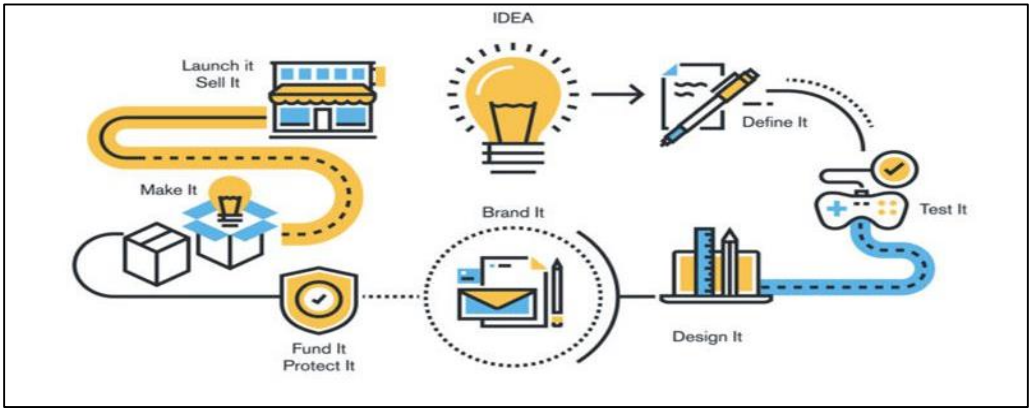
Module 5.5 Product

PRODUCT:
What a customer actually buys. This can be classified as tangible or intangible.

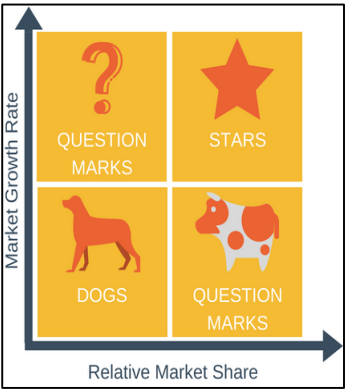
CUSTOMER CONSIDERATIONS:
The service
The performance
The price

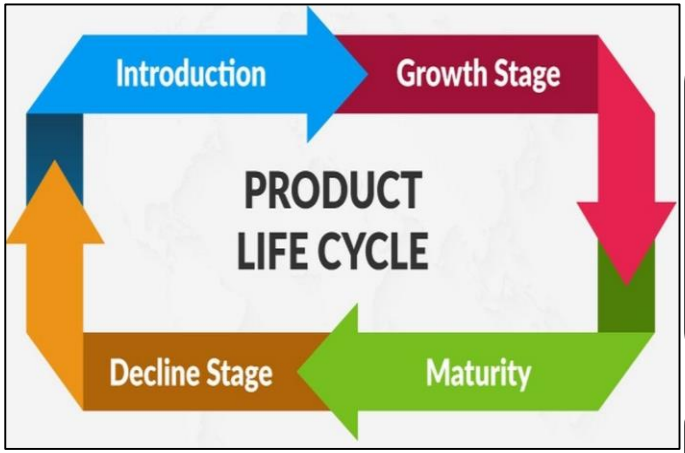
BUSINESS CONSIDERATIONS:
Product development
Product differentiation

Product Development Stages



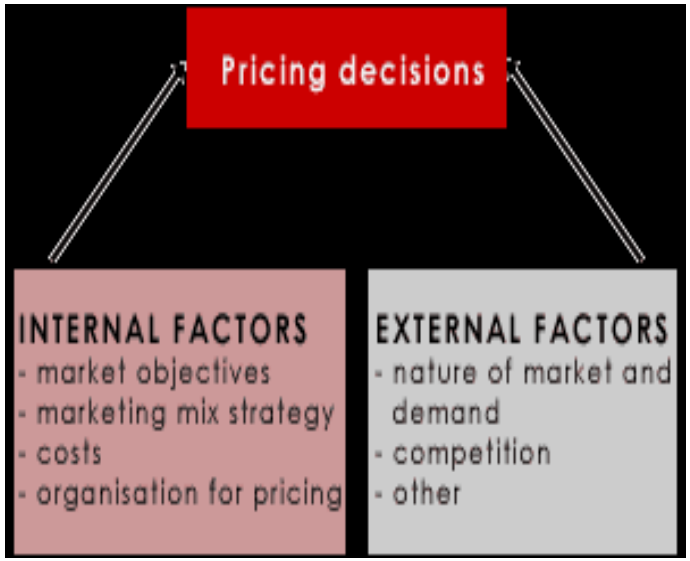
Boston Matrix





Product differentiation: making a product stand out from its competitors
Product portfolio: a collection of products a firm has produced.
Extension strategies: attempts made to maintain a products "life" in a market.
Price skimming: is setting a high price for a product when it first enters the market.
Price penetration: launching a new product at a low price to achieve fast sales.

Module 5.5 Pricing



CONSIDERATIONS:
Can people afford it?
Is it worth it?
How much is it?

ANSWER STRUCTURES:

REMEMBER
POINT, EXPLAIN, IMPACT when answering a 6 mark question.
AND
INTRODUCTION, 2X POINT (+/-), ANALYSIS when answering a 12 mark question.

Module 6.2: Cash flow forecasts

Cash flow: the money that flows into and out of a business.
Cash flow forecast: a plan of the expected inflows and outflows to and from a business.
Cash flow statement: a record of the cash inflows and outflows that took place at a different time.

CASH FLOW IMPORTANCE:
Not enough cash can result in…
Cancellation of suppliers
Unable to pay workforce
Cease trading

Cash Inflows	Cash Outflows
Cash sales	Payment of wages & salaries
Receipts from trade customers	Payment of suppliers (e.g. raw materials, stocks)
Sale of spare assets	Buying equipment
Investment of share capital	Interest on bank loan or overdraft
Personal funds invested	Payment of dividends
Receipt of bank loan	Repayment of loans
Government grants	Payment of leasing or hire purchase rentals
Receipts from factoring	Income tax, VAT & Corporation tax

Computer Science : 1.5 Network Protocols (1 of 2)

KEYWORDS		
Protocol	The rules and standards that are agreed in order to make it possible for different devices to talk to one another	
IP Address	Each node on a network is given a unique 32 bit address (4x8bits) for example 192.168.0.1 There are 4 billion possible combinations.	
DHCP	Dynamic Host Configuration Protocol – this protocol allows the network server to control the allocation of IP addresses	
MAC Address	Media Access Control Unique addresses hard-coded into the network interface controller. Gives the manufacturer, NIC type and unique identifying number. 48 bits displayed as Hex (eg 01-23-45-67-89-ab-cd-ef)	
TCP/IP	Transmission Control Protocol / Internet Protocol	A set of protocols that governs the transfer of data over a network
HTTP	Hyper Text Transfer Protocol	Standards for writing webpages to display content for display
HTTPS	*Hyper Text Transfer Protocol Secure*	*Client-server protocol for requesting (client) and delivering (server) resources, such as HTML, securely*
FTP	*File Transfer Protocol*	*Used to directly send files from one node to another over the internet. Commonly used for uploading files to webservers*
POP	Post Office Protocol	Used by email clients to download email from the remote email server and save it onto the users computer. More or less redundant now, and has been replaced by IMAP
IMAP	Internet Message Access Protocol	An alternative to POP, allowing more control such as the complete control of remote mailboxes
SMTP	Simple Mail Transfer Protocol	An old standard for transmission of email. SMTP can only be used to *push* mail to client machines, whilst both POP and IMAP ae used by clients to *retrieve* mail.

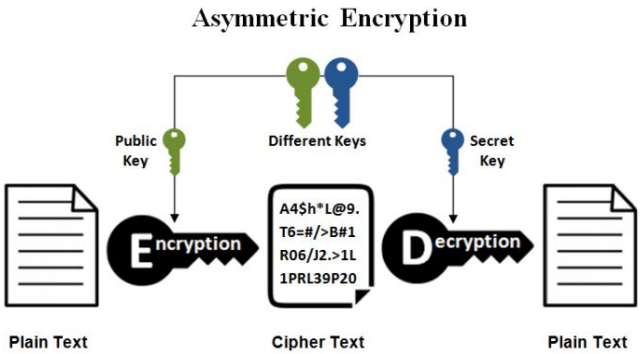
ENCRYPTION

Encryption is taking a message and changing the letters in such a way that it is not readable. The correct recipient knows how to unscramble the message and can read the text.
Modern encryption is 128bit and secure against brute force attacks.

PUBLIC KEY ENCRYPTION

Public Key Encryption is a method of securely sending data over the internet. The recipient's computer uses an algorithm to produce 2 linked keys: a public key and a private key.

1. Alice (the sender) requests Bob's (the recipient) public key. This is shared.
2. Alice uses Bob's public key to *encrypt* the message she wishes to send.
3. The encrypted document is sent over the internet – it is secure.
4. When Bob receives the encrypted document he combines his public key with the secret private key. This allows the message to be decrypted and turned back into plain text.



Computer Science : 1.5 Network Layering (2 of 2)

KEYWORDS	
Protocol	The rules and standards that are agreed in order to make it possible for different devices to talk to one another
Layering	Rules organised into a distinct order in which they need to be applied
Interoperability	The ability for different systems and software to communicate, exchange data and use the information exchanged
Encapsulation	Enclosing data inside another data structure to form a single component
De-encapsulation	Removing data from inside and encapsulated item.

WHY LAYER?

Layering allows problems to be broken down into small chunks, and then smaller solutions created to specific parts of the problem. These small parts interact in an agreed manner, allowing the solution to be built by different teams or companies.

Layering is not unique to computing. In the car industry, a Ford engine might be used with a Jaguar gearbox in a Mazda car. By separating these 'layers', but agreeing on the interface between the layers, each company is free to develop their layer as they see fit, without affecting the other layers. It is also possible to swap one layer out, and replace it with another one – such as swapping an engine for a more powerful one.
This *interoperability* is important as it allows data (in computing) to be passed from one layer to the next.

TCP/IP Protocol Layers

LAYER 1: Application

This layer ensures data is produced in a form that is acceptable to the application that will use it, such as web-browsers or email clients. This is where IMAP or HTML protocols would be used.

LAYER 2: Transport

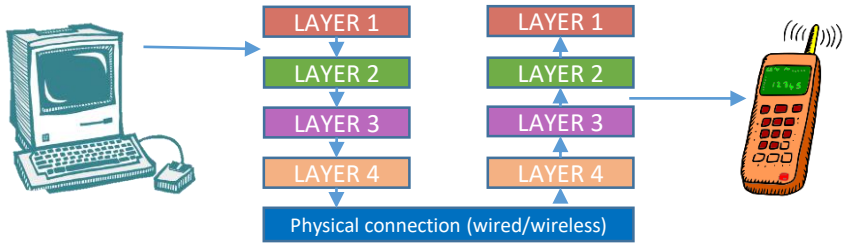
This layer establishes the connection across the network. The transmitting device agrees with the receiving device the speed or data transfer, the size and number of packets and any error checking to be used. This layer uses TCP protocols

LAYER 3: Internet

This layer is concerned with transmitting the data across different networks. It identifies the destination and establishes the path the data will take between nodes. It uses IP protocols

LAYER 4: Network

This layer deals with the physical transmitting of the data. It converts the data into binary electronic signal that can be understood by the network hardware. It uses protocols such as Ethernet or 802.11 (wireless) so the signal is hardware independent and can use any available compliant physical medium, such as UTP or fibre optic wire.



Data transfer occurs by breaking the file into small *packets,* adding each layer to the packet in order at the sending device, then decoding in reverse order at the receiving device before rebuilding the file.

Packet switching is the process that modern networks use to send large data between devices. The data is split into small ***packets*** and numbered. The packets can travel by any route to the destination where the receiving machine reassembles them into the correct order.

Drama - Component 1: Devising Theatre

Overview

Portfolio
- 750-900 words written

Performance
1 Actor Monologue (2-5minutes)
- 2 Actors (5-10 minutes)
- 3 Actors (7-12 minutes)
- 4 Actors (9-14 minutes)
- 5 Actors (11-16 minutes)

ALL CANIDIATES IN A GROUP MUST CREATE & PERFOM A 2 MINUTE MONOLOGUE IN A SOLO PEREFORMACE AS WELL AS GROUP PERFORMANCE.

Evaluation
- 1 hour 30 minutes
- 2 sides of A4

Assessed on either **acting or design.**

Designers must work with a group of **actors.**

It is **not necessary** for all **acting groups** to work with **designers.**

Work in groups of between **two** and **five actors.**

Each group may have up to **four designers**, each offering a **different design skill**.

Actors will be assessed on their **performance skills.**

- Vocal Skills
- Physical Movement
- Spatial Relationships

Designers must pick **one skill** from the list below:

- lighting design
- sound design
- set design (including props)
- costume design (including hair and make-up).

Devising Theatre: Performance

Devise a piece of **theatre** in **response** to the **stimulus** chosen from the selection.

Must demonstrates **one** of the following:

- the **techniques** of a theatre **practitioner**
- the dramatic **characteristics** of a specific **genre**

Create and **develop** ideas to communicate **meaning** to an **audience** by:

- **Researching** and **developing ideas** using: **Techniques or characteristics** of the **practitioner or genre**
- **Rehearsing**, **amending** and **refining** the work in progress.

Choose **one** stimulus from a list of four:

- *(a quotation)*
- *(a song)*
- *(a picture)*
- *(a concept or statement)*

Stimulus
Idea
Develop
Research
Rehearse
Perform

The **portfolio** is intended to highlight the **creative** and **developmental process** of **devising** theatre.

It is **not** intended to be a **full record of the rehearsal period**,

Choose carefully the **evidence** which best supports the **3 stages** of **development** of their piece of **theatre**.

The Rehearsal Process

1. **How** ideas have been **researched**, **created** and **developed** in response to the chosen **stimulus.**
2. **How** ideas from the chosen **practitioner/genre** have been **incorporated** in the piece **to communicate meaning.**
3. **How** ideas have been **developed**, **amended** and **refined** during the development of the devised piece.

For each stage, candidates **must** provide illustrative material

- ★ Sketches
- ★ Photographs
- ★ Ground plans
- ★ Diagrams
- ★ Storyboards
- ★ Mood boards
- ★ Sections of script
- ★ Digital media,
  - including **brief recordings** of sections of a rehearsal or material **appropriate to the skill area**, e.g., sound clips. ***These should be no longer than one minute.***

Evaluation

2 sides of A4

Reflecting on the **Final Performance**

The **evaluation** is your reflection on the **final performance.**

You **must** include your chosen **stimuli** and **practitioner/ genre.**

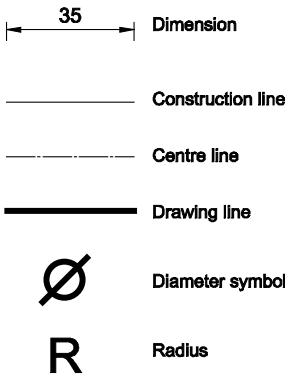
Use them to open your evaluation and refer to them throughout.

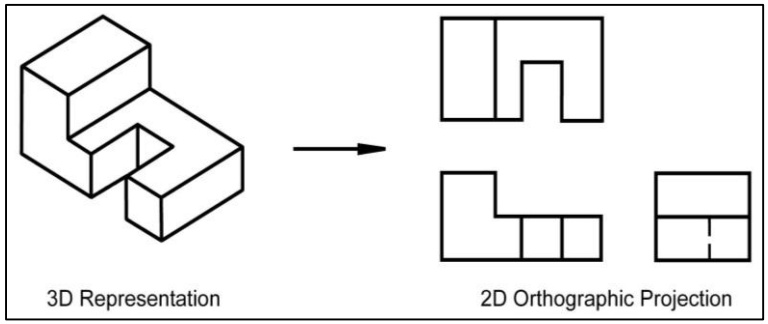
1. **Analyse** and **evaluate interpretation** of **character/role** or their realisation of **design** in the **final performance.**
2. **Analyse** and **evaluate** how own performance **skills** or design skills contributed to the **effectiveness** of the **final performance.**
3. **Analyse** and **evaluate** individual **contribution** to **fulfilling** the **aims** of the piece in the **final performance.**

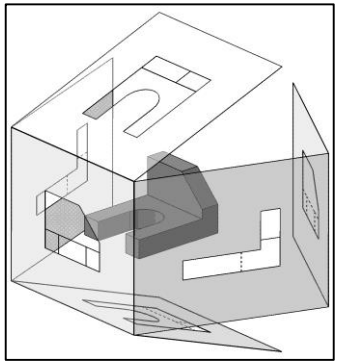
1. **How did your character/ role add to the design of the piece?**
2. **How did you use your skills to add effect in the final performance?**
3. **What Went Well? How was your piece successful?**
4. **Even better if? What was unsuccessful? What could you do to make your performance even better?**
5. **How did you fulfil the purpose of your piece of theatre?**

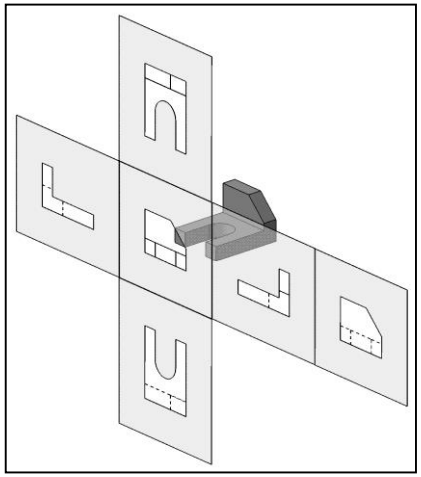
Key knowledge

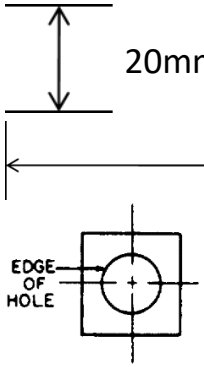
- Orthographic projection = 2-D representation of a 3-D object.

