



ASH MANOR SCHOOL
Aspire & Achieve

Year 9 Summer Term Knowledge organiser

Name:

Tutor group:

Tutor:

Tutor room:

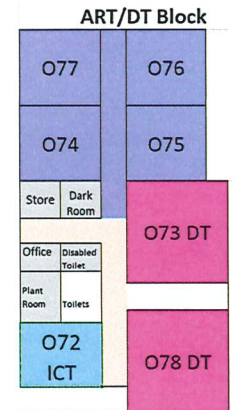
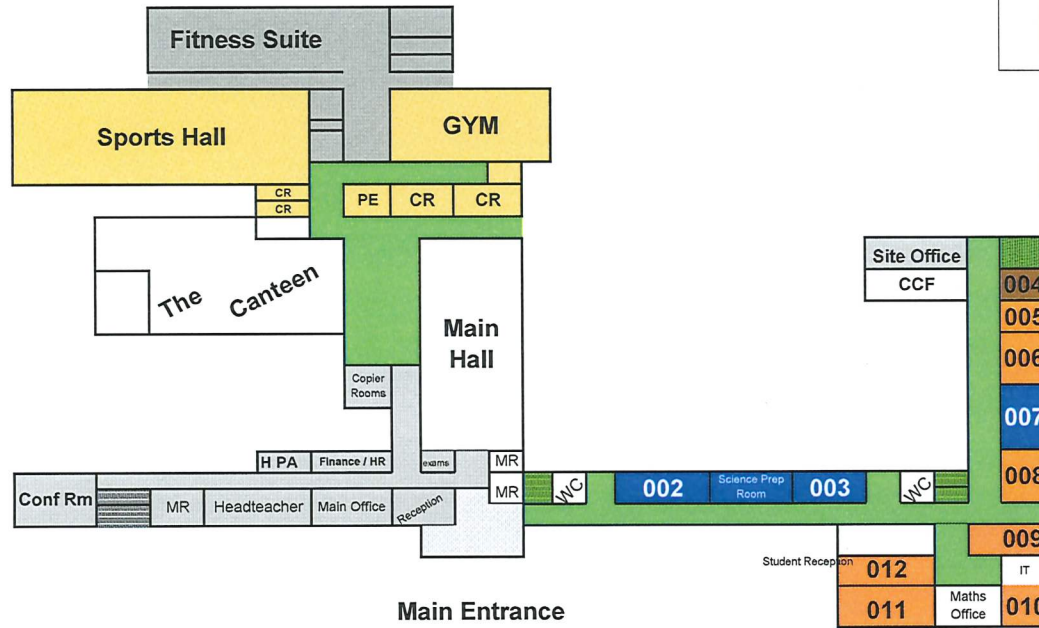
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Key School information

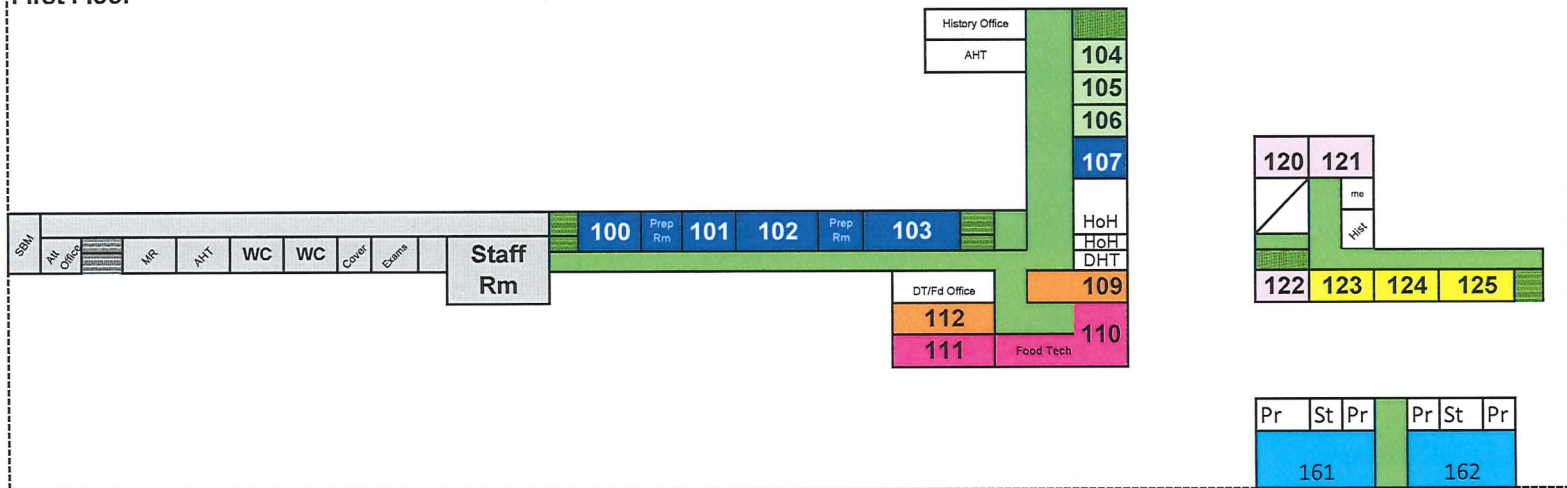
Times of the school day	
8.00am – 8.30am	Breakfast in canteen
8.35am	Pre-lesson 1 bell
8.40am-9.30am	Lesson 1
9.30am-10.20am	Lesson 2
10.20am-10.40am	Morning break
10.40am-11.30am	Lesson 3
11.30am-12.20pm	Lesson 4
12.20pm-1.00pm	Lunch
1.00pm-1.20pm	Tutor time / Assembly
1.20pm-2.10pm	Lesson 5
2.10pm-3.00pm	Lesson 6
3.00pm-4.00pm	Extended learning and extra-curricular clubs

Term dates	
Autumn term	Y7: 04/09/23 to 15/12/23 Y8-11: 05/09/23 to 15/12/23
Half term	23/10/23 to 27/10/23
Spring term	03/01/24 to 28/03/24
Half term	12/02/24 to 16/02/24
Summer term	15/04/24 to 19/07/24
Half term	27/05/24 to 31/05/24