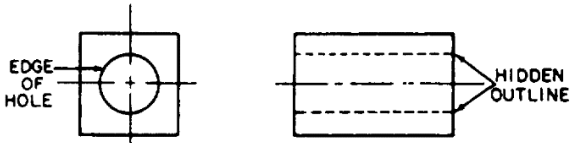


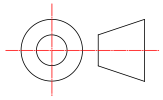












An OP drawn in Third Angle will take an object, like the one shown below, and arrange the elevations in a specific orientation, shown left

Keywords

Orthographic - A formal engineering drawing that uses a 2D drawing of each side of an object and consists of a front view, a side view and a plan view.
Isometric - Isometric projection is a method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings
CRITERIA - When analysing a product first prepare a list of questions, this is known as a criteria. Look at the table (above). For example, the criteria listed below could apply to the table when it is being analyzed.
Specification – A detailed list of targets that the design of a product must satisfy i.e. cost, materials, user etc
Prototype - A one off product or component usually made as a test to determine whether the product functions correctly and looks appealing
Polymer - Used in the production of plastic, they make up the components of many objects used in daily life: plastic containers, nylon products, rubber tires and many more.
Ergonomic - Making a product comfortable for a consumer to use
Scale - A drawing that shows a real object with accurate sizes reduced or enlarged by a certain amount
Quality control - A drawing that shows a real object with accurate sizes reduced or enlarged by a certain amount
CAM - The use of machines and equipment to manufacture a component. This usually means it is done at greater speed and with a higher level of accuracy compared to the man made equivalent

QR codes

Ortho drawing

Specification

Revision book

GCSE Pod

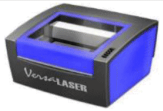
CAD / CAM

1. CAD – Computer Aided Design

Advantages of CAD	Disadvantages of CAD
Designs can be created, saved and edited easily, saving time	CAD software is complex to learn
Designs or parts of designs can be easily copied or repeated	Software can be very expensive
Designs can be worked on by remote teams simultaneously	Compatibility issues with software
Designs can be rendered to look photo-realistic to gather public opinion in a range of finishes	Security issues - Risk of data being corrupted or hacked
CAD is very accurate	SolidWorks, 2D DESIGN
CAD software can process complex stress testing	**CAD Software**

2. CAM – Computer Aided Manufacturing

Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased.	Training is required to operate CAM.
Consistency – All parts manufactures are all the same.	High initial outlay for machines.
Accuracy – Accuracy can be greatly improved using CAM.	Production stoppage – If the machines break down, the production would stop.
Less Mistakes – There is no human error unless pre programmed.	Social issues . Areas can decline as human jobs are taken.
Cost Savings – Workforce can be reduced.	


Laser Cutter


Robots


Barcode Scanner


AGV – Automated Guided Vehicle

3: Production Techniques

3.1 Flexible Manufacturing Systems (FMS) : involves an assembly of automated machines commonly used on short-run batch production lines where the products frequently change.

3.2 Lean Manufacturing: It aims to manufacture products just before they are required to eliminate areas of waste including:

- Overproduction
- Waiting
- Transportation
- Inappropriate processing
- Excessive inventory
- Unnecessary motion
- Defects

3.3 Just In Time (JIT) : Items are created as they are demanded. No surplus stock of raw material, component or finished parts are kept.

Advantages of JIT	Disadvantages of JIT
No warehousing costs	Reliant on a high quality supply chain
Ordered secured before outlay on parts is required	Stock is not available immediately off-the-shelf
Stock does not become obsolete, damaged or deteriorated	Fewer benefits from bulk purchasing

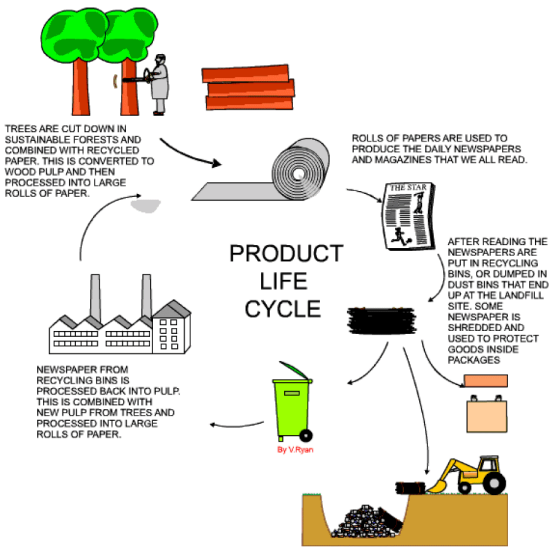
4. Scales of Production

One off: when you make a unique item
Batch: when you make a few/set amount
Mass: when you make thousands
Continuous: open ended production

5: Informing Design Decisions

5.1 Planned obsolescence - Planned obsolescence is when a product is deliberately designed to have a specific life span. This is usually a shortened life span.
5.2 Design for maintenance - Products are often designed to be thrown away when they fail... This can be achieved by designing products that can be repaired and maintained.
5.3 Disposability – Some products are designed to be disposable.

5.4 Product Lifecycle -



7: KEY WORD FOCUS

You should be able to explain the meaning of each of these words by the end of this rotation.

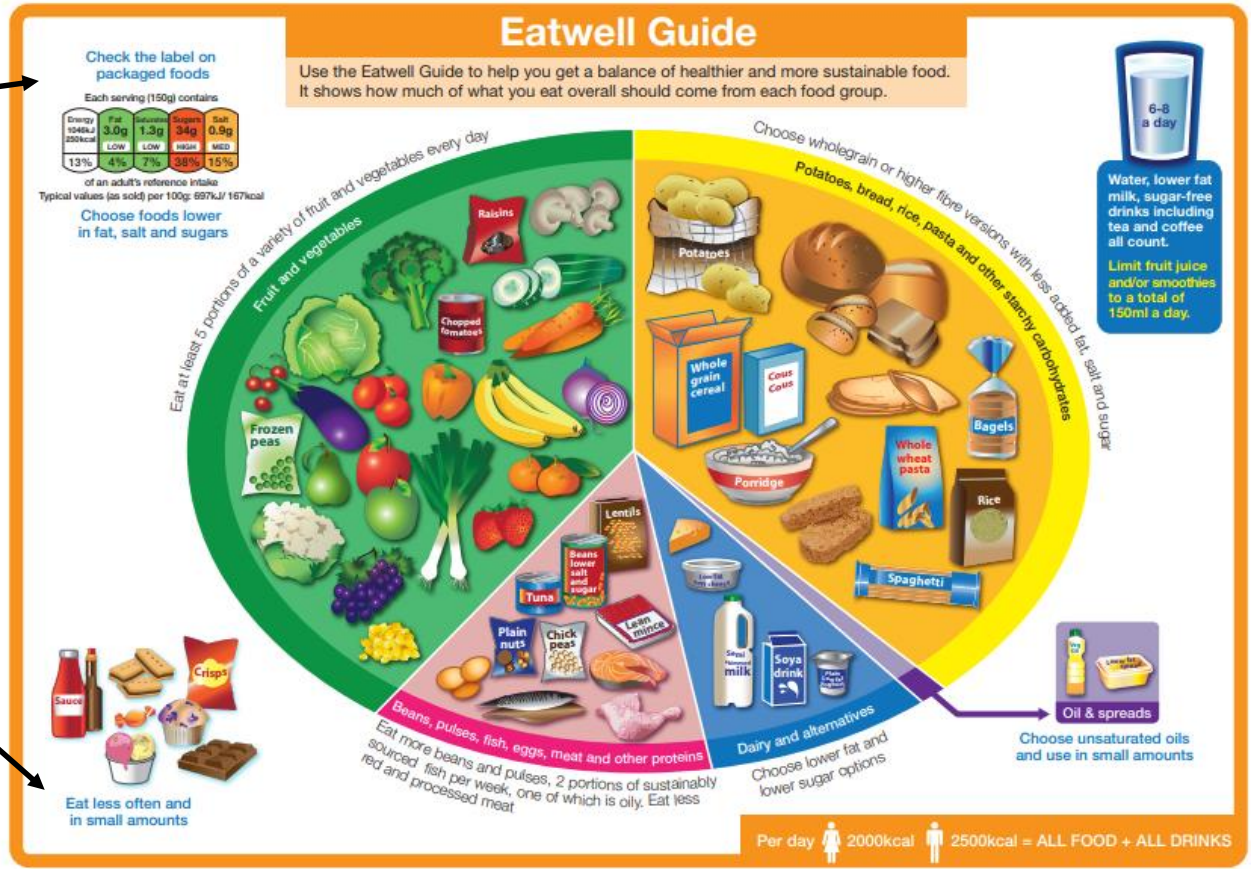
CNC	Computer Numerical Control
EPOS	Electronic Point Of Sale (Barcodes)

Eatwell Guide

The Eatwell Guide shows how eating different foods can make a healthy and balanced diet. It divides food into groups and shows how much of each food group is needed for a healthy diet.

A traffic light colour coded food label which helps you choose healthy food

Foods high in fat and/or sugar have been removed from the main segments as these should be eaten less often and in small amounts.



8 Tips for Healthy Eating

1. Base your meals on starchy foods
2. Eat lots of fruits and vegetables
3. Eat more fish—including a portion of oily fish each week
4. Cut down on saturated fat
5. Eat less salt
6. Get active
7. Drink plenty of water
8. Don't skip breakfast

Macro Nutrients

Protein is needed for growth, repair, maintenance and energy.

Carbohydrate provides the body with energy.

Fat keeps the body warm, provides energy, protects vital organs and provides fat soluble vitamins

Micro Nutrients Vitamins & Minerals

Vitamin A Keeps the eyes and skin healthy
Liver, milk, carrots, red peppers

Vitamin B Releases energy from food
Bread, fish, broccoli, liver, milk, peas, rice

Vitamin C Keeps connective tissue healthy. Helps the body to absorb iron
Oranges, blackcurrants, broccoli, red and green peppers

Vitamin D Helps the body to absorb calcium for strong bones and teeth
Butter, eggs, milk and oily fish

Calcium Builds strong bones and teeth
Yoghurt, cheese, milk, tofu

Iron Keeps red blood cells healthy
Green vegetables, beans, fish, egg yolk, red ,meat

Sodium (Salt) Keeps the correct water balance
Cheese, bacon, salted nuts, ready meals

Macronutrients, fibre and water

Macronutrients

Macronutrients provide energy. The macronutrients are:

- carbohydrate;
- protein;
- fat.

Macronutrients are measured in grams (g).

Keywords

Dietary reference values: Estimated dietary requirements for particular groups of the population.
Essential amino acids: 8 of the different amino acids found in proteins from plants and animals that have to be provided by the diet.
Macronutrients: Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body.
Protein complementation: combining different protein types at the same meal to ensure all EAAs are ingested.
Reference Intakes: Guidelines for the maximum amount of nutrients consumed.

Fat

Sources of fat include:
saturated fat;
monounsaturated fat;
polyunsaturated fat.

Fats can be saturated, when they have no double bonds, monounsaturated, when they have one double bond, or polyunsaturated, when they have more than one double bond.

Recommendations

<35% energy, Saturated fat <11% energy.
A high saturated fat intake is linked with high blood cholesterol levels.

Sources:

Saturated fat: fatty cuts of meat; skin of poultry; butter; hard cheese; biscuits, cakes and pastries; chocolate.
Monounsaturated fat: edible oils especially olive oil; avocados; nuts.
Polyunsaturated fatty acids: edible oils especially sunflower oil; seeds;
margarine; spreadable fats made from vegetable oils and oily fish.

Carbohydrate

All types of carbohydrate are compounds of carbon, hydrogen and oxygen. They can be divided into three main groups according to the size of the molecule.

These three types are:
monosaccharides (e.g. glucose);
disaccharides (e.g. lactose);
polysaccharide (e.g. sucrose).

The two types main of carbohydrate that provide dietary energy are starch and sugars. Dietary fibre is also a type of carbohydrate.

Starchy carbohydrate is an important source of energy.

Starchy foods - we should be choosing wholegrain versions of starchy foods where possible.

Recommendations

- Total carbohydrate - around 50% of daily food energy.
- Free sugars include all sugars added to foods plus sugars naturally present in honey, syrups and unsweetened fruit juice (<5% daily food energy).
- Fibre is a term used for plant-based carbohydrates that are not digested in the small intestine (30g/day for adults).

Protein

- Made up of building blocks called amino acids.
- There are 20 amino acids found in protein.
- Eight amino acids have to be provided by the diet (called essential amino acids).

The essential amino acids are isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.
In young children, additional amino acids, e.g. histidine and tyrosine, are sometimes considered to be essential (or 'conditionally essential') because they may be unable to make enough to meet their needs.

Recommendations

0.75g/kg bodyweight/day in adults.

Sources:

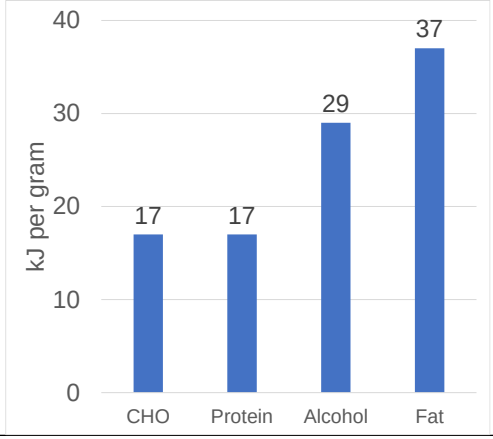
Animal sources: meat; poultry; fish; eggs; milk; dairy food.

Plant sources: soya; nuts; seeds; pulses, e.g. beans, lentils; mycoprotein.
In young children, additional amino acids, e.g. histidine and tyrosine, are sometimes considered to be essential (or 'conditionally essential') because they may be unable to make enough to meet their needs.

Macronutrients, fibre and water

Energy from food

- Energy intake is measured in joules (J) or kilojoules (kJ), but many people are more familiar with Calories (kcal).
- Different macronutrients, and alcohol, provide different amounts of energy.



Protein complementation

Different food contains different amounts and combinations of amino acids.

Vegans and vegetarians can get all the amino acids they need by combining different protein types at the same meal. This is known as protein complementation.

Examples are:
rice and peas;
beans on toast;
hummus and pitta bread;
bean chilli served with rice.

Dietary reference values (DRVs) are a series of estimates of the energy and nutritional requirements of different groups of healthy people in the UK population. They are not recommendations or goals for individuals.

Reference Intakes are guidelines for the maximum amount of energy (calories), fat, saturated fat, sugars and salt consumed in a day (based on a healthy adult female).

Fibre

- Dietary fibre is *a type of carbohydrate found in plant foods.*
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.

Dietary fibre helps to:

- reduce the risk of heart disease, diabetes and some cancers;
- help weight control;
- bulk up stools;
- prevent constipation;
- improve gut health.

Energy from food

- Energy intake is measured in joules (J) or kilojoules (kJ), but many people are more familiar with Calories (kcal).
- Different macronutrients, and alcohol, provide different amounts of energy.

Keywords

Dietary reference values: Estimated dietary requirements for particular groups of the population.
Essential amino acids: 8 of the different amino acids found in proteins from plants and animals that have to be provided by the diet.
Macronutrients: Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body.
Protein complementation: combining different protein types at the same meal to ensure all EAAs are ingested.
Reference Intakes: Guidelines for the maximum amount of nutrients consumed.

Hydration

- Aim to drink 6-8 glasses of fluid every day.
- Water, lower fat milk and sugar-free drinks including tea and coffee all count.
- Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.

20% of water is provided by food such as soups, yogurts, fruit and vegetables.

The other 80% is provided by drinks such as water, milk and juice.
Drinking too much water can lead to 'water intoxication' with potentially life threatening hyponatraemia.
This is caused when the concentration of sodium in the blood gets too low.

Design and Technology - Food: Preparation and Nutrition

State the difference between HBV and LBV sources of Protein.

How can reduce the amount of sugar our diet?

State why Micronutrients are important in our diet.

What happens if we consume too many carbohydrates?

Differences/ similarities between lacto-vegetarian and vegan?

Identify & describe macronutrients

Identify & describe micronutrients

Discuss the 2 main types of fat.

How can we prevent vitamin loss when preparing & cooking food?

Explain the importance of water.

Food, Nutrition and Health

Define Anaemia?

Define Diabetes?

Why is Fibre important in the diet?

What is the difference between soluble and insoluble fibre?

Detail why free sugars are bad for our health.

Compare and contrast rickets and osteoporosis.

List the Water and Fat soluble vitamins:

Why might a vegan not get enough vitamin B12 in their diet?

Identify sources of; Monosaccharides, disaccharides, polysaccharides

Summarise the effect of obesity on our health?

Evaluate the benefits to health of consuming oily fish.

Comment on why consumers shouldn't consume too many pastry products.

State energy values (kcal) for:
1g protein
1g carbohydrate
1g fat

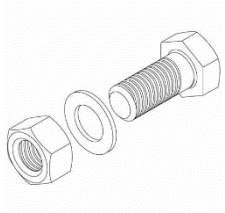
Design and Technology - Workshop: Metal Candle Holder

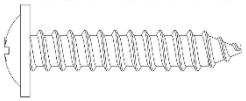
Keywords

Centre Punch	Tool used for denting metal and marking drill holes
Scriber	Sharp point used to scratch lines on metal
Engineers Blue	Dye used to help mark out metal
Ball pein hammer	Metal workers hammer with flat and ball ends
Dividers	Adjustable tool with 2 points for measuring and marking
Notcher	Guillotine used to cut metal removing a square "notch"
File	Used to remove metal and plastic
Emery Cloth	"Sandpaper" for metal
Engineers Square	Try square for metal
Hacksaw	Fine toothed saw for cutting metal
Tap / tap wrench	Used to cut an internal thread in a hole
Tapping grease	Grease used to help cut a thread and avoid tool wear
Centre lathe	Metal workers' lathe
Parting off (tool)	A tool used in a lathe for cutting off pieces from the main body of stock being worked on.
Brazing	Method of melting brass to form a joint in steel
Flux	Compound used to prevent oxidisation when brazing
Borax	The type of flux used when brazing steel
Oxidisation	Impurities forming on the surface of metal, often as a result of exposure to heat, water or other chemicals.
Brass	An alloy of copper and zinc. Also used for brazing
Quench	Rapid cooling of metal in water
Mild Steel	Also known as **Low Carbon Steel**. Most common form of steel used for cars, construction and many other uses
Ferrous / Non Ferrous	Metal containing / not containing Iron.
Sand casting	The process of melting metal and pouring it into a sand mould
Aluminium	A soft, light weight material with a low melting point
Welding	The fusing of metals together using heat or chemicals
Spot Welder	Machine that passes a low voltage through metal causing local heat and fusing similar types of metal together.
Cope	The top section of a casting box
Drag	The bottom section of a casting box
Runner/ riser	Where molten aluminium enters / exists a casting box
PPE	Personal Protective equipment; goggles, mask, etc.

Permanent and Non Permanent Joints in Metal

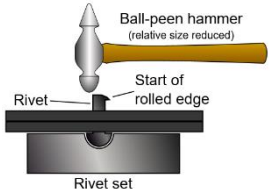
Metal can be joined in a number of **permanent** and **non permanent** ways.
A **non permanent** method of joining is a method that can be taken apart. This is particularly useful for maintenance as it means that parts that are broken or worn out can be replaced..
Non permanent methods of joining metal involve use of nuts, bolts and self tapping screws.