Important IT details	
Username	
Password reminder	



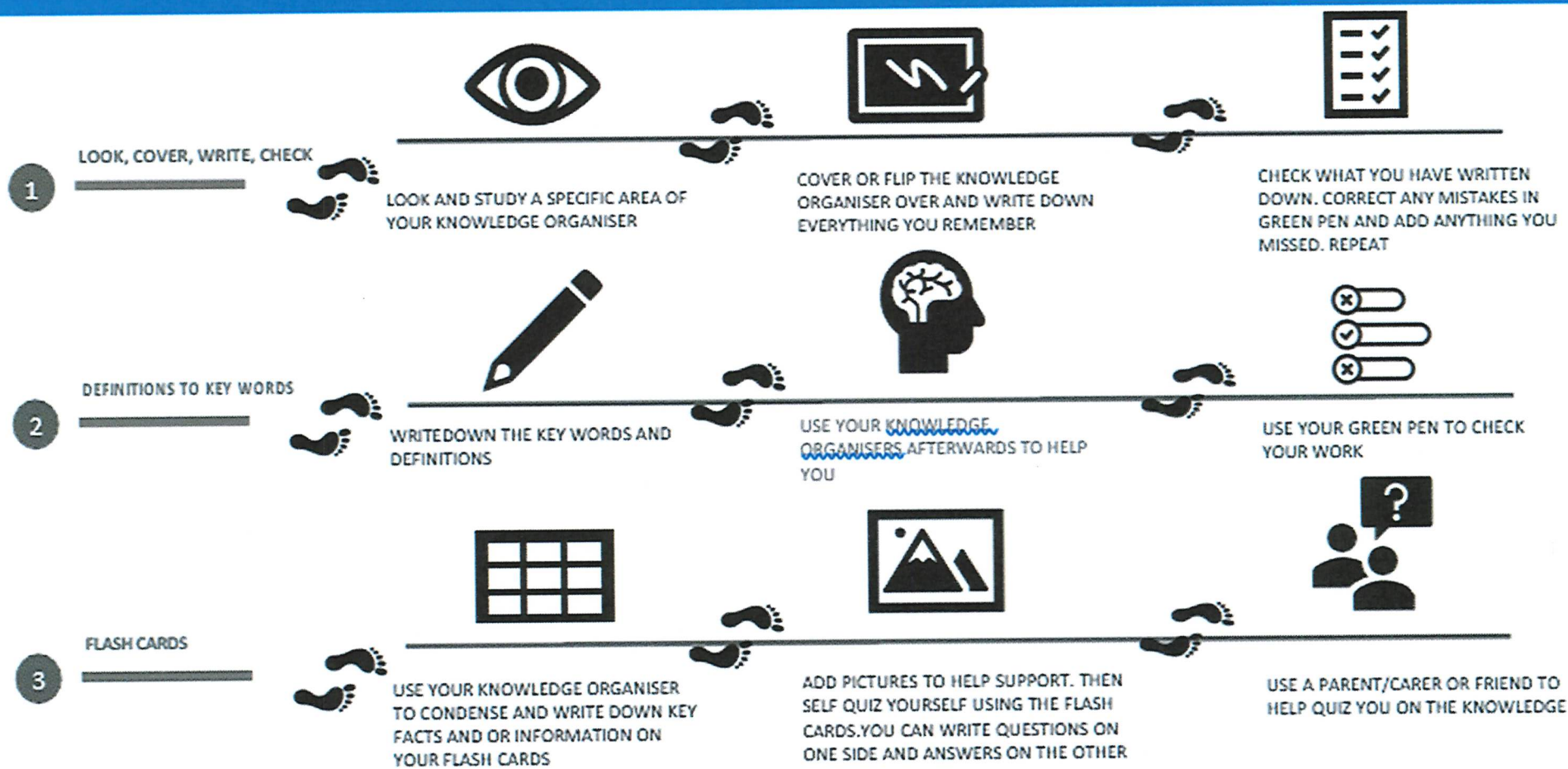
First Floor



- Science
- Maths
- English
- Art
- Computing Studies
- MFL
- History / Classics
- Geography
- Performing Arts
- PE
- SEND
- RE
- DT/Food
- Business studies
- non student areas

How to use Knowledge Organisers – a step by step guide

Knowledge organisers contain critical knowledge you must know. This will help you recap, revisit and revise what you have learnt in lessons in order to remember this knowledge for the long term. You must have this for every lesson – it is part of your equipment.



KNOWLEDGE ORGANISERS ARE ALSO AVAILABLE ON THE SCHOOL'S WEBSITE:
<https://www.ashmanorschool.com/>

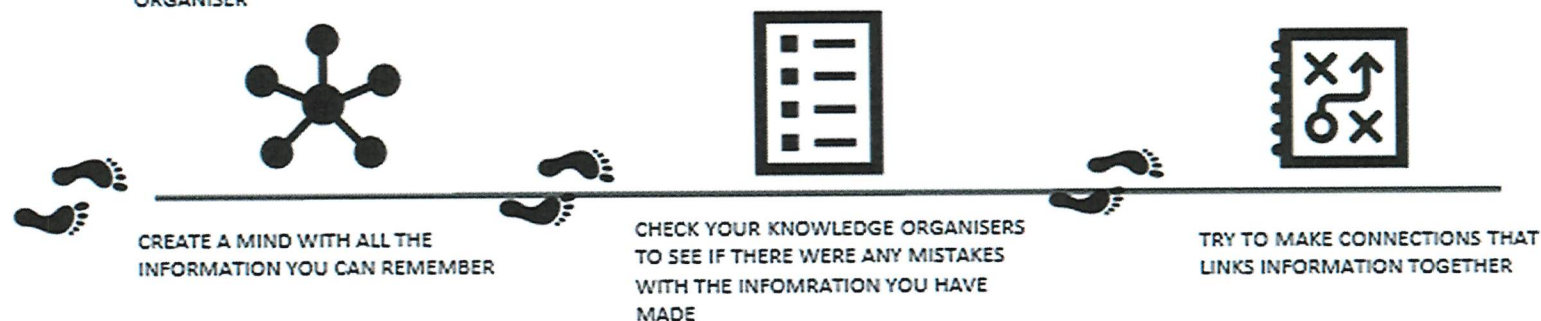
How to use Knowledge Organisers – a step by step guide

Knowledge organisers contain critical knowledge you must know. This will help you recap, revisit and revise what you have learnt in lessons in order to remember this knowledge for the long term. You must have this for every lesson – it is part of your equipment.