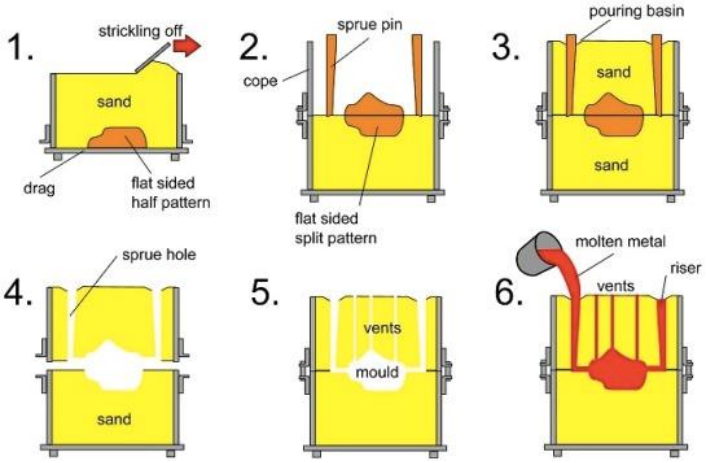




Permanent methods of jointing include **soldering, riveting, welding** and **brazing**. To disassemble a permanent joint it is likely to involve cutting the joint or otherwise damaging the components. Metals are often **welded** together using an electric spark or arc. This generates high levels of heat, fusing the metals together. **Brazing** or **soldering** involves melting a different metal of a lower melting temperature around the joint. This bonds to the parts and creates the joint. Brazing and soldering are not as strong as welding.
When **riveting**, holes are drilled through the metal and a metal rivet is fitted into these. The rivet is then hammered flat creating a dome of metal and closing the joint

Nuts and bolts *(top)* allow items to be easily disassembled without damaging components. Self tapping screws *(above)* can cut their own thread in soft materials





Casting
When **casting**, a **pattern**, often made from wood is packed in a box filled with sand. Once sand has been compacted, the pattern is removed. **Molten aluminium** is poured into the void via a **sprue hole** or **runner** and takes up shape. When cooled, the mould can be taken apart, sand re used . The **runner** and **riser** need to be removed and the casting cleaned up

Drama - Component 1: Devising Theatre

Overview

Portfolio
- 750-900 words written

Performance
1 Actor Monologue (2-5minutes)
- 2 Actors (5-10 minutes)
- 3 Actors (7-12 minutes)
- 4 Actors (9-14 minutes)
- 5 Actors (11-16 minutes)

ALL CANIDIATES IN A GROUP MUST CREATE & PERFOM A 2 MINUTE MONOLOGUE IN A SOLO PEREFORMACE AS WELL AS GROUP PERFORMANCE.

Evaluation
- 1 hour 30 minutes
- 2 sides of A4

Assessed on either **acting or design.**

Designers must work with a group of **actors.**

It is **not necessary** for all **acting groups** to work with **designers.**

Work in groups of between **two** and **five actors.**

Each group may have up to **four designers**, each offering a **different design skill**.

Actors will be assessed on their **performance skills.**

- Vocal Skills
- Physical Movement
- Spatial Relationships

Designers must pick **one skill** from the list below:

- lighting design
- sound design
- set design (including props)
- costume design (including hair and make-up).

Devising Theatre: Performance

Devise a piece of **theatre** in **response** to the **stimulus** chosen from the selection.

Must demonstrates **one** of the following:

- the **techniques** of a theatre **practitioner**
- the dramatic **characteristics** of a specific **genre**

Create and **develop** ideas to communicate **meaning** to an **audience** by:

- **Researching** and **developing ideas** using: **Techniques or characteristics** of the **practitioner or genre**
- **Rehearsing**, **amending** and **refining** the work in progress.

Choose **one** stimulus from a list of four:

- *(a quotation)*
- *(a song)*
- *(a picture)*
- *(a concept or statement)*

Stimulus
Idea
Develop
Research
Rehearse
Perform

The **portfolio** is intended to highlight the **creative** and **developmental process** of **devising** theatre.

It is **not** intended to be a **full record of the rehearsal period**,

Choose carefully the **evidence** which best supports the **3 stages** of **development** of their piece of **theatre**.

The Rehearsal Process

1. **How** ideas have been **researched**, **created** and **developed** in response to the chosen **stimulus.**
2. **How** ideas from the chosen **practitioner/genre** have been **incorporated** in the piece **to communicate meaning.**
3. **How** ideas have been **developed**, **amended** and **refined** during the development of the devised piece.

For each stage, candidates **must** provide illustrative material

- ★ Sketches
- ★ Photographs
- ★ Ground plans
- ★ Diagrams
- ★ Storyboards
- ★ Mood boards
- ★ Sections of script
- ★ Digital media,
  - including **brief recordings** of sections of a rehearsal or material **appropriate to the skill area**, e.g., sound clips. ***These should be no longer than one minute.***

Evaluation

2 sides of A4

Reflecting on the **Final Performance**

The **evaluation** is your reflection on the **final performance.**

You **must** include your chosen **stimuli** and **practitioner/ genre.**

Use them to open your evaluation and refer to them throughout.

1. **Analyse** and **evaluate interpretation** of **character/role** or their realisation of **design** in the **final performance.**
2. **Analyse** and **evaluate** how own performance **skills** or design skills contributed to the **effectiveness** of the **final performance.**
3. **Analyse** and **evaluate** individual **contribution** to **fulfilling** the **aims** of the piece in the **final performance.**

1. **How did your character/ role add to the design of the piece?**
2. **How did you use your skills to add effect in the final performance?**
3. **What Went Well? How was your piece successful?**
4. **Even better if? What was unsuccessful? What could you do to make your performance even better?**
5. **How did you fulfil the purpose of your piece of theatre?**

The Fourth Wall

Konstantin Stanislavski: Proscenium Theatre Characteristics:

- Everyday
- conversations and style of speaking
- Ordinary people
- A carefully rehearsed acting style which created an impression of reality
- Real setting
- Time is portrayed naturally

The System: rehearsal

Internal (emotions)	**External** (physicality)
Feeling of truth	Making the body Expressive
The magic 'If'	Accentuation
Emotional Memory	Restraint and control
Concentration of Attention	Intonation and Pauses
Relaxation of muscles	Diction and Singing
Units and Objectives	Tempo- rhythm and movement

Actors should feel the emotion of the play and express it to the audience.

Breaking the 4th Wall

Bertolt Brecht: Epic Theatre Characteristics:

- Direct Address
- Narration
- Multi-rolling
- Ensemble
- Music/Song
- Gestus
- Placards
- Speaking Stage Directions
- Tickle and Slap.

Brecht Style:

Alienation

Create **distance** between the **actor** and **spectator** so they audience can **respond** to drama **objectively**.

Didactic

Plays have an **educational purpose** for both **audience** and **performers.**

Gestic

Defines **emotion** using a **combination** of **physical** and/or **vocal** techniques

English – Language Paper 1 and 2 writing revision

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 the reader's mind through your use of the English language.
- **But remember, you can combine a story and a piece of description!**

TECHNIQUES/METHODS 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.

SUGGESTED STRUCTURE

Paragraph 1 - Weather/Environment: Describe the weather and the environment around the main character in order to give a sense of place. Use pathetic fallacy to set the tone of your writing.
Paragraph 2 - Location: Describe the setting in which the action takes place. Zoom in on a particular feature such as a park bench or a lamp-post and describe it in meticulous detail.
Paragraph 3 - Main Character: Describe your main character using physiognomy and metaphorical language to describe their personality. Show don't tell.
Paragraph 4 - Feelings of main character through personification. Example: Fear stalked me. It was the *predator and I was its prey.*
Paragraph 5 - The meeting: Have your character come across another and describe their interaction using sensory language. End on a piece of dialogue. The first and last piece of speech.

TECHNICAL ACCURACY

Technical Accuracy/SPaG is worth 16 marks (check over answers for this in final 5 minutes) Vary sentence structure, try beginning a sentence with an adverb or a verb or use a semicolon to replace a conjunction like and or but.

- Example: I am going to the shops **and** I am going to buy some pears.
- I am going to the shops**;** I am going to buy some pears.
- Example 2: **Suddenly**, there came a tapping.
- Example 3: **Running** closer and closer to my target, I was almost with reach.

PAPER 1

Remember to use paragraphing, separating these based on changing focus or theme and ensure you make your writing flow coherently. If you forget to paragraph, look for where you feel a change of paragraph would go and write // next to this.

HELPFUL HINTS

- Keep your tone consistent throughout: Do not use similes which suggest a light and playful atmosphere after you have just spent 15 minutes making the scene sound creepy.
- Describe the setting and location. Avoid action: The easiest way to gain marks in this section of the paper is to describe in detail using techniques. Too much action will deviate from this description.
- Use a variety of structural features: Flashbacks or deep thoughts of the protagonist work well.
- Keep to one or two characters: You should concentrate on saying a lot about very little. Fuller descriptions of one/two character(s) is best.

FORM (WHICH FORM SHOULD YOU WRITE IN)

- Article/Blog (needs a headline and a tagline)
- Letter (should be set out appropriately with addresses and salutations)
- Speech (Paragraphing and sentences on lines of their own to show effect of strong single statements)

PURPOSE (WHY YOU ARE WRITING)

- Article/Blog to persuade/inform/entertain
- Letter to persuade/inform
- Speech to persuade

AUDIENCE (WHO YOU ARE WRITING TO)

- Formal/informal register. Dependent on who you are writing/speaking for. Mostly formal but formality may drop to entertain.

TECHNIQUES/METHODS TO USE

- **Anecdotes**- Stories/examples (it doesn't have to have actually happened)
- **Facts and statistics**- Factual information (make them up or borrow from the source material)
- **Opinions**- Your ideas/thoughts (but don't rant)
- **Rhetorical Questions-** Questions to stick in the mind of reader/make a statement
- **Emotive Language**- Tug at the heart strings (make your reader
- feel sympathy or happiness or hope)
- **Semantic field** – use vocabulary with a similar/linking theme

PAPER 2

SUGGESTED STRUCTURE

- Article/Blog: Catchy headline/tagline, often with alliteration or some form of play on words.
- Letter: Correct salutation and expressing your concern for the issue at hand. Reason for writing.
- Speech: Attention grabbing opening line expressing outrage/disgust/concern at the issue.

Opening expressing the opposite point of view that you wish to *argue and then using a short sentence to disprove this* **and explain why this way of thinking is untrue.**
Example: 'Some may say that animal testing is an acceptable evil as it is the cheapest method to test products. This is misguided. Rather than solely an economic issue, animal testing is a moral concern in our society…

Go on to express your point of view with 3 reasons why it is the correct viewpoint to hold. Use our techniques to support this. Such as emotive language, statistics and facts.
Example: 'Firstly, animal testing is an avoidable evil. The vast majority of tests on animals can only provide a 70% chance that they will have similar effects on humans. This is due to the differing nature of our DNA.'

TECHNICAL ACCURACY

- Use the same guidance for Paper 1 for Paper 2.
- Spending 5minutes at the end checking your use of SPaG can make all the difference!

English – Literature Paper 1 : Romeo and Juliet

Act	Plot – 'Romeo and Juliet' by William Shakespeare
Prologue	A sonnet, recited by the chorus, outlines the play.
1	Act I, Scene 1: Capulet and Montague servants fight in the streets. Benvolio tries to break them up, but Tybalt arrives and challenges him. The Prince arrives and declares that any further fighting will be punished with death. After this, the Montagues discuss Romeo's melancholy state and Benvolio learns Romeo is in love with Rosaline. Act I, Scene 2: Paris seeks Capulet's permission to marry his daughter Juliet. Capulet says she is too young, but Paris should try to win her affections at his banquet. Capulet's invitation list is intercepted by Benvolio and Romeo, who decide to attend the event. Act I, Scene 3: The Nurse and Lady Capulet tell Juliet about Paris, and she agrees to consider him as a potential suitor. Act I, Scene 4: Romeo, Benvolio, and Mercutio arrive at the banquet, and Mercutio banters with Romeo. Act I, Scene 5: Romeo and Juliet see each other and fall in love immediately. Tybalt sees Romeo and wants to fight him, but Lord Capulet stops him.
2	Act II, Scene 1: Romeo separates himself from his friends as they leave the party. Act II, Scene 2: Romeo listens to Juliet at her balcony, and they exchange vows to marry. Juliet says she will send a messenger to Romeo the next day to arrange the wedding. Act II, Scene 3: Romeo goes to see Friar Lawrence to ask for his help with marrying Juliet. The Friar agrees, hoping that their alliance will end their families' feuding. Act II, Scene 4: Benvolio and Mercutio discuss Tybalt, who has challenged Romeo to a duel. Romeo arrives and the friends banter about his love. The Nurse appears; Romeo's friends depart. Romeo gives the Nurse a message for Juliet: she is to go to Friar Lawrence that afternoon, and they shall be married. He arranges for the Nurse to receive a rope-ladder for Juliet to lower for him that night. Act II, Scene 5: The Nurse returns to an impatient Juliet. She teases her charge by withholding the message but then tells her the good news. Act II, Scene 6: Juliet comes to Romeo in Friar Lawrence's cell, and they greet each other joyfully. The Friar prepares to marry them.
3	Act III, Scene 1: Benvolio and Mercutio encounter Tybalt, and Mercutio mocks him. Romeo arrives and refuses to accept Tybalt's challenge to a duel (due to his secret marriage to Juliet). Mercutio thinks this is cowardly so fights on his behalf. Romeo tries to intervene and Mercutio is killed under his arm, cursing the families as he dies. Romeo fights and kills Tybalt to get revenge. At Benvolio's urging, Romeo flees. The Prince appears and interrogates Benvolio. Judging Tybalt to be guiltier than Romeo, he spares the latter the death sentence but banishes him from Verona. Act III, Scene 2: Juliet longs for night, when Romeo is to come. The Nurse brings her word of Tybalt's death and Romeo's banishment, and volunteers to bring Romeo to the distraught girl. Act III, Scene 3: Romeo is in a state of anger and disbelief, hiding with the Friar. The Nurse arrives with word of Juliet's distress. The Friar chastises Romeo for behaving so foolishly and proposes that, after a night with Juliet, Romeo should flee to Mantua until everything is cleared up. Romeo agrees and leaves. Act III, Scene 4: Capulet decides to marry Juliet to Paris in three days to cheer her up. Act III, Scene 5: Romeo and Juliet awake after spending the night together and Romeo leaves. Lady Capulet arrives and tells Juliet about her impending marriage. Julie refuses and her parents fly into a rage. The Nurse advises that Juliet ignore her marriage to Romeo, which no one else knows about, and marry Paris.
4	Act IV, Scene 1: Juliet interrupts Paris talking to Friar Lawrence and, when he leaves, threatens to kill herself if the Friar doesn't help her. He agrees to provide her with a potion that will make her seem to be dead, until Romeo collects her from the family crypt. Act IV, Scene 2: Juliet apologizes to her father, promising to obey him and marry Paris. Capulet moves the wedding up a day to the next morning. Act IV, Scene 3: Juliet drinks the potion. Act IV, Scene 4: Capulet sends the Nurse to awaken Juliet on the morning of her wedding day. Act IV, Scene 5: The Nurse finds Juliet dead and the family grieve for her.
5	Act V, Scene 1: Balthasar arrives in Mantua and tells Romeo that Juliet has died. Romeo immediately plans to join her and buy a poison from and apothecary. Act V, Scene 2: Friar John reports to Friar Lawrence that he has been unable to deliver Lawrence's letter to Romeo. Lawrence sends John to fetch a crow bar, planning to open the vault and take Juliet into hiding in his own cell until Romeo can be summoned. Act V, Scene 3: Paris visits Juliet's tomb at night. Romeo appears with Balthasar, whom he sends away with a letter to Montague. Paris steps forth to challenge him. They fight, and Romeo kills Paris. Romeo then enters the crypt, drinks the poison, and dies. Friar Lawrence arrives tells Juliet what has happened and begs her to flee. She refuses and stays. She kisses her dead lover and stabs herself with his dagger. The watchmen appear, arresting Balthasar and the Friar as the Prince arrives, followed by both families. The Friar explains what has happened, and his tale is confirmed by Balthasar and by Romeo's letter to his father. Montague and Capulet make peace and vow to erect golden statues of the two lovers.

Character	
Romeo	The son and heir of Montague and Lady Montague. A young man of about sixteen.
Juliet	The daughter of Capulet and Lady Capulet. A beautiful thirteen-year-old girl.
Friar Lawrence	A Franciscan friar, friend to both Romeo and Juliet.
Mercutio	A kinsman to the Prince, and Romeo's close friend.
Nurse	Juliet's nurse, the woman who breast-fed Juliet when she was a baby and has cared for Juliet her entire life.
Tybalt	A Capulet, Juliet's cousin on her mother's side.
Capulet	The patriarch of the Capulet family, father of Juliet, husband of Lady Capulet, and enemy, for unexplained reasons, of Montague.
Paris	A kinsman of the Prince, and the suitor of Juliet most preferred by Capulet.
Benvolio	Romeo's cousin and thoughtful friend, he makes a genuine effort to defuse violent scenes in public places
Prince Escalus	The Prince of Verona. A kinsman of Mercutio and Paris. As the seat of political power in Verona, he is concerned about maintaining the public peace at all costs.

Themes
Love and hate
Violence and conflict
Fate

Context

Queen Elizabeth I – She was queen while Shakespeare was writing, and supported him. Elizabeth I made Protestantism the official religion of England, which angered many Catholics, and led to much conflict. Shakespeare may be referencing this in 'Romeo and Juliet', with the two warring families.

Patriarchy – patriarchal societies are ones where men are dominant, and have control over women e.g. by choosing who they would marry.

Nurses – employed by wealthy families to feed and care for their children.

The Humours – Elizabethans believed the body contained four 'humours': blood, phlegm, yellow bile and black bile. The amount you had of each determined your personality. People with too much phlegm are emotional. People with too much blood are irresponsible and gluttonous. People with too much yellow bile are violent and vengeful. People with too much black bile are depressed and self- centred.

Fate - the belief that your life is mapped out for you, or 'written in the stars'. Many Elizabethans believed God decided your fate, and that astrology could help you identify your course in life.

Bubonic Plague/Black Death – a plague that killed many people. Sufferers were quarantined in their houses, with a red 'X' painted on the door, and left to die.

Techniques and Terminology

Prologue – sets up the story and foreshadows events.
Foreshadowing – when an author drops hints about what will happen through language or symbolism.
Dramatic irony – when an audience knows something the characters do not.
Symbolism – when an image represents an idea, e.g. light symbolises happiness, flowers symbolise youth etc.
Double meaning/homophones – when a word can be read to mean two things e.g. 'grave'= serious or gravestone.
Rhyming Couplets – two lines next to each other that rhyme with each other, often used for dramatic impact.
Iambic pentameter - a line of verse with five metrical feet, each consisting of one short (or unstressed) syllable followed by one long (or stressed) syllable

Geography – Paper 1 case studies

Key terms:
Social (S) impacts on people
Economic (EC) impact of money
Environmental (EN) impact on the natural world

Weather Hazards (global) – Tropical Storms Week 1

Typhoon Haiyan – Philippines (LIC)

Effects: **6,300** people killed
90% of Tacloban City damaged
30,000 fishing boats destroyed
Response: **1200** evacuation centres for homeless
Oxfam help replace fishing boats.
More cyclone shelters built.

Somerset levels UK

Causes: December 2013 to February 2014 , **12** major winter storms, stormiest period in 20 years. The ground became **saturated** with water.
The land is low lying and flat.
Effects: **S** - 3rd January Muchelney village cut off.
EC - A361 (road) was closed £1 million lost in business.
EN - 6880 hectares farmland flooded soil was washed away.
Response: Somerset council declare a **major emergency.**
Sand bags protect houses.
Pumps remove water.
Long term the rivers were **dredged.**

Tectonic Hazards- Earthquake Week 1

New Zealand 2011 (HIC)

Effects: CTV building collapsed 115 lost lives.
Liquefaction land turned to liquid.
Landslides blocked roads
Response: Emergency services on scene in 20 mins. Sniffer dogs and heat seeking cameras used.
New buildings made earthquake proof

Nepal 2015 Gorkha (LIC)

Effects: Over 9,100 people lost their lives
3 million made homeless
Response: Search & rescue teams arrived from UK
Field hospitals set up by Red Cross.
Emergency shelters from Action aid.
People left to rebuild

UK Ecosystems Week 2

Slapton Ley (Lake)

Producers - Algae
Consumer – Fish (Roach)
Secondary Consumer – Bird (Heron)
Decomposers - Worms
Food chain – Algae, Fish, Birds
Food web
Nutrient cycling. – Worms help decompose leaf litter.

Tropical Rainforests

Malaysia (Asia)

Opportunities:
Logging: Largest cause of loss of biodiversity, due to commercial and illegal logging.
Mineral Extraction: **Precious metals (gold)** are found in the rainforest.
Commercial Agriculture: Large scale **'slash and burn'** for ranches and palm oil.
Energy development: **High rainfall** creates ideal conditions for **hydro-electric power (HEP)** like the **Bakun Dam**
Road building: needed to bring supplies and provide access to new mining areas
Challenges:
Economic development (EC)
+ Mining, farming & logging creates employment & tax income for government.
Soil erosion (EN)
- 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 (EN)
-Trees are **carbon 'sinks'**. -When burnt, they release more carbon in the atmosphere. This enhances the **greenhouse effect.**

Hot Deserts Sahara desert – Sahel region

Opportunities
Mineral Extraction – Salt mines in Mali
Energy – Solar energy with DesertTech in Tunisia
Farming – Commercial farming is possible through large irrigation schemes
Tourism - Camel trekking in Morocco
Challenges
Extreme temperatures – Temperatures can reach 40°c+
Water supply – Less than 250mm rain – boreholes need to be dug.
Inaccessibility – Vast areas cannot be got too. 4x4 vehicles needs. Oil companies use helicopters.
Causes of desertification. Overgrazing, deforestation, Over population

Coastal management Lyme Regis (UK)

Reason - Management is needed to protect the town which is a key tourist attraction in the South West.
Strategy – Hard engineering, sea wall and groynes to widen the beach.
Effects – The area has been protected during recent major storms
Conflict - The area has increased in popularity with more tourists causing traffic congestion.

River management Banbury(UK)

Reason - Management is needed to protect the town which has flooded severely in the past
Strategy - Earth embankment parallel to the M40 and flood water storage area.
Effects - transport systems remain open during flooding, quality of life for local people improved.
Conflict - cost £18.5 million, and 100,000 tonnes of Earth moved

Geography – Paper 2 case studies

Economic World (Nigeria as a NEE)

Location: Nigeria is a NEE in West Africa. Nigeria is the most populous and economically powerful country in Africa. Economic growth has been base on oil exports.
Political: Free and fair elections led to stability and investment from USA and China
Social: It is a multi cultural and multi faith leading to Social tensions.
Cultural: Vibrant music scene, the Nollywood film industry producing 200 films per month
Industry
Economic: 50% of economy based on manufacturing and services
Nissan and Unilever have factories there.
TNC's: Shell has invested in the country providing jobs and education, but profits go overseas.
Changing relationships: Nigeria plays a leading role with the African Union and UN.
Growing links with China with huge investment in infrastructure
Environment: Oil spills devastated swamps and its ecosystems. Industry has emptied toxic chemicals into rivers risking human health. 80% of forest have been cut down.
Aid: Receives **$5billion** per year in aid.
NGO Charities: (ActionAid) have improved health centres, provided anti-mosquito nets and helped to protect people against AIDS/HIV.
Effects of development: Life expectancy increased from 46 to 53 years. Years in school increased from 7 to 9.

Tourism in LIC (Jamaica)

Jamaica relies on tourism as it provides jobs and income e.g. in hotels. Tour guides.
A new airport and roads have been built, and many shops, dive centres and restaurants opened.

Urban issues Lagos Nigeria (LIC)

Lagos - Nigeria

Location and background: The city has grown. Lagos's expand in 1970's due to the oil boom.. It has expanded around the Lagoon the Lekki Peninsula.
City's importance: Lagos is the financial centre of west Africa, It is the home to Nollywood film industry. Over 60% of industrial and commercial activities in the nation.
Migration to Lagos: More recently rural to urban migration has increased the size of the population due to droughts in the North.
Social opportunities: Standards of living are gradually improving, there is better health care, electricity supply and water.
Economic opportunities: More jobs are available in manufacturing and services in Lagos than anywhere else in Nigeria.
Social Challenges: Poor areas have to share communal water points up to 3km away from the residential areas. Crime rates are high in the city, and there are clear divisions between rich and poor.
Economic Challenges: There are not enough formal jobs for all migrants. Many people work informally for example scavenging in the Olusosun rubbish dump for things to sell.
Environmental Challenges: Factory emissions are not controlled leading to air and water pollution. Only 40% of rubbish is formally collected.
Mokoko – The floating slum district. An estimated 2,000 people enter Lagos every day, many ending up in squatter settlements
Urban Planning: The floating school has improved access to education. BRT improved public transport.

Urban issues Plymouth UK (HIC)

13th City of the UK, home to the Trident nuclear submarines. The city has many **opportunities;**
Social: The shopping areas of Drake Circus and The Barcode
Economic: Wrigleys and Princess Yachts are based in the area. Key transport links such as A38.
Environmental: New eco buses and water taxis are reducing transport on the roads
and Challenges;
Social: Increased house prices = more homelessness and deprivation
Economic: Closure of the airport
Environmental: Urban sprawl has led to decline of greenfield sites around the city.
BIG CITY PLAN – to improve transport (Forder Valley) and amenities in Central Park and Millbay.

The challenge of resource management

Lesotho water transfer scheme

Water is transported (transferred) from Lesotho (a country in Southern Africa which has a **water surplus**) into areas of South Africa which has a **water deficit**.
Advantages
- South Africa is more water secure.
- Provides jobs for those in Lesotho.
- Improved relationships between the two countries.

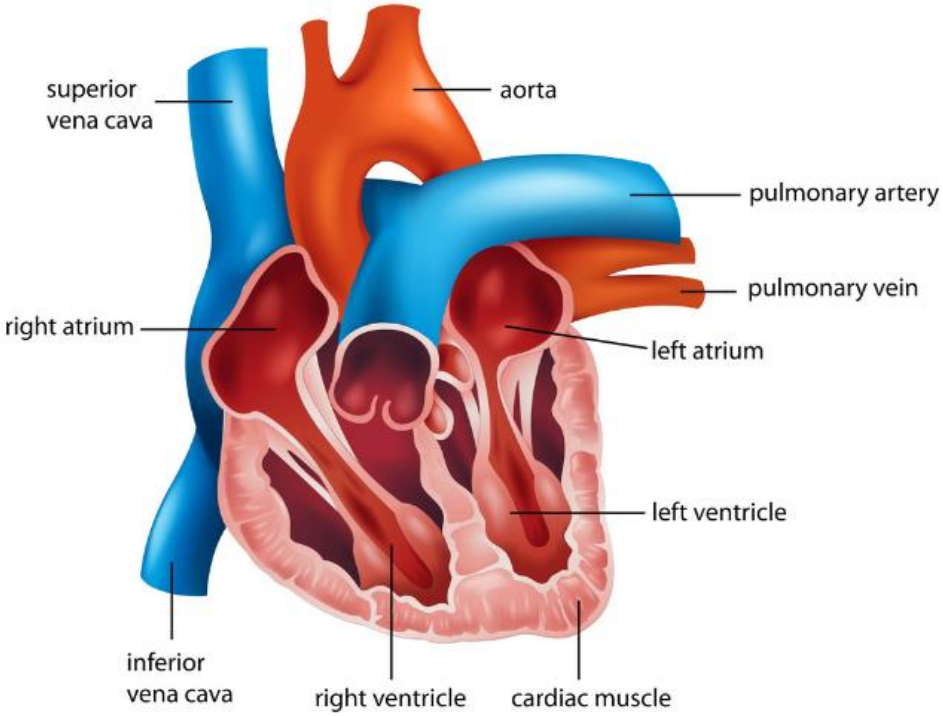
Disadvantages
It is very expensive and uses a lot of carbon to pump water over long distances.
Many traditional jobs and skills are being lost
Migration routes for animals and ways of life for nomadic people are being disrupted.

RO23: Understanding body disorders L01: How systems work

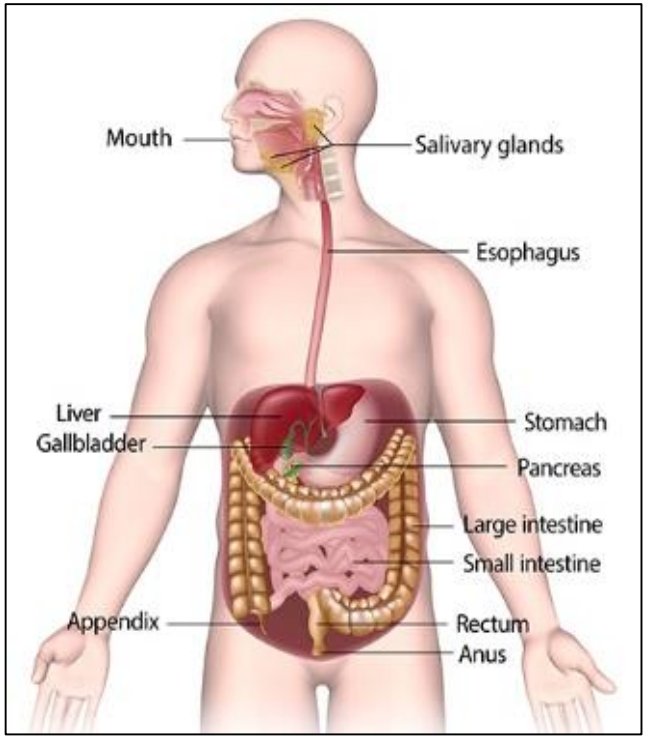
What is covered:

- The Cardiovascular System
- The Respiratory System
- The Digestive System

The Cardiovascular System



The Digestive System



Key Terms: Cardiovascular System

Deoxygenated blood
Oxygenated blood
Valves
Arteries
Veins
Vessels

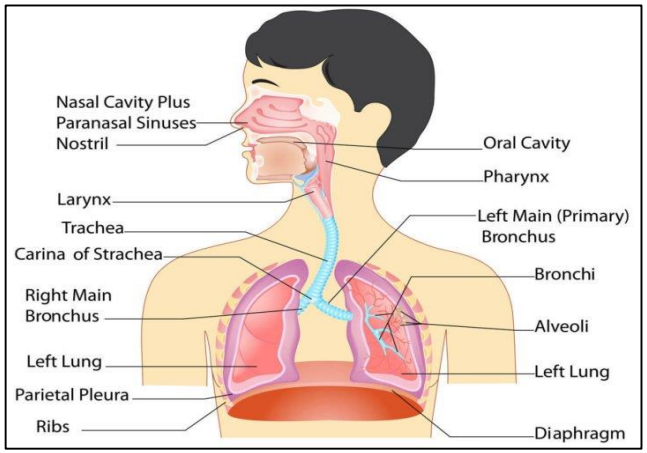
Key Terms: Digestive System

Stomach
Absorption
Digestion
Ingestion
Elimination

Key Terms: Respiratory System

Inhalation
Exhalation
Alveolus Gas Exchange
Diaphragm
Intercostal Muscle
Sternum

The Respiratory System



LO1: Assessing Scenes of Danger and Identifying Risks

In an emergency, acting **calmly** and **quickly** is essential.

There are 4 main steps:

- Assess the situation
- Make the area safe
- Give emergency aid
- Get help

Keywords

First Aid - Urgent treatment given to an individual who has suffered a sudden injury or an unexpected health problem.

Casualty - Someone who has suffered an injury.

Risk - Something that could cause harm to individuals.

Providing key information to the emergency services:

- Location
- Telephone number
- Name of person calling
- Type of emergency
- Condition of casualty/details of injury
- Hazards
- Name of casualty

STEP 1: Assessing the Scene- Before approaching the casualty, look around the scene of the incident. Quickly checking for danger to the casualty or others.

STEP 2: Make the Area Safe - Quickly remove any hazards that you can - without injuring yourself. Look for things such as moving sharp objects away.

STEP 3: Give Emergency Aid - If there is more than one casualty - treat the one with the most severe injuries first. Check whether they are **conscious**, **breathing** and have a **pulse.**

STEP 4: Get Help! Calling 999 in a medical emergency is essentially what you do here. Medical emergencies include; heart attacks, strokes or head injuries.

Consent, Communication and Additional Support.

Consent means that permission is given for something to happen.

Informed Consent is when a person is given information about what they are giving their consent for.

Communicating Effectively is vital when giving first aid as this allows the casualty to understand what is happening and reassures them.

Additional Support is getting extra help in the form of an extra pair of hands if there are helpful passers by or calling for the emergency services.

The purpose of administering first aid is obvious. There are ***three*** main aims though:

- **Preserve life** - your own, the casualty's and bystanders'
- **Prevent deterioration** - stop the casualty getting worse
- **Promote recovery -** help them to get better

ABC Check

A= Airway

Check for obstructions in the throat or in the mouth that are stopping breathing.

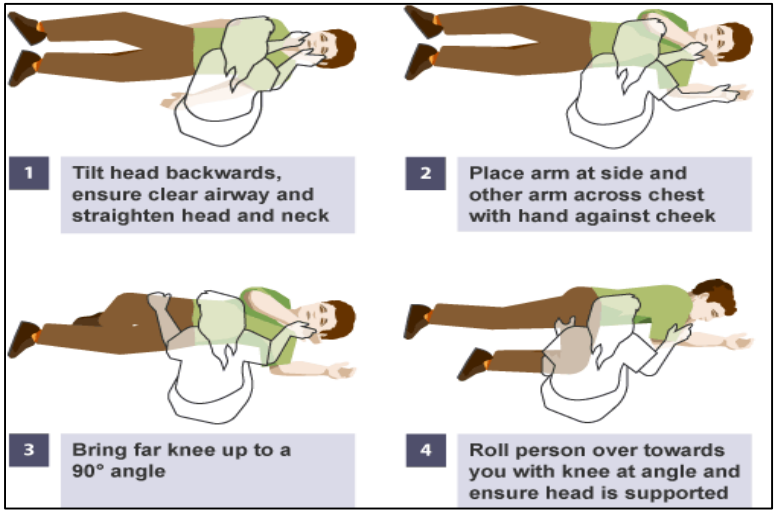
B = Breathing

Look for chest movements and listen for breathing sounds. If the casualty is breathing, place them in the **recovery position**.

C = Circulation

Check for a pulse. You can check for this at the wrist or neck. If no pulse is detected, start **CPR.**

The Recovery Position



LO2: First Aid Procedures

6 injuries to get to know!

- Shock
- Bleeding
- Burns/Scalds
- Choking
- Asthma Attack
- Conscious/ Unconscious/ Breathing/Not-breathing.

What you need to know…

- Symptoms
- Causes
- Severity
- Sequence of First Aid steps
- Rationale (what's the aim?)

You will be required to choose one of the following sectors to base your coursework on:

- Health
- Social Care
- Children and Young Peoples' Workforce

Useful websites:

- Careerpilot : Plan your future work & study
- Home | Skills Launchpad Plymouth

THE LIGHTHOUSE
HIGHLIGHTING YOUR FUTURE POTENTIAL

Essays

Essay 1: LO1A

- Statutory, private and third sectors of employment
- Sources of information about careers- internal and external
- Career possibilities in health, social care or child and young peoples' workforce

Essay 2: LO1B

- Entry points and qualifications needed for health, social care or the children and young peoples' workforce roles.

Essay 3- LO2A

- Personal attributes and skills necessary for careers in health, social care or early years.

Essay 4: LO2B

- Rewards and challenges in health, social care or the children and young peoples' workforce
- Health and safety issues

Essay 5- LO3A

- Identify career opportunities in health, social care or the children and young people's workforce.
- Prepares thorough career plans.

Essay 6: LO3B

- Produces a plan of development goals to improve behaviours, skills and attributes.
- Clearly draws upon relevant skills/knowledge/understanding from units RO21, RO22 and RO31

RO26:Planning for employment in health, social care and children and young peoples' workforce

Keywords

Statutory sector - These are services that are paid for and provided by the government e.g. NHS.

Private sector - These are services that are run as a business to make a profit e.g. Nuffield hospital, residential homes.

Third sector - Provided by non-profit making organisations that are quite often a charity e.g. Age concern.

Entry points - point at which job seekers enter the job market with the minimum required training and education.

Attributes - a quality or feature regarded as a characteristic.

Skills - learned ability to perform an action with determined results with good execution.

Career Plans - practical strategy that allows you to determine your skills and interests, set career goals, and put actions in place that will help you reach them.

History – Cold War Rivalry and the search for World Peace

Cold War Rivalry and Detente

Definition of Era :

The Cold War was a period of tension between the USSR and USA in the 20th Century. There were a series of flash points and the ever present threat of nuclear weapons. There were periods when relations between the powers were better than others known as a "thaw" and periods of great tension or a "freeze" in relations. Largely it was based on ideological differences between capitalism and communism.

Timeline :

1945 : Atom Bombs dropped on Japan
1948 : Berlin Blockade
1949 : NATO established
1949 : China becomes communist
1949 : Russians test the A-Bomb
1962 : Cuban missile Crisis
1965 : Gulf of Tonkin Resolution
1968 : Tet Offensive
1973 : Paris Peace Agreement
1975 : Helsinki Accords
1979 : Russians invade Afghanistan
1987 : Intermediate Nuclear Forces Treaty
1989 : Fall of the Berlin Wall, Velvet Revolution
1991 : Gulf War, Collapse of Soviet Union

Keywords and Concepts :

Blockade : Prevent food and goods from moving.
Puppet : Someone who does as they are told.
Doctrine : Key set of beliefs.
Agent Orange : Chemical defoliant.
Hawks : Advisor who advocates war.
Doves : Advisor who advocates peace.
Sino-Soviet : Poor Chinese-Russian.
Split : relations.
ICBM : Nuclear weapon.
Guerilla : Combatant who does not wear regular uniform.

Week 1 and 4

Origins of the Cold War.

At the end of WW II the US was very worried about Soviet expansion into Eastern Europe. Truman felt that America had been fooled at the Yalta Conference and warned by Kennan's Long Telegram he took a much firmer line. At Potsdam he looked to use the threat of the atomic bomb to gain advantages over the Soviet Union. Truman's idea was to contain the spread of communism (the Truman Doctrine) in Greece and other countries and gifted large amounts of aid to Western Europe through the Marshall Plan. Containment was based on the 'Domino Theory' , the belief that if one country fell to communism this would trigger the fall of its neighbours.