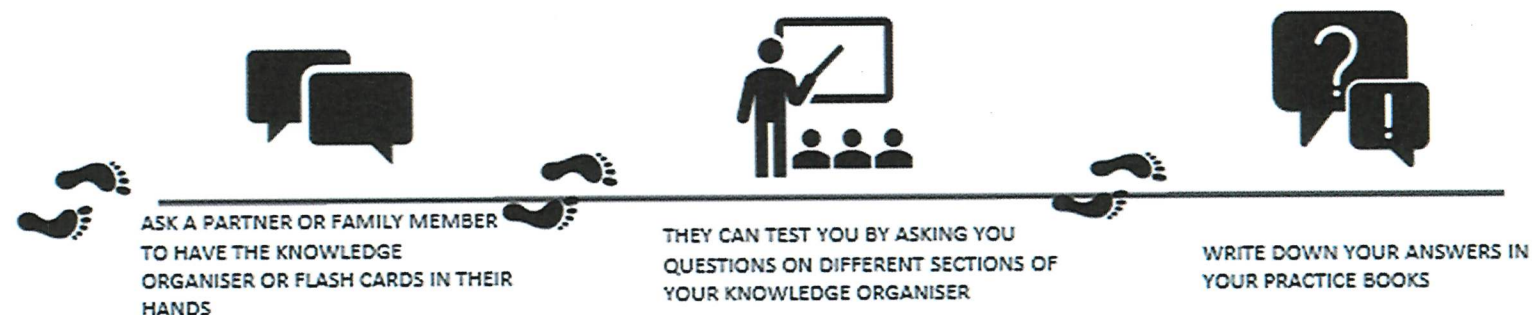
4 SELF QUIZZING



5 MIND MAPS



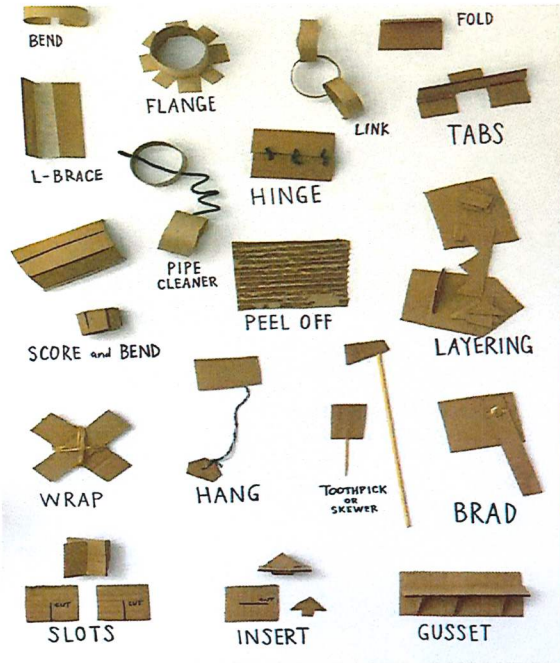
6 PAIRED RETRIEVAL



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ART

Construction techniques



Key words:
 Printing
 Line
 Texture
 Form
 Mark Making
 Roller
 Ink
 Lino Cutter

Etching
 Registering Prints
 Tonal Range
 Structure
 Shape
 Blending
 Negative Space
 Construction

Lino printing how to:



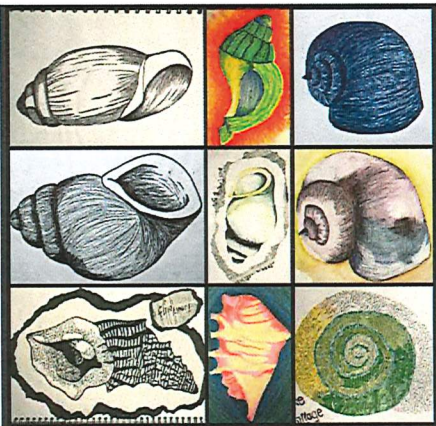
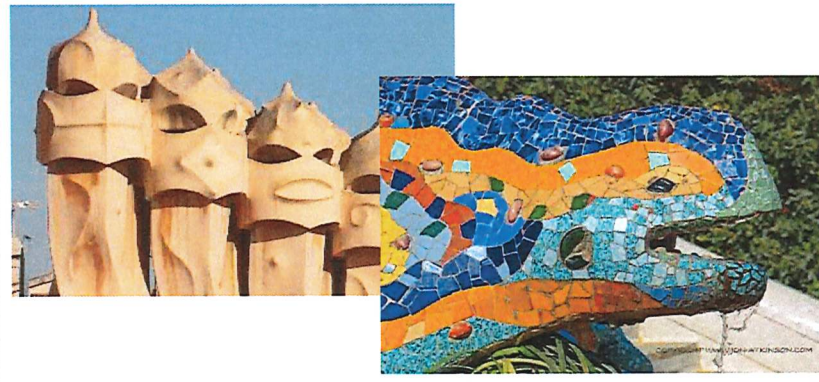
Lino cutter



Lino print

Draw your design on paper and then on the lino. Cut your lino using a lino cut to remove areas you do not want printed. Ink up you lino with a roller and print on to paper.

Gaudi, Spanish Architect 1852-1926
 Inspired by natural forms



Mark Making
 &
 Media Experiments

Artist Research, writing an opinion:

- Who is the artist?
- Where are they from?
- When were they making their artwork? Are they contemporary?
- Are they linked to a particular art movement? Are they linked to other artists?
- What materials do they use?
- Describe their work in your own words; what do you see? What mood does the work give you and why?
- How does this artists work fit into your project so far?

YEAR 9 SUMMER 2 – PROJECT MANAGEMENT

1.1. PROJECT LIFE CYCLE

Advantages:	Disadvantages:
<ul style="list-style-type: none"> Provides a structured approach There are defined inputs and outputs for each phase The roles and responsibilities of each project team member are clearly defined Resources can be allocated in advance The project manager can monitor the progress of the project The iterative/phase reviews can be carried out to ensure that the project is meeting the success criteria, objectives and constraints 	<ul style="list-style-type: none"> If the initiation phase has not been completed accurately or completely then later stages will be impacted Project team may be forced to work within tight deadlines which can have an impact on the quality of the output Constant management of the process with strict surveillance is required

1.2. INTERACTION AND ITERATION BETWEEN PHASES

INTERACTION:	How the phases link together	
ITERATION:	The repeating of a phase.	
Phase	Interaction with:	Iteration with:
Initiation	Planning	
Planning	Initiation Execution	Initiation
Execution	Planning Evaluation	Planning
Evaluation	Execution	Execution



1.3. INPUTS AND OUTPUTS OF EACH PHASE

Phase	Input	Output
Initiation	<ul style="list-style-type: none"> User requirements User constraints 	<ul style="list-style-type: none"> Feasibility report Legislative implications Phase review
Planning	<ul style="list-style-type: none"> Feasibility report Legislative implications 	<ul style="list-style-type: none"> Project plan Test plan Constraints list Phase review
Execution	<ul style="list-style-type: none"> Project plan Test plan Constraints list 	<ul style="list-style-type: none"> Deliverable product Test results Phase review
Evaluation	<ul style="list-style-type: none"> Deliverable product Test results 	<ul style="list-style-type: none"> Release of deliverable product User documentation Final evaluation report

1.4. ADVANTAGES OF SETTING OBJECTIVES

- They help to identify and meet the client's requirements
- They are used to measure the success of the final deliverable product
- Nothing will be left out so the product can be used as soon as it is ready
- The product will be delivered within the agreed timescale.