Berlin and NATO

One continuous area of great tension was in **Berlin**. Berlin lay deep in the Soviet zone of Germany and in 1948 in response to the introduction of a new currency and the friendly relations towards the West Germans demonstrated by Britain and America, Russia closed land access to Berlin and formed a **blockade**. Air corridors were left open and an air lift managed to supply Berlin. This proved a propaganda disaster for the Russians who made a similar mistake in 1961 with the building of the Berlin Wall.
The Berlin crisis confirmed to Truman that America should follow a policy of containment in concert with other nations. The North Atlantic Treaty Organisation or **NATO** was a defensive alliance set up to stop further Soviet expansion and meant that any aggression would be met with a united response. In 1955 The Russians established the Warsaw Pact in response to the admittance of West Germany into NATO.

Week 2 and 5

The Cuban Missile Crisis

Probably the closest the superpowers ever came to nuclear war the clash over the deployment of nuclear weapons to the Caribbean island of Cuba. The leader of Cuba, Fidel Castro, feared American invasion following a failed attempt at the Bay of Pigs and asked the USSR for help. A U2 spy plane spotted missile silos and ships which appeared to carry missile heading to the island. What followed was a week long stand-off where Kennedy was advised by Hawks and Doves on Ex-Comm before finally agreeing a deal with Khrushchev that saw American missiles withdrawn from Turkey. This type of crisis showed Kennedy to be an expert at brinkmanship

Vietnam

Following defeat at Diem Bien Phu, France could no longer keep hold of Vietnam. At the Geneva Conference Vietnam was split into the communist north under Ho Chi Minh and the capitalist south under American puppet Diem. Kennedy sent 16,000 advisors to support the south from the communist Vietcong guerrilla fighters. These were reinforced in 1965 following the Gulf of Tonkin resolution that allowed American Ground troops to be sent to Vietnam. However the Americans underestimated the abilities of the Vietcong and their determination to fight. In addition American tactics of search and destroy and bombing raids such as Rolling Thunder plus the use of chemical weapons like napalm and Agent Orange failed to win Vietnamese hearts and minds. Following the Tet offensive of 1968 and the My Lai massacre American opinion turned against the war. Nixon sought "Peace with Honour". The American withdrawal was confirmed at the Paris Peace Conference in 1973.

Week 3 and 6

Détente

The thaw in cold war relations was a result of the threat of nuclear war; Nixon's **Ping-Pong diplomacy** and US desire to leave Vietnam. **SALT I** significantly limited the number of nuclear weapons. The US Senate refused to ratify SALT II due to Russia's invasion of Afghanistan. The Helsinki Accords enshrined the basic human rights of freedom of movement, religion and the press. Russia's invasion of Afghanistan brought tensions and the US refusal to attend the Moscow Olympics in 1980.

Reagan

Reagan hated communism. He referred to it as the "**Evil Empire**". He was determined to win the Cold War by forcing the USSR to disarm using his new Strategic Defence Initiative (SDI) nicknamed Star Wars. This freeze in relations is referred to as the second Cold War.

Gorbachev and 1989

Gorbachev was critical in the ending of the Cold War. He abandoned the **Brezhnev Doctrine** (USSR authority to interfere in Eastern Europe) and allowed the collapse of communism most famously with the fall of the Berlin Wall in October 1989. Further arms treaties were also signed eventually leading to the fall of the Soviet Union in 1991.

US involvement in the Gulf

America became increasingly involved in the Gulf of Persia and the Middle East during the 80s and 90s primarily to secure the supply of oil to the west. Tensions with Iran increased with the rise of an Islamic theocracy. Saddam Hussein's invasion and occupation of Kuwait led to the Gulf War of 1990-91 with the US. This conflict destabilised the region leading to many future problems.

Languages – French : notre planète!

Useful verbs

augmenter	to increase
combattre	to fight
détruire	to destroy
disparaître	to disappear
Eempêcher	to prevent
endommager	to endanger
épuiser	to exhaust/use up
éteindre	to switch off
gaspiller	to waste
jeter	to throw
manquer	to lack
menacer	to threaten
protéger	to protect
provoquer	to cause/provoke
ramasser	to collect/gather
recycler	to recycle
résoudre	to solve/resolve
réutiliser	to reuse
salir	to make dirty
sauver	to save
tuer	to kill
utiliser	to use

Recycling Vocabulary

Le bois	wood
La boite	tin/can/box
Le carton	cardboard
L'emballage	packaging
Les ordures	the rubbish
Le panneau solaire	solar panel
Le papier	paper
La pile	battery
Rechargeable	rechargeable
Le recyclage	recycling
Le sac en plastique	plastic bag
Le verre	glass

Conditional Tense:

"Would/could/should"

Use the stem of the future tense and add imperfect tense endings

Je recycler**ais**
Tu recycler**ais**
Il/elle/on recycler**ait**
Nous recyler**ions**
Vous recycler**iez**
Ils/elles recycler**aient**

Environment Vocabulary

Le changement climatique	climate change
La circulation	traffic
La couche d'ozone	ozone layer
Le déboisement	deforestation
L'effet de serre	the greenhouse effect
Les embouteillages	traffic jams
L'essence sans plomb	unleaded petrol
L'environnement	the environment
Le gaspillage	waste
Le gaz d'échappement	exhaust fumes
L'inondation	flood
La marée noire	oil slick
Le monde	the world
Le pétrolier	oil tanker
La pluie acide	acid rain
La pollution de l'air/de la mer/des rivières/de l'atmosphère	air/sea/river/ atmospheric pollution
Les produits bios	green/bio products
Le réchauffement de la Terre	Global warming
Les ressources naturelles	natural resources
La sécheresse	drought
La terre	earth
Le trou dans la couche d'ozone	the hole in the ozone layer
L'usine	factory

Imperatives

In French use the "vous" form of the present tense.

Economisez	Save/ economise !
Fermez	Close !
Mettez	Put !
Luttez	Fight !
Protégez	Save !
Recyclez	Recycle !

Languages – French : les problems sociaux!

Describing your Family

Madame, Monsieur

Je vous écris pour demander une mission bénévole. Ce qui m'inquiète, c'est la cruauté envers les animaux. **Je voudrais les protéger:** les chiens et les chats **qui ont été maltraités et abandonnés**. Il faut faire quelque chose **pour mettre fin à cette pratique barbare**. J'aimerais donc faire du bénévolat dans un refuge animalier.

Bien que je n'aie que quinze ans, je crois que c'est important de participer à la vie en société. Il est important de ne pas se focaliser sur soi-même.

Je n'ai pas encore beaucoup d'expérience, mais l'hiver dernier, mon frère a fait du bénévolat dans une organisation qui aide les sans-abri et un soir, je suis allée avec lui. J'ai parlé aux jeunes **qui étaient à la rue** et **je leur ai servi un repas chaud**. Ça a été une expérience révélatrice.

Faire du bénévolat sera une expérience enrichissante qui me permettra d'élargir mes compétences. Ça pourrait aussi être un tremplin pour trouver du travail dans le futur car après avoir quitté le lycée, j'aimerais travailler dans le secteur animalier.

Je vous prie d'agréer l'expression de mes sentiments distingués.

...

Marriage and Partnership

Translate it! - Learn it! - Use it! - Think it!

Ce qui me préoccupe	What worries me
Ce qui est important pour moi dans la vie, c'est d'abord …	*The most important thing to me in life is above all …*
Ensuite, c'est …	*Then it's …*
le sport	*sport*
la musique	*music*
ma santé	*my health*
ma famille	*my family*
l'argent (m)	*money*
mes études	*my studies*
mes animaux	*my pets*
mes amis	*my friends*
Ce qui me préoccupe/m'inquiète (le plus), c'est …	*What worries me (the most) is …*
l'état (m) de la Terre	*the state of the Earth/planet*
le réchauffement climatique	*global warming*
la pauvreté dans le monde	*world poverty*
l'injustice (f)	*injustice*
l'environnement (m)	*the environment*

Scan me

Subjunctive jedi

il faut que tu saches
– you need to know
pour que ça aille mieux
– in order to make it better
bien que je sois jeune
– although I'm young
je veux que tu prennes ça
– I want you to take this
je ne crois pas que ce soit vrai
– I don't think it's true
je suis triste qu'on ne puisse pas…
– I'm sad that we aren't able to…
que ça te plaise ou non
– whether you like it or not
avant que tu décides
– before you decide…
le plus grave que j'aie jamais vu – the sadest I've ever seen

Linking expert

de plus - furthermore
ensuite - after
pourtant - yet
d'autre part - on the other hand
par contre - on the contrary
alors que - whereas
néanmoins - nonetheless
surtout - mostly
en particulier - especially
cela dit - that being said
soit… soit… - either… or…
d'ailleurs - by the way
par conséquent - as a result
autrement dit - in other words
(tout) d'abord - firstly
deuxièmement - secondly
pour conclure - to conclude

Add a bit of sophistication and complexity!

Les mots essentiels	*High-frequency words*
à part tout cela	*apart from all that*
bien que (+ subjunctive)	*although*
ceci dit	*that said, …*
comme ça …	*in this way …*
du coup, …	*as a result, …*
en ce qui concerne …	*as far as … is concerned*
en même temps	*at the same time*
en train de	*in the process of (doing)*
il s'agit de	*it's about, it's a matter of*
pas mal de	*quite a lot of*
quotidiennement	*daily*
tel(le)(s) que	*like, such as*
tout le monde	*everyone*

Add a bit of sophistication and complexity!

- **Afin de sauver la planète+…**
  in order to save the planet…
- **Il y a du pour et du contre…**
  there are some plus and minuses…
- **Ce qui me préoccupe le plus/ moins**
  what worries me the most/ the least
- **Un avantage/ un inconvénient c'est que…**
  an advantage/ inconvenient is that…

1. Lo que más me preocupa es …

2. El problema más serio es ……

porque afecta a muchísima gente en …

la hambre	hunger
la pobreza	poverty
la desigualdad **la injusticia**	inequality injustice
la obesidad	obesity
la violencia	violence
la drogadicción	drug addiction
la falta de agua corriente	lack of running water
la deforestación	deforestation
la polución	pollution
el paro/el desempleo	unemployment
el racismo	racism
el cambio climático	climate change
los sin techo	those without roof/homeless

evitar	to avoid
aliviar	to alleviate/relieve
apoyar	to support
buscar	to look for/search for
cometer	to commit
mendigar	to beg

cuidar	to care for
dañar	to damage
dar a luz	to give light/ to.give birth
envenenar	to poison
fallecer	to pass away
luchar	to struggle/fight
recaudar dinero	to raise money

Los problemas sociales y globales

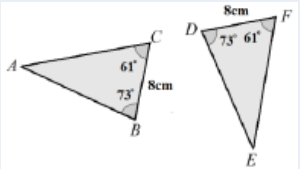
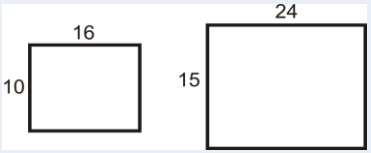
Foundation and Higher

1. Cuando era más joven	When I was more young
2. Antes era un poco egoísta	Before, I was a bit selfish
3. pero ahora	but now
4. En vez de ahorrar todo mi dinero	Instead of saving all my money
5. Intento apoyar	I try to support
6. Intento recaudar dinero para	I try to raise money for…
7. Doy mi tiempo	I give my time
8. a una organización benéfica	to a charity
9. mientras	whilst
10. Me entristece que …	It saddens me that …
11. Me preocupa que …	It worries me that …
12. tantas personas viven en la calle	so many people live on the streets
13. Habrá aún más	There will be even more
14. todos los días cuando me lavo los dientes	All the days when I wash my teeth
15. Es esencial + inf	It's essential to …
16. Es necesario + inf	It's necessary to …
17. No es justo que + inf	It's not fair to…

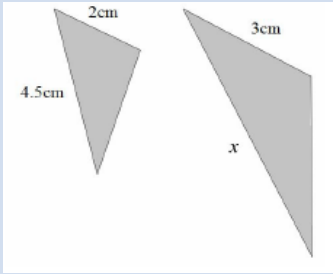
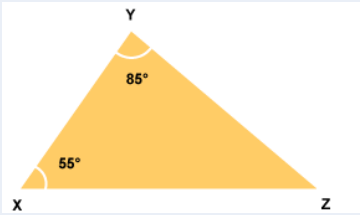
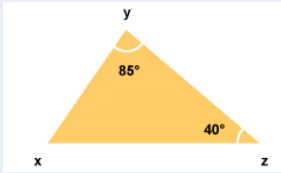
Higher only

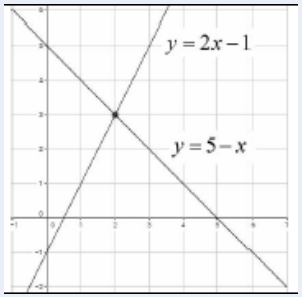
1. ignoraba los problemas de….	I was unaware of the problems of…
2. a mi hermano no le interesa ….	To my brother (….) doesn't interest him
3. Es esencial que + subj	Before going out
4. Es necesario que + subj	I usually turn off the lights
5. No es justo que + subj	It's not fair that…

Maths – Foundation : Congruence and Similarity, Simultaneous Equations and Vectors

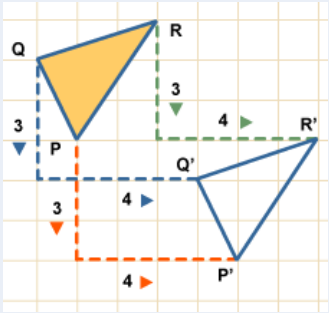
Topic/Skill	Definition/Tips	Example
1. Congruent Shapes	Shapes are congruent if they are **identical** - **same shape** and **same size**. Shapes can be rotated or reflected but still be congruent.	
2. Congruent Triangles	4 ways of proving that two triangles are congruent: 1. **SSS** (Side, Side, Side) 2. **RHS** (Right angle, Hypotenuse, Side) 3. **SAS** (Side, Angle, Side) 4. **ASA** (Angle, Side, Angle) or **AAS** <u>ASS does not prove congruency.</u>	 $BC = DF$ $\angle ABC = \angle EDF$ $\angle ACB = \angle EFD$ $\therefore$ The two triangles are congruent by AAS.
3. 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.	
4. Scale Factor	The **ratio of corresponding sides** of two similar shapes. To find a scale factor, **divide a length** on one shape **by the corresponding length** on a similar shape.	Scale Factor = $15 \div 10 = 1.5$ 

Maths – Foundation : Congruence and Similarity, Simultaneous Equations and Vectors

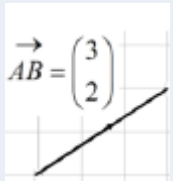
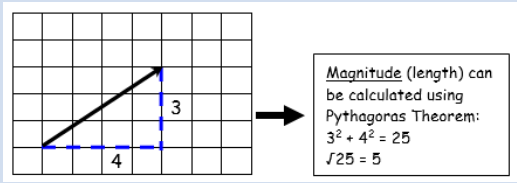
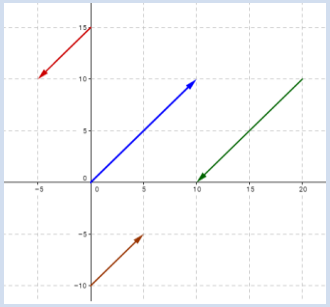
Topic/Skill	Definition/Tips	Example
5. Finding missing lengths in similar shapes	1. Find the **scale factor**. 2. **Multiply or divide** the corresponding side to find a missing length. If you are finding a missing length on the larger shape you will need to multiply by the scale factor. If you are finding a missing length on the smaller shape you will need to divide by the scale factor.	Scale Factor = $3 \div 2 = 1.5$ $x = 4.5 \times 1.5 = 6.75cm$ 
6. Similar Triangles	To show that two triangles are similar, show that: 1. The three sides are in the same proportion 2. Two sides are in the same proportion, and their included angle is the same 3. The three angles are equal	 
7. 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**.	$2x + y = 7$ $3x - y = 8$ $x = 3$ $y = 1$
8. Variable	A **symbol**, usually a **letter**, which **represents a number** which is usually unknown.	In the equation $x + 2 = 5$, x is the variable.
9. Coefficient	A **number** used to **multiply** a **variable**. It is the number that comes before/in front of a letter.	6z 6 is the coefficient z is the variable

Topic/Skill	Definition/Tips	Example
10. Solving Simultaneous Equations (by Elimination)	1. **Balance** the **coefficients** of one of the variables. 2. **Eliminate** this variable by adding or subtracting the equations (**Same Sign Subtract, Different Sign Add**) 3. **Solve** the linear equation you get using the other variable. 4. **Substitute** the value you found back into one of the previous equations. 5. **Solve** the equation you get. 6. **Check** that the two values you get satisfy both of the original equations.	$5x + 2y = 9$ $10x + 3y = 16$ Multiply the first equation by 2. $10x + 4y = 18$ $10x + 3y = 16$ Same Sign Subtract (+10x on both) $y = 2$ Substitute $y = 2$ in to equation. $5x + 2 \times 2 = 9$ $5x + 4 = 9$ $5x = 5$ $x = 1$ Solution: $x = 1, y = 2$
11. Solving Simultaneous Equations (by Substitution)	1. **Rearrange** one of the equations into the form $y = \ldots$ or $x = \ldots$ 2. **Substitute** the right-hand side of the rearranged equation into the other equation. 3. Expand and **solve** this equation. 4. **Substitute** the value into the $y = \ldots$ or $x = \ldots$ equation. 5. **Check** that the two values you get satisfy both of the original equations.	$y - 2x = 3$ $3x + 4y = 1$ Rearrange: $y - 2x = 3 \rightarrow y = 2x + 3$ Substitute: $3x + 4(2x + 3) = 1$ Solve: $3x + 8x + 12 = 1$ $11x = -11$ $x = -1$ Substitute: $y = 2 \times -1 + 3$ $y = 1$ Solution: $x = -1, y = 1$ 

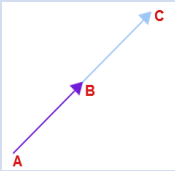
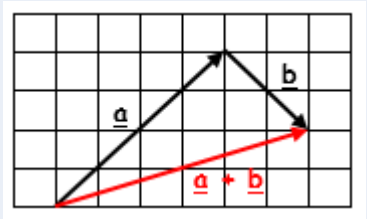
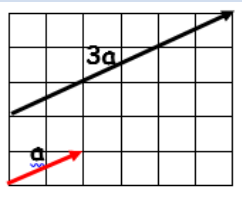
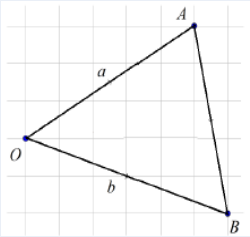
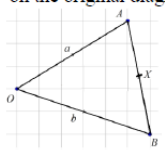
Maths – Foundation : Congruence and Similarity, Simultaneous Equations and Vectors

Topic/Skill	Definition/Tips	Example
12. Solving Simultaneous Equations (by Substitution)	1. **Rearrange** one of the equations into the form $y = \ldots$ or $x = \ldots$ 2. **Substitute** the right-hand side of the rearranged equation into the other equation. 3. Expand and **solve** this equation. 4. **Substitute** the value into the $y = \ldots$ or $x = \ldots$ equation. 5. **Check** that the two values you get satisfy both of the original equations.	$y - 2x = 3$ $3x + 4y = 1$ Rearrange: $y - 2x = 3 \rightarrow y = 2x + 3$ Substitute: $3x + 4(2x + 3) = 1$ Solve: $3x + 8x + 12 = 1$ $11x = -11$ $x = -1$ Substitute: $y = 2 \times -1 + 3$ $y = 1$ Solution: $x = -1, y = 1$
13. Translation	**Translate** means to **move a shape**. The shape does not change **size** or **orientation**.	
14. Vector Notation	A vector can be written in 3 ways: $\mathbf{a}$ or $\overrightarrow{AB}$ or $\begin{pmatrix}1\\3\end{pmatrix}$	

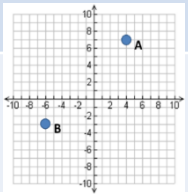
Maths - Foundation: Congruence & Similarity, Simultaneous Equations and Vectors

Topic/Skill	Definition/Tips	Example
15. Column Vector	In a column vector, the **top** number moves **left (-) or right (+)** and the **bottom** number moves **up (+) or down (-)**	$\begin{pmatrix}2\\3\end{pmatrix}$ means '2 right, 3 up' $\begin{pmatrix}-1\\-5\end{pmatrix}$ means '1 left, 5 down'
16. Vector	A **vector** is a quantity represented by an arrow with both **direction** and **magnitude**. $\overrightarrow{AB} = -\overrightarrow{BA}$	
17. Magnitude	Magnitude is defined as the **length** of a vector.	
18. Equal Vectors	If two vectors have the **same magnitude and direction**, they are **equal**.	
19. Parallel Vectors	**Parallel** vectors are **multiples** of each other.	2**a**+**b** and 4**a**+2**b** are parallel as they are multiple of each other. 

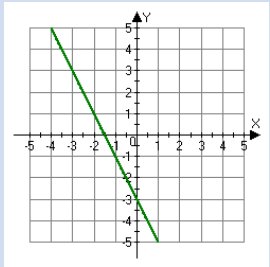
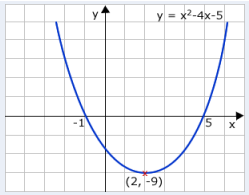
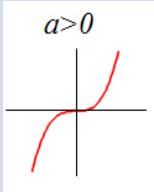
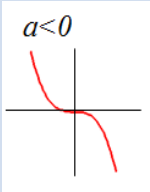
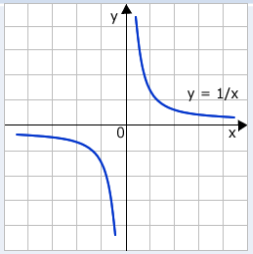
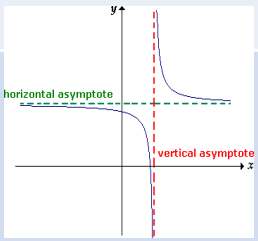
Maths - Foundation: Congruence & Similarity, Simultaneous Equations and Vectors

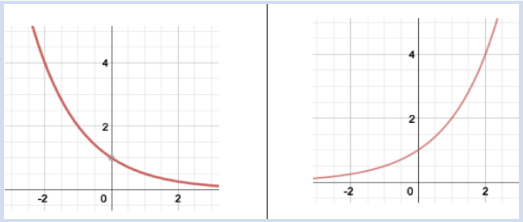
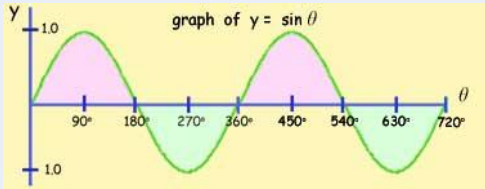
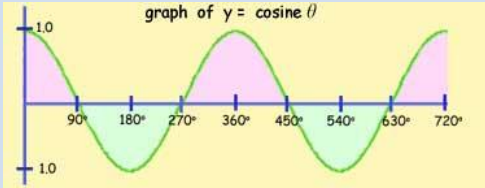
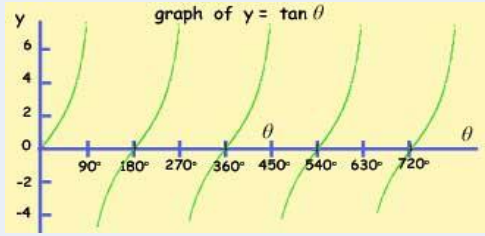
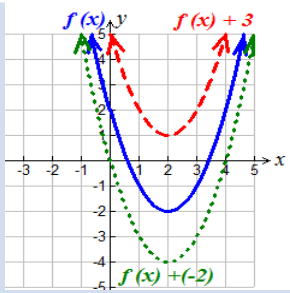
Topic/Skill	Definition/Tips	Example
20. Collinear Vectors	**Collinear** vectors are vectors that are on the **same line**. To show that two vectors are **collinear**, show that one vector is a **multiple** of the other (parallel) **AND** that both vectors **share a point**.	
21. Resultant Vector	The **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.	if **a** = $\binom{4}{4}$ and **b** = $\binom{2}{-2}$ then **a** + **b** = $\binom{4}{4} + \binom{2}{-2} = \binom{6}{2}$ 
22. Scalar of a Vector	A **scalar** is the **number** we **multiply** a vector by.	Example: 3a + 2b = $= 3\binom{2}{1} + 2\binom{4}{-1}$ $= \binom{6}{3} + \binom{8}{-2}$ $= \binom{14}{1}$ 
23. Vector Geometry	 $\overrightarrow{OA} = a \quad \overrightarrow{AO} = -a$ $\overrightarrow{OB} = b \quad \overrightarrow{BO} = -b$ $\overrightarrow{AB} = \overrightarrow{AO} + \overrightarrow{OB} = -a + b = b - a$ $\overrightarrow{BA} = \overrightarrow{BO} + \overrightarrow{OA} = -b + a = a - b$	**Example 1:** X is the midpoint of AB. Find $\overrightarrow{OX}$ **Answer:** Draw X on the original diagram  Now build up a journey. You could use $\overrightarrow{OX} = \overrightarrow{OA} + \frac{1}{2}\overrightarrow{AB}$. This will give: $\overrightarrow{OX} = a + \frac{1}{2}(b - a)$. This will simplify to $\frac{1}{2}a + \frac{1}{2}b$ or $\frac{1}{2}(a + b)$

Maths – Higher : Algebraic Fractions, Graphs, Graph Transformations, Area under Graph and Gradient of curve

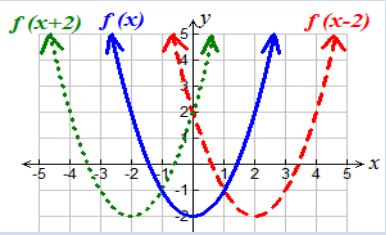
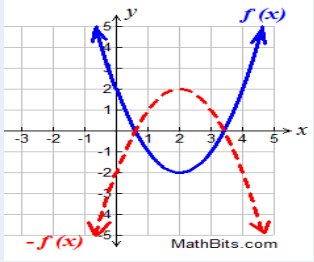
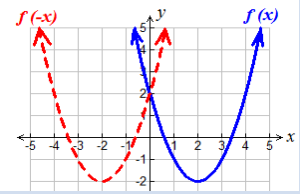
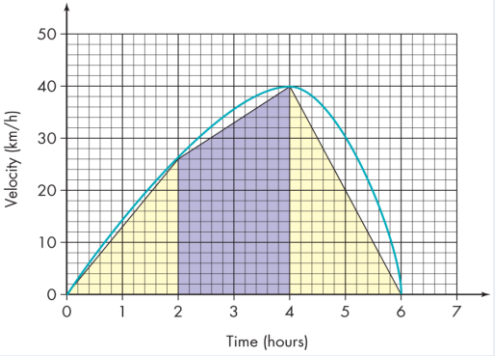
Topic/Skill	Definition/Tips	Example
1. Algebraic Fraction	A fraction whose **numerator** and **denominator** are **algebraic expressions**.	$\frac{6x}{3x-1}$
2. Adding/ Subtracting Algebraic Fractions	For $\frac{a}{b} \pm \frac{c}{d}$, the **common denominator** is bd $\frac{a}{b} \pm \frac{c}{d} = \frac{ad}{bd} \pm \frac{bc}{bd} = \frac{ad \pm bc}{bd}$	$\frac{1}{x} + \frac{x}{2y}$ $= \frac{1(2y)}{2xy} + \frac{x(x)}{2xy}$ $= \frac{2y + x^2}{2xy}$
3. Multiplying Algebraic Fractions	**Multiply** the **numerators together** and the **denominators together**. $\frac{a}{b} \times \frac{c}{d} = \frac{ac}{bd}$	$\frac{x}{3} \times \frac{x+2}{x-2}$ $= \frac{x(x+2)}{3(x-2)}$ $= \frac{x^2+2x}{3x-6}$
4. Dividing Algebraic Fractions	**Multiply** the first fraction by the **reciprocal of the second fraction**. $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$	$\frac{x}{3} \div \frac{2x}{7}$ $= \frac{x}{3} \times \frac{7}{2x}$ $= \frac{7x}{6x} = \frac{7}{6}$
5. Simplifying Algebraic Fractions	**Factorise** the numerator and denominator and **cancel common factors**.	$\frac{x^2+x-6}{2x-4} = \frac{(x+3)(x-2)}{2(x-2)} = \frac{x+3}{2}$
6. Coordinates	Written in **pairs**. The **first** term is the **x-coordinate** (movement **across**). The **second** term is the **y-coordinate** (movement **up or down**)	A: (4,7) B: (-6,-3) 

Maths - Higher : Algebraic Fractions, Graphs, Graph Transformations, Area under Graph and Gradient of curve

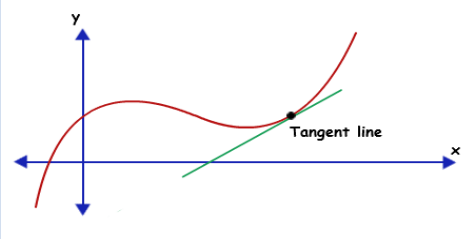
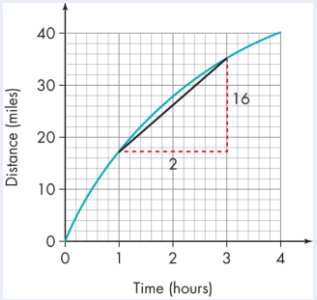
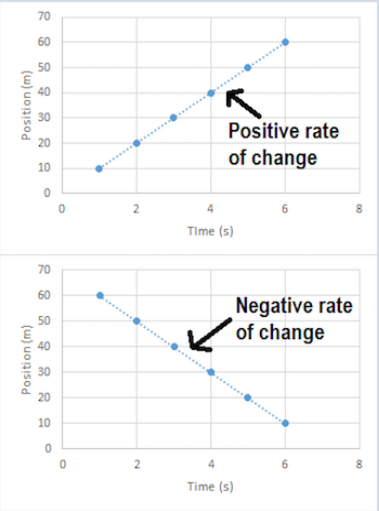
Topic/Skill	Definition/Tips	Example
7. Linear Graph	**Straight line** graph. The **equation** of a linear graph can contain an **x-term**, a **y-term** and a **number**.	Example:  Other examples: $x = y$ $y = 4$ $x = -2$ $y = 2x - 7$ $y + x = 10$ $2y - 4x = 12$
8. Quadratic Graph	A '**U-shaped**' curve called a **parabola**. The equation is of the form $y = \boldsymbol{ax^2 + bx + c}$, where a, b and c are numbers, $\boldsymbol{a \neq 0}$. If $\boldsymbol{a < 0}$, the parabola is **upside down**.	
9. Cubic Graph	The equation is of the form $\boldsymbol{y = ax^3 + k}$, where $\boldsymbol{k}$ **is an number**. If $\boldsymbol{a > 0}$, the curve is **increasing**. If $\boldsymbol{a < 0}$, the curve is **decreasing**.	 
10. Reciprocal Graph	The equation is of the form $\boldsymbol{y = \frac{A}{x}}$, where $\boldsymbol{A}$ **is a number** and $\boldsymbol{x \neq 0}$. The graph has **asymptotes** on the **x-axis and y-axis**.	
11. Asymptote	**Subject: Maths** A **straight line** that a graph **approaches** but **never touches**.	

Topic/Skill	Definition/Tips	Example
12. Exponential Graph	The equation is of the form $\boldsymbol{y = a^x}$, where a is a number called the **base**. If $\boldsymbol{a > 1}$ the graph **increases**. If $\boldsymbol{0 < a < 1}$, the graph **decreases**. The graph has an **asymptote** which is the **x-axis**.	
13. $y = \sin x$	Key Coordinates: $(\mathbf{0,0}), (\mathbf{90,1}), (\mathbf{180,0}), (\mathbf{270,-1}), (\mathbf{360,0})$ y is never more than 1 or less than -1. Pattern repeats every 360°.	
14. $y = \cos x$	Key Coordinates: $(\mathbf{0,1}), (\mathbf{90,0}), (\mathbf{180,-1}), (\mathbf{270,0}), (\mathbf{360,1})$ y is never more than 1 or less than -1. Pattern repeats every 360°.	
15. $y = \tan x$	Key Coordinates: $(\mathbf{0,0}), (\mathbf{45,1}), (\mathbf{135,-1}), (\mathbf{180,0}),$ $(\mathbf{225,1}), (\mathbf{315,-1}), (\mathbf{360,0})$ **Asymptotes** at $\boldsymbol{x = 90}$ and $\boldsymbol{x = 270}$ Pattern repeats every 360°.	
16. $f(x) + a$	**Vertical translation** up a units. $\binom{0}{a}$	

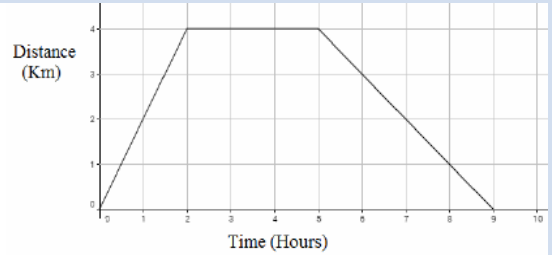
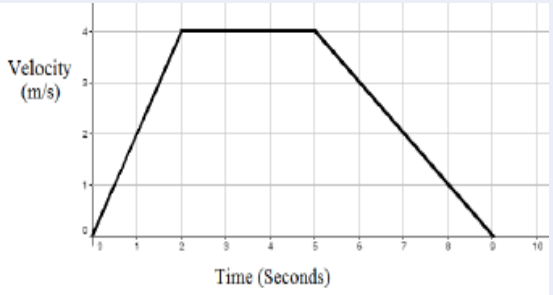
Maths - Higher: Algebraic Fractions, Graphs, Graph Transformations, Area under Graph and Gradient of curve

Topic/Skill	Definition/Tips	Example
17. $f(x+a)$	**Horizontal translation** <u>left</u> a units. $\begin{pmatrix} -a \\ 0 \end{pmatrix}$	
18. $-f(x)$	**Reflection** over the **x-axis**.	
19. $f(-x)$	**Reflection** over the **y-axis**.	
20. 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.	

Maths - Higher: Algebraic Fractions, Graphs, Graph Transformations, Area under Graph and Gradient of curve

Topic/Skill	Definition/Tips	Example
21. Tangent to a Curve	A straight **line** that **touches** a curve at **exactly one point**.	
22. Gradient of a Curve	The **gradient of a curve** at a point is the same as the **gradient of the tangent** at that point. 1. Draw a tangent carefully at the point. 2. Make a right-angled triangle. 3. Use the measurements on the axes to calculate the rise and run (change in y and change in x) 4. Calculate the gradient.	 $Gradient = \frac{Change\ in\ y}{Change\ in\ x}$ $= \frac{16}{2} = 8$
23. Rate of Change	The rate of change at a particular instant in time is represented by the **gradient of the tangent to the curve** at that point.	

Maths - Higher : Algebraic Fractions, Graphs, Graph Transformations, Area under Graph and Gradient of curve

Topic/Skill	Definition/Tips	Example
24. 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**).	
25. 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.**	

The Music Industry EXTERNAL EXAM
Part 1: Understanding different types of organisations that make up the music industry

- Venues and live performance
- Health, safety and security at venues
- Production and promotion
- Service companies and agencies
- Unions
- How organisations interrelate and why these relationships are important

Introducing Music Recording
Part 1: Planning a recording session

- Equipment
- Recording Sessions
- Health & Safety

Part 2: Use recording equipment safely to produce multi-track recording

- Recording audio
- Mixing down the multi-track

Link to :- Music Industry facts every musician needs to know :-
https://www.thebalancecareers.com/music-industry-facts-every-musician-needs-to-know-2460726

Setting up a recording Session
https://www.izotope.com/en/blog/music-production/18-tips-for-running-a-great-recording-session.html

Part 2: Understand jobs roles in the music industry

- Performance and creative roles
- Management and Promotion roles
- Recording roles
- Media and other roles
- How and why workers are employed in the industry
- Getting a break and starting out
- Importance of individual roles and responsibilities
- How individual roles and responsibilities interrelate
- How the industry relies on entrepreneurs, the self-employed and small enterprises
- How to get paid

Maintaining your Mental Wellbeing

Key Concepts:

Why is the mental wellbeing of young people important?

What happens to the teenage brain during puberty?

How can you assess your own mental wellbeing?

What does Anxiety feel like?

How to understand overwhelming stress.

How tiredness affects mental wellbeing

What simple techniques can help maintain your mental wellbeing?

Talking therapies and mindfulness

Notes:
Online support for young people needing help with how they feel

Young Minds:
https://youngminds.org.uk/
If you need urgent help text YM to 85258 for free 24/7 support

Kooth:
https://www.kooth.com/
Childline:
https://www.childline.org.uk/
0800 1111

Mobile apps to help deal with anxiety:
7 Cups
Breathe
Headspace

Key Terms:

Mental wellbeing– the state of feeling emotionally content and thinking in helpful and positive ways.

Mental illnesses – these are health conditions that cause serious changes in someone's thinking and/or their behaviour and that prevents them from functioning normally. This can be short term or long term and is very common.

Stress – a state of strain or tension that can either affect someone's body, or the way they are thinking, or both.

Stress Bucket - a visual way of representing how a number of stressful events or situations can overwhelm someone.

Anxiety – when someone is experiencing extreme worry or fear and it affects them physically and the way they are thinking.

Relaxation techniques – ways to help to calm your mind and body. These can include simple, but deliberate ways of slowing down your breathing using a counting system.

Mindfulness – a series of techniques that teach you how to focus on your thoughts and bodily sensations without judging them as good or bad. This helps to relax the mind and body.

CAMHS – Child and Adolescent Mental Health Services.