1.4. INITIAL PROJECT CONSIDERATIONS

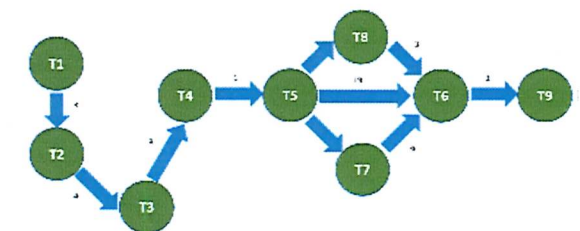
User Requirements	<ul style="list-style-type: none"> What the client expects from the final product The project manager refers to them to monitor the project
Success Criteria	<ul style="list-style-type: none"> Used to determine if the project is successfully completed Used in phase reviews Should be measurable, realistic and relevant Refer to user requirements Refer to constraints
Constraints/ Limitations	<ul style="list-style-type: none"> Time Resources – budget, hardware and software Regulations/Legislations Security/Risk Management Mitigation of risks
SMART GOALS:	DESCRIPTION:
Specific	Details of what the final deliverable product should look like / be able to do
Measureable	Able to look at progress towards the goals during phase reviews
Achievable	Completing the goals within the timeframe set by the client
Realistic	Goals which the team can work towards and complete
Time	Timescale of delivering the final product

1.5 PROJECT PLANNING	
GANTT CHART (FORMAL)	
Components	– Dates/Days along the top –Tasks down the left side – Blocks to represent the time allocated to each task – Milestones – Dependent tasks – Concurrent tasks
Advantages	– Can show estimated time schedule – Tasks are shown against a time schedule – Resources for each task can be shown
Disadvantages	– Task time is estimated – Task dependencies can be difficult to identify – Can be too simple for a complex project
PERT CHART (FORMAL)	
Components	– Nodes/sub-nodes – Time/duration lines – Task sequences – Dependent tasks – Concurrent tasks – Can show critical path
Advantages	– Can show slack time so resources can be reallocated – Enables timescales to be planned more precisely – Tasks can be scheduled as dependent or concurrent – Manages unpredictable activities
Disadvantages	– Can be confusing – Needs skill and knowledge to create – Can be too simple for a large or complex project
CRITICAL PATH (FORMAL)	
Components	– Nodes/sub-nodes – Time/duration lines – Task sequences – Dependent tasks – Concurrent tasks
Advantages	– Helps to control cost and time – Manages well defined activities – Suitable for non-research projects – Suitable for reasonable time estimates
Disadvantages	Not suitable for research and development projects – Needs skill and knowledge to create

VISUALISATION DIAGRAM (FORMAL)	
Components	– Multiple images/graphics – Size/ position of images/graphics – Position/ style of text – Fonts – Annotations – Colours/themes
Advantages	– Data can be quickly understood – Easy to spot emerging trends/patterns – Non-specialists can understand the data shown
Disadvantages	– Not appropriate for a large or complex project
FLOW CHART (INFORMAL)	
Components	– Start point – End point – Decisions – Processes – Connecting lines – Directing arrows
Advantages	– Useful for a small project with a small number of tasks and decisions – No specialist knowledge required to understand the flow chart
Disadvantages	– Does not show time allocated for each task – Tasks are shown sequentially so does not show concurrent tasks
MIND MAP (INFORMAL)	
Components	– Nodes/sub-nodes – Branches/ connecting lines – Key words – Colours – Images
Advantages	– Easy to add ideas/tasks at any time – Can provide focus on the tasks to be completed – Shows dependent tasks
Disadvantages	– No time schedule – Can be difficult for others to understand – Does not show concurrent tasks
TASK LIST (INFORMAL)	
Components	– Tasks/sub-tasks – Start date – End date – Duration – Resources
Advantages	– Can provide focus on the tasks to be completed – No tasks will be missed out
Disadvantages	– Should not be used for a large or complex project

1.5 SOFTWARE TO CREATE PROJECT PLANS	
SOFTWARE	PROJECT PLAN
Project Management Software	<ul style="list-style-type: none"> • Gantt chart • PERT Chart • Critical path
Spreadsheet	<ul style="list-style-type: none"> • Simple Gantt chart • Task list
Word Processor	<ul style="list-style-type: none"> • Task list • Mind map • Flow chart
Desktop Publishing	<ul style="list-style-type: none"> • Visualisation diagram • Mind map

ADVANTAGES
<ul style="list-style-type: none"> • Real-time changes can be made • Project plans can be share electronically • Project plans can include allocated resources • Reports can be generated
DISADVANTAGES
<ul style="list-style-type: none"> • Can be expensive • There is a possibility that a simple project can become very complicated • Can be time-consuming to set up a project • May need some knowledge, training or experience to use



YEAR 9 SUMMER 1 – ISSUES AND THE WIDER WORLD

Copyright: The legal protection on created content (such as books, computer programs or films).

Cracking: The act of gaining unauthorised access to a computer or piece of software.

e - waste: Waste created by disposal of electronic devices or created during manufacture.

Environmental: Issues relating to the impact on the natural world.

Ethics: Issues relating to good or bad, about whether an action is morally correct or not.

Legality: Issues related to whether something is against the law or not.

Patent: Legal protection for new inventions or concepts.

Piracy: The unauthorised use of someone else's intellectual property.

Artificial Intelligence:

Description: Replicating “human” intelligence in a machine or programming. Making a computer think, or appear to think.

Ethical Issues: Some people view AI as “playing God”, attempting to replicate life. AI is programmed in to some key ethical areas—such as military drones or self driving cars. How should a programmed car react when faced with a “trolley problem” style scenario, where its only options are to harm the people in the vehicle, or people outside the vehicle? Would using military drones dehumanise warfare? It is one thing to have human soldiers killing people in the name of their country, but what about a machine?

Legal Issues: What laws would govern the machines? If a machine was to commit a crime, would the programmer be held responsible? How would road laws be affected by AI cars?

Environmental Issues: How will self driving cars affect pollution? What waste will be produced making all of the new machines implementing artificial intelligence.

Wearable Technology:

Description: Refers to any form of technology that is worn on the body. Often this technology involves “smart” features, such as connecting and sharing data with computers.

Ethical Issues: Is it right to trust sensitive data such as location data to external companies? Some smart watches could track locations at all times. Some smartglasses or smartwatches contain cameras. This creates many ethical issues around privacy and recording others without permission. Virtual Reality headsets are a major innovation and major concern. Is it ethical to create lifelike, interactive environments that people could lose themselves in?

Legal Issues: Recording people without permission. Having more technology could mean more potential for cyber crime and hacking. Often security on secondary devices like fitness trackers are not as good as main devices.

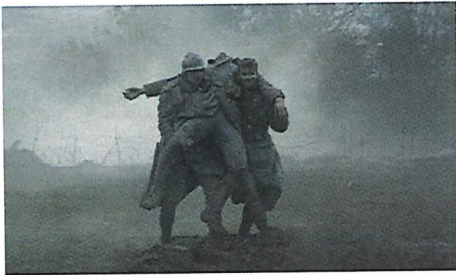
Environmental Issues: Potential for environment to suffer if virtual reality industries become common. By creating a new sector of technology, much more energy is being used to make and produce, along with more waste produced from redundant devices.



Dance: Choreographic Skills Knowledge Organiser



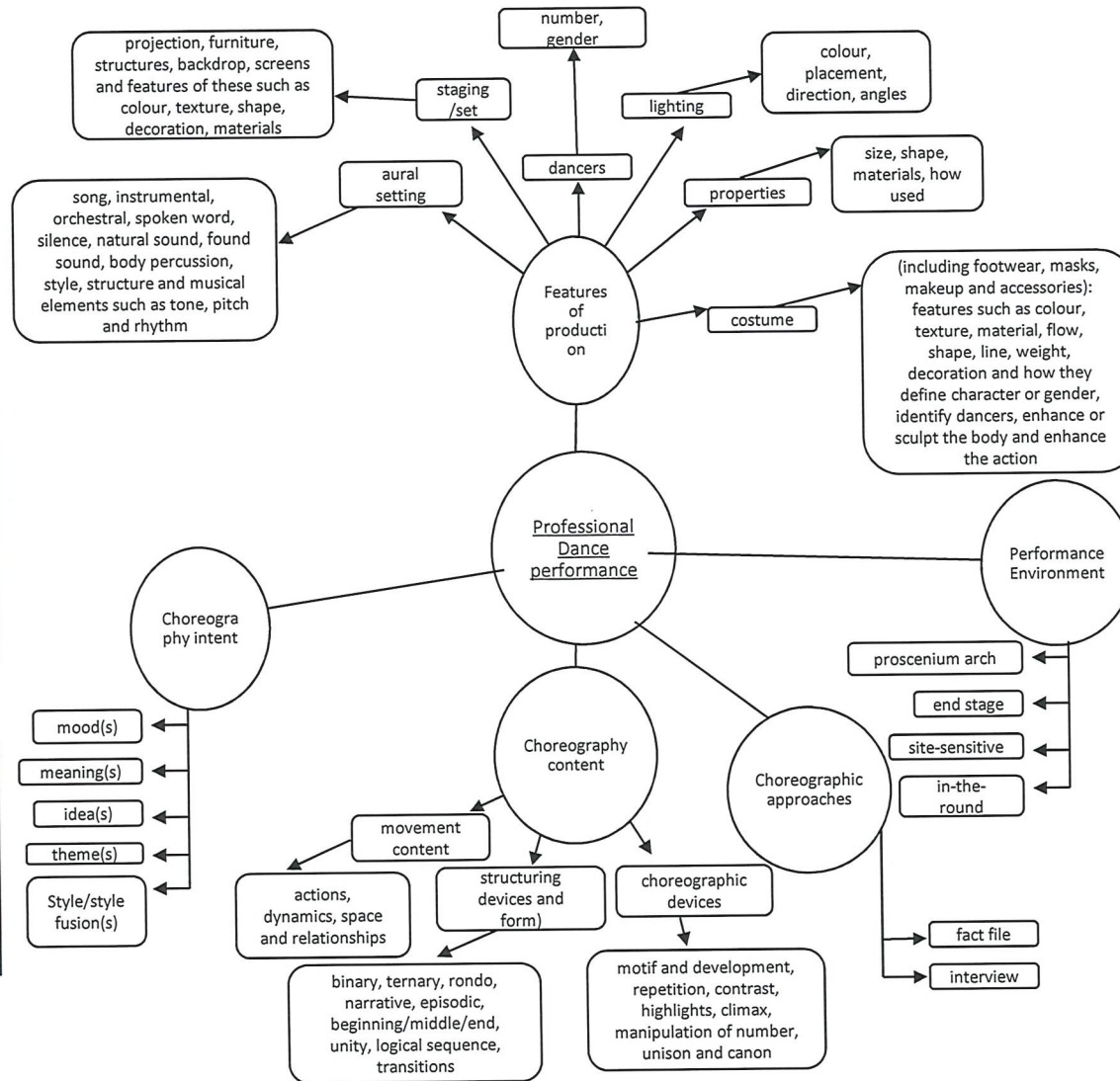
Matthew Bourne's Swan Lake



Young Men



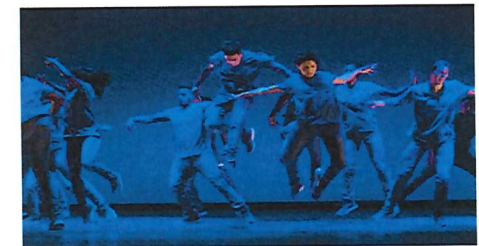
Message in a Bottle



A Linha Curva



Hush



Emancipation of Expressionism

Dance: Choreographic Skills Knowledge Organiser

Dance Term		Definition	MOTIF DEVELOPMENT	
MOTIF		A distinctive and recurring gesture or series of movements used to provide a theme or unifying idea.	ACTION DEVELOPMENTS <ul style="list-style-type: none"> • Add ACTION • Take ACTION • Repeat ACTION • Perform ACTIONS on the other side of the body • Perform ACTIONS with different body parts <p>Travel Turn Jump Gesture Stillness/Balance Stillness Floor work Transfer of weight</p>	SPACE DEVELOPMENTS <ul style="list-style-type: none"> • Change levels • Change pathways • Change direction • Change the size and shape of the movement • Change patterns of movement in the space • Change spatial design in space
PHRASE		The smallest unit of form containing a beginning, middle and an end and a high point.		
STIMULUS		The starting point of the choreographic process. Five main categories of stimuli: Auditory Visual Tactile Ideational/Theme Kinaesthetic/Movement based		
CHOREOGRAPHIC INTENTION		Is what you want to communicate/portray to the audience, how you want the audience to think/feel From your stimulus you will decide on a choreographic intention		
IMPROVISATION		The process of spontaneously creating movement		
IMPROVISATION/CREATIVE TASKS		Instructions to use or follow in order to create movement		
TRANSITION		How one movement, phrase or section of a dance progresses into the next; a linking movement or idea.		
MOTIF DEVELOPMENT		Ways in which a movement phrase can be varied and developed (using ASDR etc.)	DYNAMIC DEVELOPMENTS <ul style="list-style-type: none"> • Change dynamics • Add – Pause • Accent • Suspension • Vary the quality and timing <p>Fast/Slow Sudden/Sustained Acceleration/Deceleration Strong/Light Direct/Indirect Flowing/Abrupt</p>	RELATIONSHIP DEVELOPMENTS <ul style="list-style-type: none"> • Change positions/group formations • Change the size and pattern of the group formation • Mirroring • Action and Reaction • Contact • Unison • Canon
REPTITION		Repeating the same action or phrase again.		
CLIMAX		The most significant moment of the dance		
CHOREOGRAPHIC APPROACH		The way in which a choreographer makes the dance.		
CHANCE METHOD		A technique in which selected isolated movements are assigned sequence by such random methods		
WHOLE COMPOSITION		A piece of dance choreography made up of sections that are all joined by a theme/intention		

The Design Elements: A Quick Visual Checklist

Costume

Colour / Style / Fabric / Detailing / Condition

Garments / Shoes / Hair and Make-up / Accessories

Set Design

Shape / Texture / Material / Colour / Condition