Kit Needed

- Short or long sleeved PE top and black Eggbuckland shorts, Skort or leggings – white trainers

Equipment

- Netball court, netball posts, bibs (with positions), netballs size 5 and cones
- Badminton – posts, bases, nets, rackets, shuttles and cones

Key components

- **Netball and Badminton –** main rules, regulations, laws and scoring system.
- Application of rules
- Roles and responsibilities of officials
- Technical and tactical demands – Continuous, discrete and serial skills
- Observation check lists
- Review of performance – strengths SWOT analysis and improvements

Key words

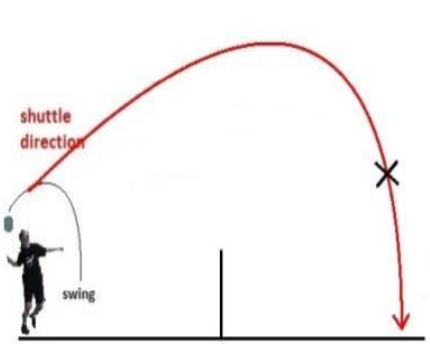
Netball
Foot fault, marking and defending, held ball, passing, contact and contest, obstruction, offside, free pass, penalty pass, toss up, injuries

Badminton
Service rules, singles or doubles, court markings Equipment, net, posts, time, faults, lets, injuries

BTEC Unit 2 Practical Sport

Netball
Chest pass
Bounce pass
Shoulder pass
Interception
Marking and defending with/without the ball

Badminton
Backhand/Forehand
Serving
Drop shot
Overhead clear
Smash shot
Shuttle racket

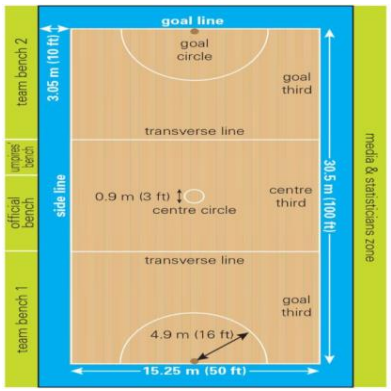


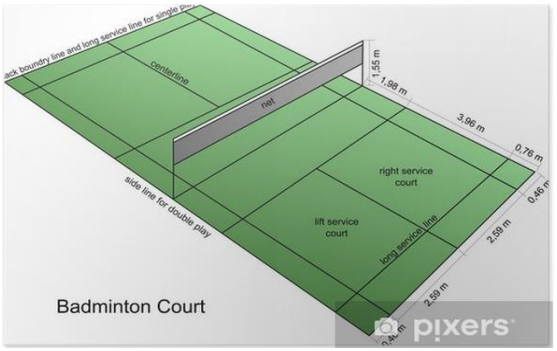
Assessment criteria Pass/Merit/ Distinction

2A.P1 - Describe the rules, regulations and scoring system for netball and badminton.
2A.P2 - Apply the rules in netball and badminton in four specific situations.
2A.P3 - Describe the roles and responsibilities of officials in netball and badminton.
2A.M1 - Explain the roles and responsibilities of officials and the application of the rules, regs and scoring.
2A.D1 - compare and contrast the roles and responsibilities of officials in netball and badminton.

2B.P4 - Describe the technical and tactical demands of badminton.
2B.P5 - use relevant skills, techniques and tactics effectively in conditioned practices.
2B.M2 - use relevant skills, techniques and tactics effectively in competitive situations .

2C.P6 - independently produce an observation checklist to review own performance.
2C.P7 - review own performance.
2C.M3 - explain strengths and areas of improvement.
2C.D2 - analyse strengths and areas of improvement justifying recommended activities.





Continuous skill – a skill that has no obvious beginning and end – running
Discrete skills – has a clear beginning and end. A skill that can be repeated. A serve at the start of a game.
A serial skills – a series of discrete skills that together produce an organised movement

Physical Education - Keywords

Badminton

Key Word	Definition
Shuttlecock	The object that is hit to play the game.
Court	The playing area
Racket	A bat with a round or oval frame strung with catgut, nylon, etc., used especially in tennis, badminton, and squash
Serve	A type of shot that starts the game
Overhead Clear	A type of shot that is aimed to the back of the court
Smash	A type of shot that aims to win a point
Backhand	A shot that is led by the back of the hand
Forehand	A shot that is led by the palm of the hand.
Baseline	Back boundary line at each end of the court, that runs parallel to the net.
Tramlines	The two parallel side lines and the two backlines are called tramlines
Rally	This occurs when the players hit the shuttlecock back and forth several times before one side scores a point

Netball

Key Word	Definition
Court	The playing area
Umpire	Two umpires control the game
Obstruction	A player attempting to intercept or defend the ball must be at least 3ft (0.9m) away from the player with the ball. Measured from the landing foot of the player in possession of the ball.
Contact	Any action that results in players touching or bumping into each other
Centre pass	The first pass used to started the game and restart after every goal that is scored
Offside	When a player makes contact with a part of the court which is not included in the players own playing area
The 'D' or shooting circle	The marked circle which the shooters must land in before attempting to make a goal
Centre circle	The small circle in the center of the netball court
Feed the ball	Any pass made to the shooters within the shooting circle
Footwork	This is the rule which limits the movement of the player's feet after catching the ball
Landing foot	The first foot to be grounded after catching the ball. You can pivot on this foot.

Notes

Psychology Year 11 – K0
Language, thought and communication

What is communication?
The transmission of thoughts, ideas and information between one or more people using a variety of methods both verbal and non verbal.
What is thought? Ideas we process in our minds.

This unit contains;
- Relationship between language and thought
- Human vs animal
- Key study: von Frisch
- Non-verbal communication
- Key study: Yuki

Von Frisch (1950)
Aim: How do bees communicate food source to each other
Design: Field experiment in a real life environment
Method: Glasses of sugar water placed at various locations. After the bees had visited a glass they were marked with coloured spots. Their movements were observed in a glass hive.

Von Frisch (1950)
Results: If the food sources was 100 m or less then they did a round dance, right then left. If it was more they did a waggledance. The number of turns relates to distance.
Conclusion: Bees communicate using a variety of different movements.

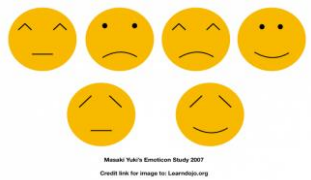
Yuki 2007
Aim: to investigate culture and facial expression
Design: a standardised questionnaire with a 1-9 rating scale
Participants: American and Japanese students
Method: 6 emoticons used and asked if they were happy, neutral or sad

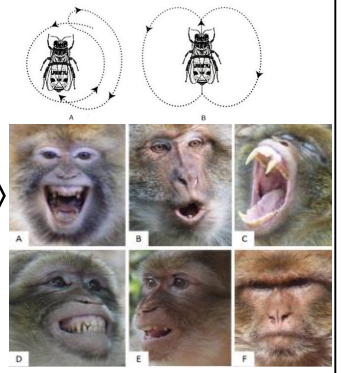
Yuki 2007
Results: Japanese gave high ratings to happy eyes but Americans judged mouths.
Conclusion: **Cultures have norms of expression. In a culture like Japan where emotions are controlled eyes are harder to lie with. In America expression of emotion is more open and so they are not looking for the same**

Functions of eye contact:
Flow, turn taking, emotion (attraction when pupil dilates), liking.

Language, thought and communication

https://learndojo.org/aqa/gcse-psychology/language-thought-communication/





Piaget said language depends on thought!

Language is developed in 4 stages
1. Sensorimotor= discovering sounds and copying
2. Preoperational= voicing internal thoughts
3. Concrete operational=talking about real things
4. Formal operational=abstracts and theories

Evaluation (A03)
☹ He did his observations alone so no interoberserver reliability
☹ He used his own children so possible bias
☺ Natural behaviour seen because the children would not have known they were being observed...no demand characteristics
☹ Sample very small so not able to generalise

Humans
1. Show **design features** such as productivity (unlimited number of messages) and displacement (communicating things that are not present including planning and the future)
2. Koko (a female gorilla) has been taught sign language and has showed evidence of production.

Evaluation of human vs animals
1. Hard to work out which design features are innate, human and animal
2. Koko suggests she has learnt but might be imitating

Study of eye contact: Argyle 1968

Aim: to see how interrupting eye contact affects conversation
Method: Pairs were observed talking but one wore dark glasses in half the conversations
Result: When the glasses were worn there were more pauses and interruptions

Key words
Culture: groups with shared beliefs, language, customs and behaviour
Recall: bringing a memory back to the front of the mind...access
Recognition: identifying something or someone already known
Posture: positioning of the body-non verbal communication
Territory: an area defended against others
Eye Contact: 2 people in a conversation looking into each others eyes
Body language: non verbal communication based on how the body is positioned or used

Sapir Whorf hypothesis- our thoughts and behaviours are shaped by the language we speak.

Different cultures have different thinking as well as different language.

They studied native languages (Hopi tribe).

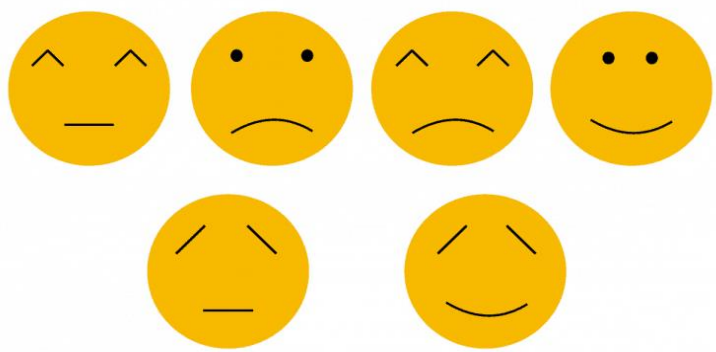
There are cultural and generational differences in understanding words e.g. cloud

Evaluation:
☹ They never met anyone from the Hopi tribe
☹ It is possible to translate books and not loose the meaning
☹ People who cannot speak can still think

Psychology – Language, thought and communications

Chapter 6

What is communication?
The transmission of thoughts, ideas and information between one or more people using a variety of methods both verbal and non verbal.
What is thought? Ideas we process in our minds.



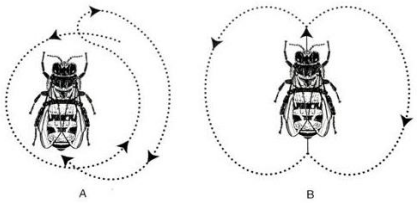
https://learndojo.org/aqa/gcse-psychology/language-thought-communication/

This unit contains;

- Relationship between language and thought
- Human vs animal
- Key study: von Frisch
- Non-verbal communication
- Key study: Yuki

Von Frisch (1950)

Aim: How do bees communicate food source to each other
Design: Field experiment in a real life environment
Method: Glasses of sugar water placed at various locations. After the bees had visited a glass they were marked with coloured spots. Their movements were observed in a glass hive.



Yuki 2007

Aim: to investigate culture and facial expression
Design: a standardised questionnaire with a 1-9 rating scale
Participants: American and Japanese students
Method: 6 emoticons used and asked if they were happy, neutral or sad

Von Frisch (1950)

Results: If the food sources was 100 m or less then they did a round dance, right then left. If it was more they did a waggledance. The number of turns relates to distance.
Conclusion: Bees communicate using a variety of different movements.

Yuki 2007

Results: Japanese gave high ratings to happy eyes but Americans judged mouths.
Conclusion: **Cultures have norms of expression. In a culture like Japan where emotions are controlled eyes are harder to lie with. In America expression of emotion is more open and so they are not looking for the same**

Paper 2: Social influence, language, neuropsychology and mental health

Key words (general)

Participant: a person recruited to be part of a study
Confederate: a person who takes part in a study. They seem to be a participant but are working for the researcher.
Hypothesis: a testable statement set by the researcher
Lab experiment: a carefully designed test in controlled laboratory conditions which will test the hypothesis
Observation: a different way to test the hypothesis by watching what people do
Variables: factors that the researcher manipulates to see the result
Extraneous variable: unexpected factors the researcher didn't choose to manipulate but might have an effect
Dependent variable (DV): the variable being tested by the hypothesis
Independent variable (IV): the variable being changed to test the DV
Sample: a small selection of people/things to be tested

Key words (specific)

Culture: groups with shared beliefs, language, customs and behaviour
Recall: bringing a memory back to the front of the mind...access
Recognition: identifying something or someone already known
Posture: positioning of the body-non verbal communication
Territory: an area defended against others
Eye Contact: 2 people in a conversation looking into each others eyes
Body language: non verbal communication based on how the body is positioned or used

Beliefs & teachings: Christianity
'Jesus'

The suffering of Christ

One of the most detailed stories we have from the whole of Jesus' life is the account of how he died. He was sentenced to death by Pontius Pilate, the Roman Governor, and his death was to be by crucifixion.
Even though Christians believe that Jesus was the son of God, it does not mean that he was somehow spared the pain and horror of his crucifixion.

There are several ways in which the crucifixion affects Christians today:

- It gives them **confidence** that if they accept Jesus' sacrifice, sin can no longer destroy their lives because God forgives those who faithfully ask for forgiveness
- They believe that suffering is a part of life, just as it was a part of Jesus' life and that, having experienced it, **God understands** what the sufferer is going through.

Incarnation

Christians believe Jesus is the Son of God. He is God in **human form**, or God **'incarnate'.**
"The word became flesh and made his dwelling among us"

- Jesus gave humanity an **example** to follow.
- Even though Jesus is God in human form, he valued everyone equally: ***"For you are all one in Christ".***
- God **sacrificed** himself on the cross to take away the sins of human beings: ***"For God so loved the world that He gave His only Son"***
- Jesus is both immanent and personal

Jesus' resurrection & ascension

Matthew 28:1-7; Mark 6:1; Luke 24:1-12; John 20:1-9

According to the accounts of Jesus' burial in the NT, he was placed in a tomb late Friday afternoon (Good Friday). How long he remained there is unclear, but we know that some of Jesus' female followers went to the tomb to anoint the body. Though details of the story vary between the 4 gospel accounts, they all make it clear that Jesus was nowhere to be found.
The belief that Jesus rose from the dead is known as the **resurrection** and is a key teaching in the Christian faith. For Christians, it is **significant evidence** of the divine nature of Jesus.

Only Mark and Luke's gospels finish off their story by telling their readers that, after meeting his disciples and asking them to carry on his good work, Jesus left them for the last time and **ascended,** body and soul, into Heaven.

Salvation

Salvation means **'to be saved from a bad situation'.** In Christianity, this bad situation is sin, and the consequences of sin.
Sin has separated humans from God, and salvation enables humans to get close to God again.
Christians believe that Jesus' death makes up for the **original sin** committed by Adam & Eve and so can bring people back to god.
Jesus knew his death was **necessary** to restore the relationship between god and the believers and make the opportunity for salvation available to all people.
Jesus (as the Son of God) could have easily avoided being crucified. His crucifixion was the result of human evil against an innocent man. It needed to happen, in order to **atone** for the sins of humanity.

"Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith"

Parables

A story used to teach a lesson or a moral

The Good Samaritan
"Love your neighbour"

The sheep & the goats
"Whatever you did for the least of these brothers of mine, you did for me"

Miracles

An act which seems to break the laws of nature

Calming the storm
This is a miracle over **NATURE**

Water into wine
This was Jesus' **first** miracle

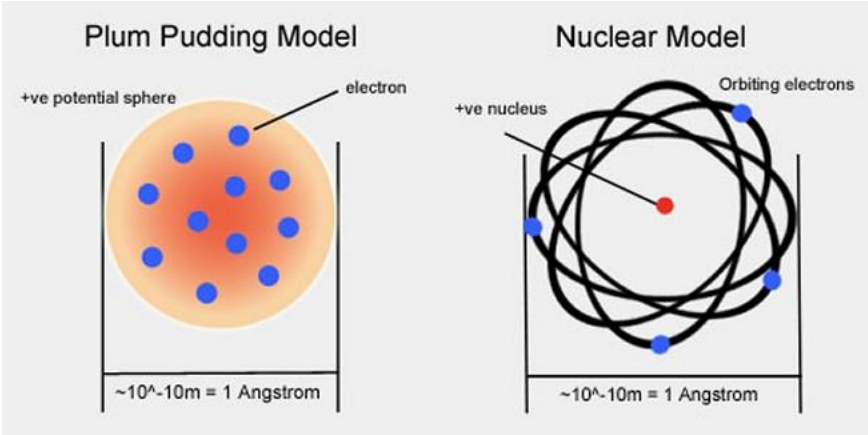
Healing a paralysed man
This is a **HEALING** miracle

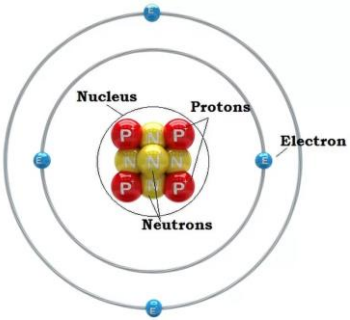
Science - Atomic Structure and the Periodic Table

Keywords

Atom	A particle with no electric charge made up of a nucleus containing protons and neutrons and surrounded by electrons.
Proton	A positively charged particle found in the nucleus of an atom.
Neutron	A neutral particle found in the nucleus of an atom.
Electron	Negatively charged particles found on energy levels (shells) surrounding the nucleus inside atoms.
Nucleus	Central part of an atom containing protons and neutrons.
Energy level (shell)	The region an electron occupies surrounding the nucleus inside an atom.
Atomic number	Number of protons in an atom.
Mass number	Number of protons plus neutrons in an atom.
Isotope	Atoms with the same number of protons but a different number of neutrons.
Relative atomic mass	The average mass of atoms of an element taking into account the mass and amount of each isotope it contains. RAM = Total mass of atoms / total number of atoms
Electronic structure	The arrangement of electrons in the energy levels of an atom.
Ion	An electrically charged particle containing different numbers of protons and electrons.
Group	The name given to each column in the periodic table.
Element	A substance containing only one type of atom.
Compound	A substance made from different elements chemically bonded together.
Period	The name given to a row in the periodic table.
Alkali metals	The elements in Group 1 of the periodic table.
Noble gases	The elements in Group 0 of the periodic table.

Halogens	The elements in Group 7 of the periodic table.
Diatomic molecule	A molecule containing 2 atoms.
Halides	Compounds made from Group 7 elements.
Mixture	More than one substance that are not chemically bonded.
Solvent	The liquid that a solute dissolves in.
Solution	A solute dissolved in a solvent.
Soluble	A substance that will dissolve.
Insoluble	A substance that will not dissolve.
Solute	The solid that dissolves in a solvent.