Levels/Ramps/Steps/Rostra / Backdrop / Gauze / Cyclorama / Projections / Set Props

Lighting Design

Lighting / Colour / Intensity / Positioning

Digetic or Non-Digetic / Live or Pre-recorded

Sound

Music or Sound Effect / Volume / Fade Time / Duration

Digetic or Non-Digetic / Live or Pre-recorded



Naturalistic

Design presents 'real life'

Minimalistic

Key set props, costume items
indicate setting, era, character

Symbolic

The design represents a
theme or message

Expressionistic

The image of reality is
distorted to represent
feelings/emotions

The PURPOSE of Design Elements: Checklist

Communicate setting: era, status, time of day, location

Create or shift mood and atmosphere / focus / perspective

Emphasise character personality, state of mind, mood or relationships

Emphasise a theme or message of the play / Support the style of the play

Evaluating Performance

IDEA

Use this 'formula' whenever you evaluate a performance you have GIVEN or one you have EXPERIENCED

Identify the skill

Describe how you/they used it

Explain why focussing on...

Audience Impact

Vocal skills

- pitch
- pace/tempo
- pause
- power/volume
- tone
- Intonation
- emphasis

Spatial Skills

Use of space

- positioning *on stage*
- movement *across stage*
- levels
- proxemics

Physical Skills

- facial expression (face)
- gesture (arms/hands)
- posture(back/shoulders)
- stance (feet)
- eye contact/gaze (eyes)
- gait (walking style)

Evaluation Words

- Successful**
- Effective**
- Engaging**
- Powerful**

What did the audience
THINK?
FEEL?
EXPERIENCE?

VOICE				
Pitch	Pace	Volume	Tone	Accent
High, Low, Squeaky, Husky, Deep, Whiny, Croaky, Brittle, Grating, Gravelly.	Fast, Slow, Halting, Abrupt, Stuttering, Stilted, Hesitant, Controlled.	Soft, Quiet, Loud, Whisper, Shout.	Harsh, Gentle, Sarcastic, Forceful, Firm, Trusting, Derogatory, Cold, Angry, Persuasive, Authoritative, Proud, Assertive, Submissive, Sly, Abrasive, Quivery, Warm, Cheeky, Anxious, Seductive, Enthusiastic, Timid, Assured, Cautious, Fierce, Fond, Nervous, Joking, Sensitive.	Liverpudlian, Northern, West country, Cockney, Upper Class British, Scottish, Irish, Australian, American.

FACIAL EXPRESSIONS			
Emotion	Eyes	Eyebrows	Mouth
Happy, Cheerful, Upset, Hurt, Eager, Anxious, Untrusting, Fearful, Rejected, Smug, Defiant, Distressed, Thoughtful, Sly, Seductive, Distraught, Spiteful, Aggressive, Friendly .	Wide, Glaring, Squinting, Teary, Hopeful, Suspicious, Tightly Shut.	Raised, Lowered, Furrowed, Inquisitive, Frown.	Opened, Jaw-dropped, Closed, Smile, Quivering, Lip-biting, Pursed Lips, Clenched.

KEYWORDS
Actor, Atmosphere, Believable, Creativity, Effect, Impact, Interaction, Monologue, Non-Naturalistic, Performance, Physical, Status, Tension, Tone, Appropriate, Audience, Character, Dialogue, Emphasize,, Genre, Improvisation, Interpretation, Original, Piece, Rehearsal, Scene, Tone.

BODY LANGUAGE			
Posture	Gesture	Gait	Mannerisms
Upright, Slouched, Relaxed, Grotesque.	Clenched Fists, Pointing, Open handed, Closed, Strong, Measured, Hesitant, Energetic.	Rapid, Sluggish, Gentle, Smooth, Direct, Rushed, Purposeful, Hasty.	Twitchy, Decisive, Indecisive, Formal, Jerky, Secretive, Wild, Controlled, Dismissive, Aggressive, Nervous, Informal.

IMPACT		
Atmosphere	Audience Response	Believability
Tense, Dangerous, Intriguing, Awe, Amazement, Anticipation, Surprising, Shocking, Awareness of Society, Comic, Pathos.	Applause, Laughter, Sympathy, Anger, Disappointment, Anti-climax, Amusement, Admiration, Distaste, Contempt, Delight, Horror, Empathy, Irritation.	Natural, Believable, Realistic, Exaggerated,

English Language

Nineteenth-Century Literature

Summer 2

Context:

Industrial Revolution: Life was transformed by the Industrial Revolution. At first, it caused many problems but in the late 19th century life became more comfortable for ordinary people.

Darwin's Theory of Evolution (1859): Darwin proposed that species can change over time, that new species come from pre-existing species, and that all species share a common ancestor.

Characteristics of Victorian literature are likely similar because the artists were inspired both by the art that came before them and the events occurring during the time that they were working. So, something can seem Victorian, but not have been written in the Victorian era, or something written in the Victorian era might not actually seem Victorian. For example, Charlotte and Emily Bronte wrote *Jane Eyre* and *Wuthering Heights* in what would be considered the Victorian era, but those novels have much more qualities of the Romantic period.

Tier 2 Vocabulary:

Virtue - behaviour showing high moral standards:
Transpire - occur; happen:
Incredulous - unable to believe something:
Reconcile - restore friendly relations between
Antipathy - a deep feeling of dislike
Repression - subduing someone or something by force
Revolution - a forcible overthrow of a government or social order
Patriarchy - a system of society or government in which the father or eldest male is head of the family
Hierarchy - a system or organization in which people or groups are ranked one above the other according to status
Adversity - difficulties; misfortune:

Pre-Victorian (1794-1836) 1837 Early Victorian (1837-1843) Mid-Victorian (1843-1860) Late-Victorian (1843-1901)

 Jane Austen (16 December 1775 – 18 July 1817) English novelist known primarily for her six major novels, which interpret, critique and comment upon the British landed gentry at the end of the 18th century.	 Mary Shelley (30 August 1797- 1 February 1851) English novelist who wrote the Gothic novel Frankenstein; or, The Modern Prometheus (1818). 	 Charles Dickens (7 February 1812 - 9 June 1870) English writer and social critic. He created some of the world's best-known fictional characters and is regarded by many as the greatest novelist of the Victorian era.	 Charlotte Bronte (21 April 1816 – 31 March 1855) English novelist and poet. Her novels have become classics of English Literature. 	 Emily Bronte (30 July 1818 – 19 December 1848) English novelist and poet. Her novel 'Wuthering Heights' is well known. 	 William Thackeray (18 July 1811 – 24 December 1863) William Makepeace Thackeray was a British novelist, author and illustrator. He is known for his satirical works, particularly his 1848 novel Vanity Fair, a panoramic portrait of British society.	 Robert Louis Stevenson (13 November 1850 – 3 December 1894) Scottish novelist, essayist, poet and travel writer. He is best known for works such as Treasure Island (1881) and Strange Case of Dr Jekyll and Mr Hyde (1886). 	 Thomas Hardy (2 June 1840 – 11 January 1928) English novelist and poet. While initially, he gained fame as the author of novels such as Far from the Madding Crowd (1874) and Tess of the d'Urbervilles (1891).
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Summer English Language Year 9

Paragraphing:

Always start a new paragraph whenever you change:

- Time
- Place
- Topic
- Person

Remember **TiPToP**

Imaginative Writing: creating an engaging narrative

Sentence types:

- Declarative** - make statements (most likely to be fact or opinion statements)
- Exclamative** - express emotion (most likely to end with an exclamation mark)
- Imperative** - give commands (include imperative verbs)
- Interrogative** - ask questions (end with a question mark)

Punctuation

- . **Full stop** – ends a sentence
- , **comma** – separates ideas
- : **Colon** – introduces a list
- ; **semi-colon** – separates clauses
- ! **Exclamation mark** – adds emphasis
- ? **Question mark** - interrogative
- “ **Speech marks** – indicates speech
- **Hyphen** – shows connection
- ... **Ellipsis** – creates mystery/intrigue

Word bank

Ways to start sentences

- Start your sentence with an 'ed' word:** Alarmed, Angered, Abandoned, Astonished, Bewildered
- Start your sentence with an 'ing' word:** Hiding Jumping Knowing Riding Praying Thinking Stopping
- Start your sentence with an adverb:** Accidentally, Bravely, Cheerfully, Defiantly, Fortunately, Menacingly
- Adverbial phrase for when something happens:** After running up the hill, Before charging into battle,
- Adverbial phrase for how something happens:** With her feet squelching in the mud, Jane trudged...
- Adverbial phrase for where something happens.** Around Behind Beneath Beside In On Over Past
- Start with a simile.** (A simile compares two things): As dark as... As busy as... As clear as...

A drop in clause adds in extra information: The dragon, who had fearsome talons, flew off into the sky.
The brave knight, who was wearing a coat of armour, strode through the castle doors.

Word types

- Noun** – Person, place, thing
- Pronoun** – In place of a noun 'you'
- Verb** – an action or state
- Adjective** – describes a noun
- Adverb** – describes a verb
- Preposition** – shows the relationship between objects
- Determiner** – used in front of a noun to show the type 'the' 'a'
- Conjunctions** – joining words

Top tips

- Remember that all sentences and names start with a **capital letter**.
- Always write in complete sentences.
- Include descriptive detail to set the scene for the reader.
- Use a variety of sentence starters and vocabulary.
- Write with a range of punctuation.

Writing in timed conditions

1. **Drop** – where are you?
Describe the setting



2. **Characters** – who are you with?



3. **Zoom** – what's happening?

Link to the task focus



4. **Flashback** –when it happened to you



5. **Ending** – create a cliff-hanger or surprise

Common Errors

- **There/their/they're** – there= place, their=belongs, they're=they are.
- **Which/witch** – which=choice, witch=supernatural
- **To/too/two** – to=the direction, too=a lot, two=2

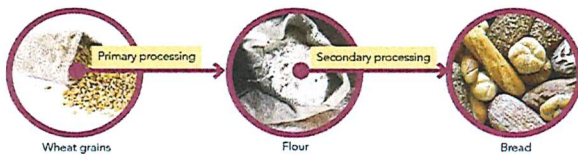
Food and Nutrition

Primary Food Processing

In this stage foods are processed straight after harvest or slaughter to get them ready to be eaten or used in other food products.

These process are required to make foods easier and safer to use and eat. Examples of primary processed foods are;

- Wheat grains into flour
- Processing of milk
- Animals into meat
- Farming and cleaning of vegetables and fruit



Secondary Food Processing

This where primary processed foods are either used on their own or mixed with other foods and ingredients to be turned into other foods.

Examples of secondary processed foods are;

- Flour into wheat
- Milk into cheese
- Meat used in foods
- Fruits and vegetables into soups, sauces, jams etc.



Food Allergens



These are different types of allergens that some people cannot handle within their diet.

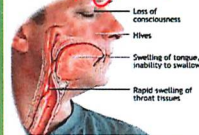
They can affect people in different ways, and if they are not addressed properly, they can lead to **serious** consequences.

Having a food allergy means that someone has an **allergic (serious) reaction** to certain foods.

The allergic reaction involves the **immune system**. It makes the body produce a substance called **HISTAMINE** which then leads to a variety of symptoms.



Anaphylaxis



People who have a serious reaction go into anaphylactic shock. This usually happens within seconds and is very serious.