Atomic Mass = # of Protons + # of Neutrons

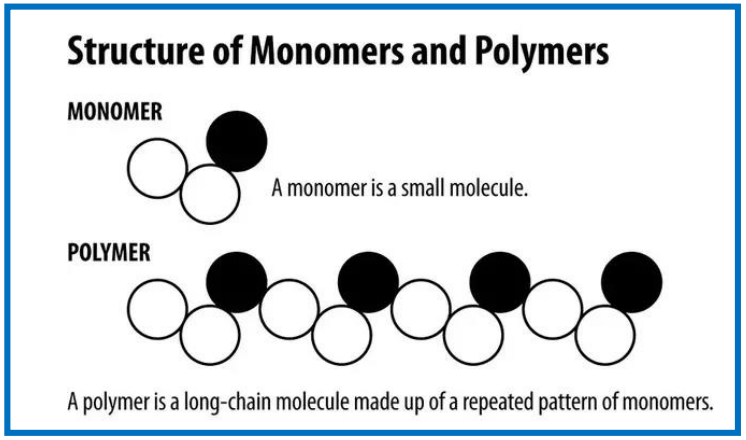
$^{4}_{2}He$

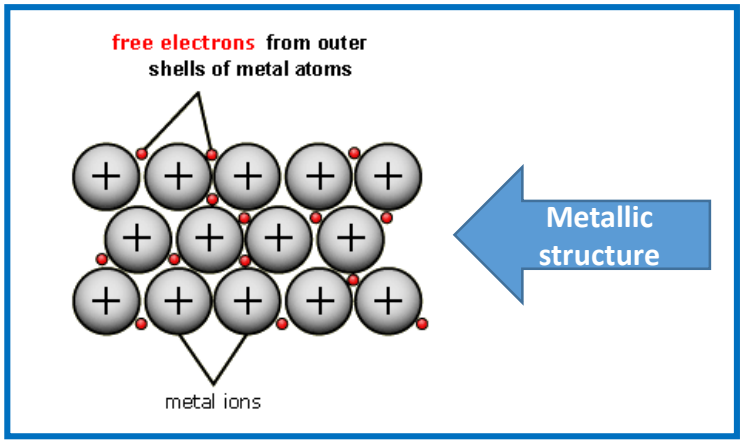
Atomic Number = # of Protons

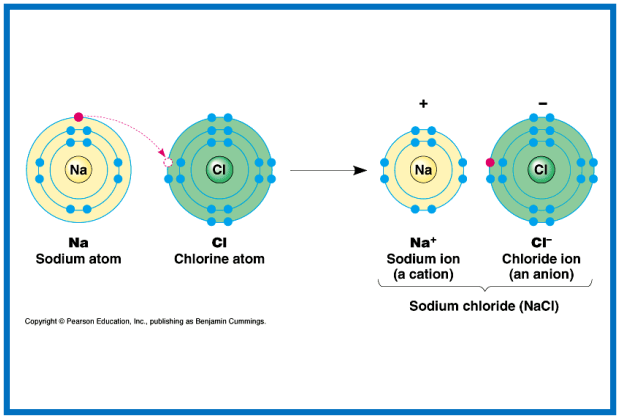
Science - Bonding, structures and the properties of matter

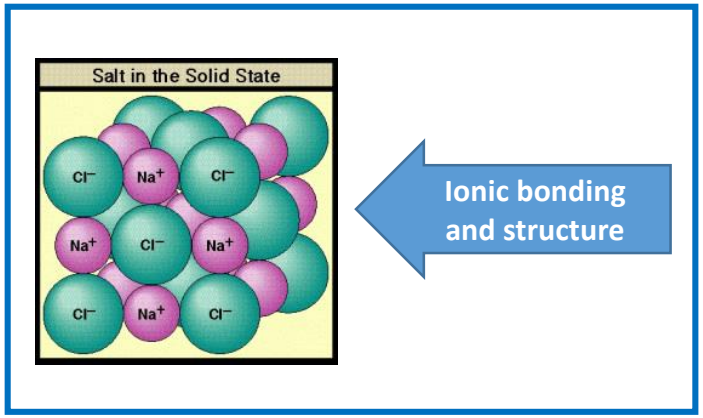
Keywords

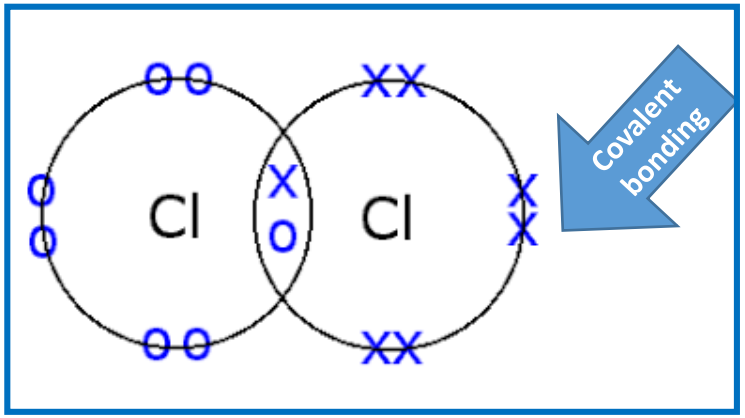
Giant Lattice	Ionic substances are made up of a giant lattice of positive and negative ions in a regular structure.
Ionic bonding	The electrostatic attraction between positive and negative ions
Molecule	Particle made from atoms joined together by covalent bonds
Covalent bond	Two shared electrons joining atoms together
Intermolecular forces	Weak forces between molecules
Polymer	Long chain molecule made from joining lots of small molecules together by covalent bonds
Monomer	The building block (molecule) of a polymer
Delocalised	Free to move around
Metallic bonding	The attraction between the nucleus of metal atoms and delocalized electrons
Malleable	Can be hammered into shape
Alloy	A mixture of a metal with small amounts of other elements, usually other metals
States of matter	These are solid, liquid and gas
Fullerenes	Family of carbon molecules each with carbon atoms linked in rings to form a hollow sphere or tube
Catalyst	Substance that speeds up a chemical reaction but is not used up in it







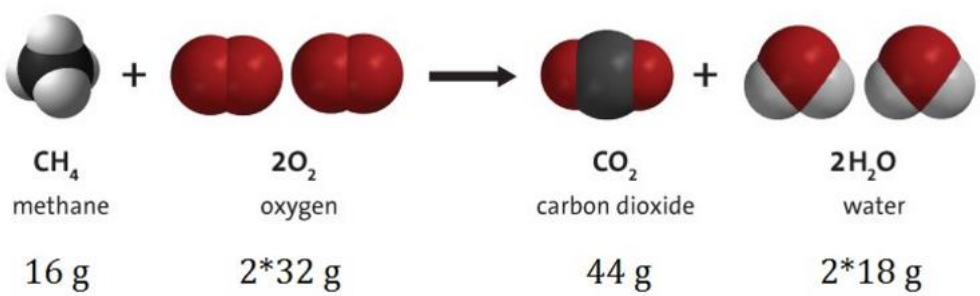


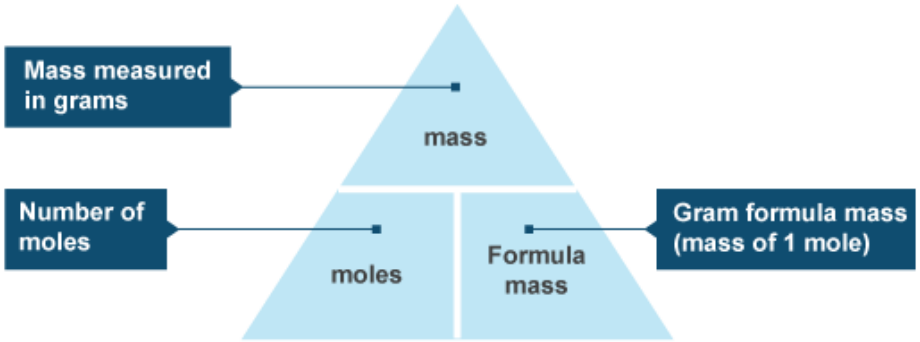


Science – Quantitative Chemistry

Keywords

Relative atomic mass	The average mass of atoms of an element, taking into account the mass and the amount of each isotope it contains.
Relative formula mass	The sum of the relative atomic masses of all the atoms in the formula.
Mole	Measurement of the amount of a substance.
Avogadro constant	The number of atoms, molecules or ions in one mole of a given substance (6.02×10^{23}).
Thermal decomposition	Reaction where high temperature causes a substance to break down into simpler substances.
Excess	When the amount of a reactant is greater than the mount that can react.
Limiting reactant	The reactant in a reaction that determines the amount of products formed. Any other reagents are all in excess and will not react.

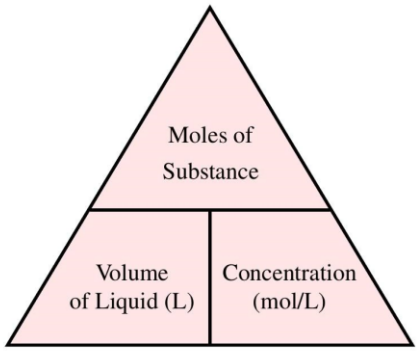


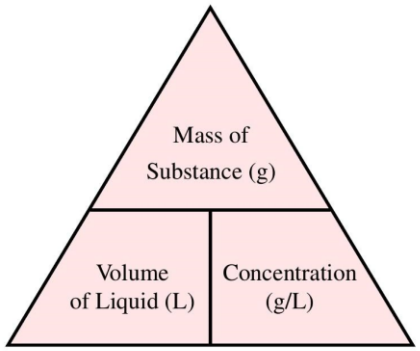


carbon	+	oxygen	→	carbon dioxide
C	**+**	**O_2**	**→**	**CO_2**
12	+	2 x 16	→	12+(2 x 16)
12g		32g		44g

So we need 32g of oxygen to react with 12g of carbon and 44g of carbon dioxide is formed in the reaction.

revisionworld

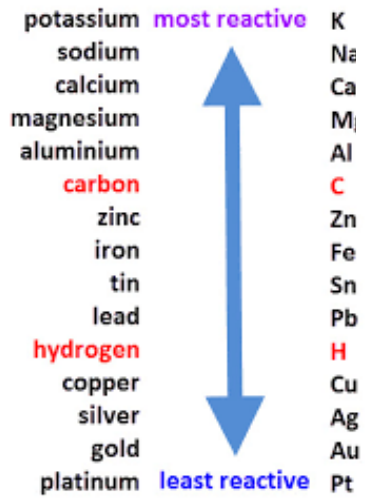


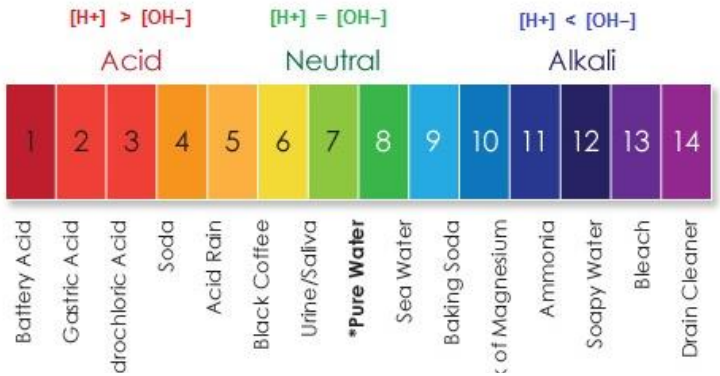


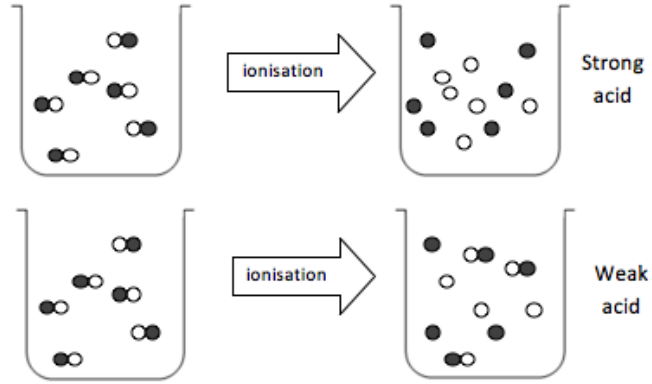
Science – Chemical Changes (1 of 2)

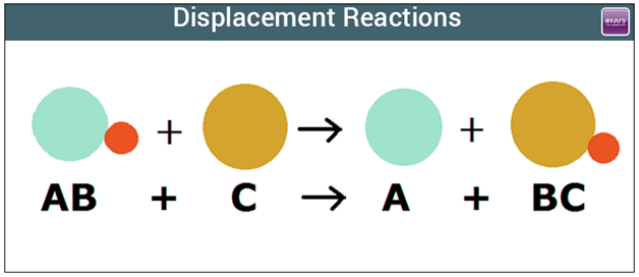
Keywords

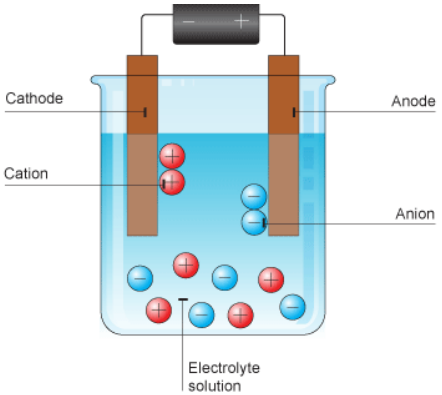
Reactivity series	An arrangement of metals in order of reactivity.
Displacement reaction	Reaction where a more reactive element takes the place of a less reactive element in a compound.
Oxidation	A reaction in which a substance loses electrons (gains oxygen).
Reduction	Reaction in which a substance gains electrons (loses oxygen).
Ore	A rock from which a metal can be extracted for profit.
Acid	Solution with a pH less than 7; produces H^+ ions in water.
Alkali	Solution with a pH more than 7; produces OH^- ions in water.
Aqueous	Dissolved in water.
Strong acid	Acid in which all the molecules break into ions in water.
Weak acid	Acid in which only a small fraction of the molecules break into ions in water.
Dilute	A solution in which there is a small amount of solute dissolved.
Concentrated	A solution in which there is a lot of solute dissolved.
Neutralisation	A reaction that uses up some or all of the H^+ ions from an acid .
Electrolysis	Decomposition of ionic compounds using electricity.
Electrolyte	A liquid that conducts electricity.
Discharge	Gain or lose electrons to become electrically neutral.
Inert electrodes	Electrodes that allow electrolysis to take place but do not react themselves.











Acid + Alkali -> salt + water
Metal + acid -> salt + hydrogen
Metal oxide + acid -> salt + water
Metal carbonate + acid -> salt + water + carbon dioxide

Science – Chemical Changes (2 of 2)

Keywords	
Diatomic molecule	A molecule containing two atoms.
Spectator ions	Ions that do not take part in a reaction and do not appear in the ionic equation for the reaction.
Ionic equation	Balanced equation for reaction that omits any spectator ions.

Common Reactions

Element + oxygen -> oxide of element
Eg Calcium + oxygen -> calcium oxide

Compound + oxygen -> oxides of each element in compound
Eg Methane + oxygen -> carbon dioxide + water

Water + metal -> metal hydroxide + hydrogen
(for metals that react with water)
Eg water + sodium -> sodium hydroxide + hydrogen

Acid + metal -> salt + hydrogen
Eg Hydrochloric acid + magnesium -> magnesium chloride + hydrogen

Acid + metal oxide -> salt + water
Eg Sulphuric acid + copper oxide -> copper sulphide + water

Acid + metal hydroxide -> salt + water
Eg nitric acid + potassium hydroxide -> potassium nitrate + water

Acid + metal carbonate -> salt + water + carbon dioxide
Eg hydrochloric acid + calcium carbonate -> calcium chloride + water + carbon dioxide

Acid + ammonia -> ammonium salt
Eg nitric acid + ammonia -> ammonium nitrate

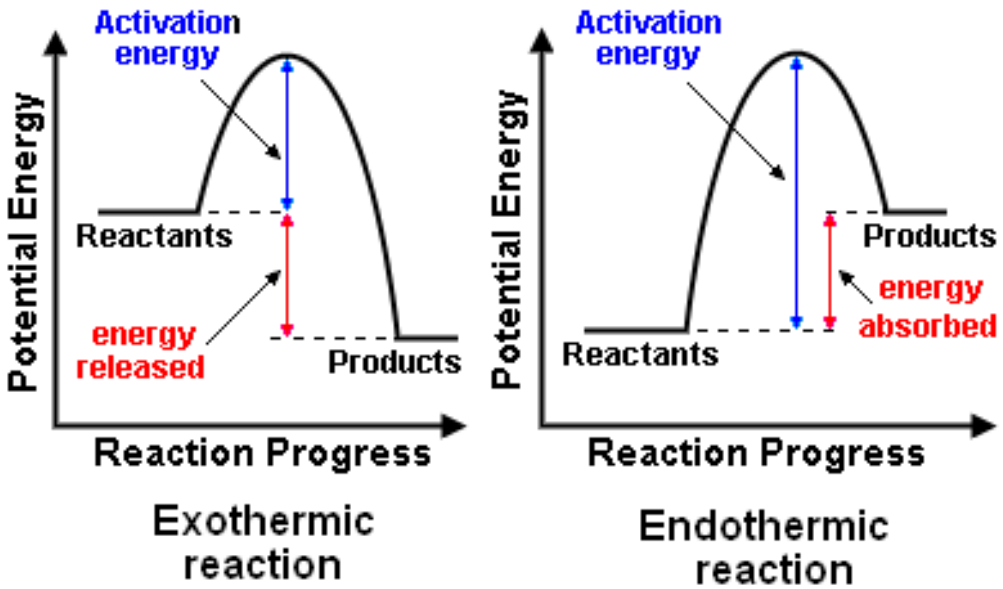
Positive ions

Name	Formula
Hydrogen	H^+
Sodium	Na^+
Silver	Ag^+
Potassium	K^+
Lithium	Li^+
Ammonium	NH_4^+
Barium	Ba^{2+}
Calcium	Ca^{2+}
Copper(II)	Cu^{2+}
Magnesium	Mg^{2+}
Zinc	Zn^{2+}
Lead	Pb^{2+}
Iron(II)	Fe^{2+}
Iron(III)	Fe^{3+}
Aluminium	Al^{3+}

Negative ions

Name	Formula
Chloride	Cl^-
Bromide	Br^-
Fluoride	F^-
Iodide	I^-
Hydroxide	OH^-
Nitrate	NO_3^-
Oxide	O^{2-}
Sulfide	S^{2-}
Sulfate	SO_4^{2-}
Carbonate	CO_3^{2-}

Keywords	
Exothermic reaction	Reaction where thermal energy is transferred from the chemicals to the surroundings and so the temperature increases
Endothermic reaction	Reaction where thermal energy is transferred from the surroundings to the chemicals and so the temperature decreases
Activation energy	The minimum energy particles must have to react



My Diary :

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	22/02/2021	23/02/2021	24/02/2021	25/02/2021	26/02/2021	27/02/2021	28/02/2021
2	01/03/2021	02/03/2021	03/03/2021	04/03/2021	05/03/2021	06/03/2021	07/03/2021
3	15/03/2021	16/03/2021	17/03/2021	18/03/2021	19/03/2021	20/03/2021	21/03/2021
4	22/03/2021	23/03/2021	24/03/2021	25/03/2021	26/03/2021	27/03/2021	28/03/2021
5	29/03/2021	30/03/2021	31/03/2021	01/04/2021	02/04/2021	03/04/2021	04/04/2021
Easter Holiday							

My Homework

Week						
22/02						
01/03						
08/03						
15/03						
22/03						
29/03						
EASTER HOLIDAY						

Home Contact