The symptoms include;
Swelling of the mouth and throat
Not being able to swallow, breathe or speak properly.

Food miles

Food miles are a way of attempting to measure **how far food has travelled** before it reaches our plates.

Not only do the miles include getting foods to you, but also getting waste foods away from you, and to the landfill!

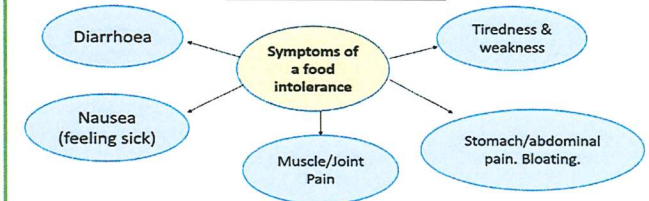


Intensive farming is a type of agriculture invested in crops, plants and animals. It uses a lot of machinery and money and concentrated within small areas of land.

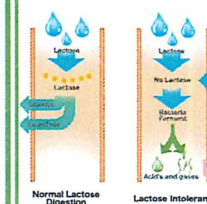
Farming within small areas of land helps to cut down on the costs of the land and labour and **produces the greatest yield**.

'Yield' means how much of something is produced. In this case, the number of crops, plants and animals produced on a farm.

Food Intolerance



Some people are sensitive to particular foods that develop a range of uncomfortable **symptoms** that make them feel weak and unable to carry out everyday activities effectively.

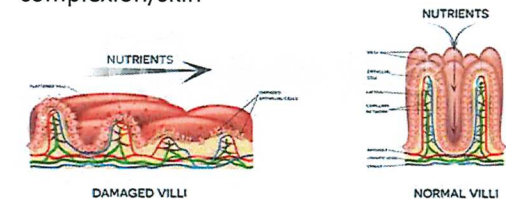


People who are **lactose intolerant** cannot digest a **milk sugar** which is naturally found in milk called **LACTOSE**.

The only way to avoid uncomfortable symptoms are to **avoid** drinking or eating milk products such as; cheese, butter, cream & yogurt.

During **digestion**, the food we eat is broken down and absorbed by the **small intestine**. The small intestine is lined with tiny finger like projections called **villi**.

In **coeliac disease**, the gluten found in wheat damages the villi. The damaged villi cannot absorb nutrients coeliacs need. The person then becomes **malnourished**. The **symptoms** of a person with coeliac disease are;
Anaemia - Poor absorption of **IRON**, Weight loss and pale complexion/skin



Food and Nutrition

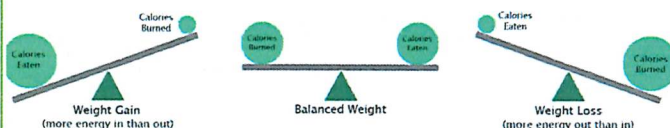
Diet Related Diseases

Obesity

Obesity is a common problem in the UK that's estimated to affect around 1 in every 4 adults and around 1 in every 5 children aged 10 to 11



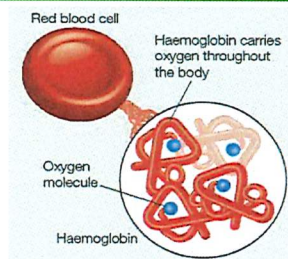
Obesity is a diet related disease in which the body contains **too much stored fat**. Obesity is caused by not being in **energy balance**. A person who eats a lot of energy dense food (e.g. saturated fat) and does not exercise will gain weight quicker.



Anaemia (Iron Deficiency)

Anaemia is a diet related health condition caused by a deficiency of iron in the blood.

The body needs the mineral iron to make the substance **hemoglobin** in red blood cells.



Hemoglobin picks up the oxygen we breathe in from the lungs and carries it to all parts of the cells where it is used, with glucose, to produce energy during respiration.

Vitamin C is needed to help absorb the iron from food during digestion.

Anaemia can affect all age groups, but teenage girls and women who are menstruating are at more risk of developing it.

Foods high in iron are dark leafy greens like kale and spinach. Red meat and liver are also good sources of iron.



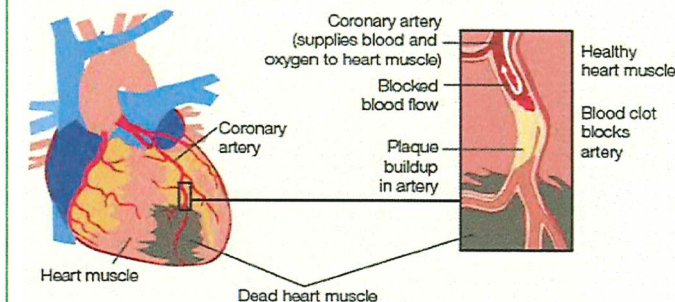
Coronary Heart Disease (CHD)

The cardiovascular system in the body is made up of the **heart and blood vessels**.

It is believed that 80% of CHD and strokes could be prevented by changes to lifestyle factors, such as diet, physical activity and smoking.

Changes to the diet to reduce the risk of CHD include:

- increasing oily fish intake
- reducing salt intake
- increase fruit and vegetables
- decreasing alcohol consumption
- Increasing exercise routines



Type 2 Diabetes

In order for all our body cells to produce energy during respiration, they need a continual supply of **glucose**.

Glucose enters the bloodstream after it has been absorbed by the food we eat.

In order for the glucose to get into the bodies cells, it needs a hormone called **insulin**.

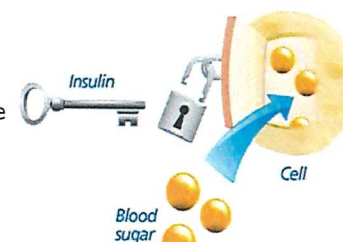
Insulin is produced by the **pancreas** which is just behind the stomach.



Imagine that each body cell has a 'door' that needs to be 'unlocked' to allow the glucose in.

If there are enough 'keys' (i.e. insulin) but the 'locks' are damaged or will not work, the glucose cannot enter the cells and stays in the bloodstream.

This is what happens in **Type 2 diabetes** which usually develops in older adults (and increasingly in young adults) and **can** be prevented.



If there are no 'keys' (i.e. no insulin), the 'doors' cannot be unlocked and glucose stays in the bloodstream.

This is what happens in **Type 1 diabetes** and can develop in young children and teenagers. It **cannot** be prevented.



Quel est ton repas préféré?

What is your favourite meal?

Mon repas préféré est le dîner puisque je peux le prendre avec ma famille et je parle de ma journée. D'habitude, ma mère prépare toujours un plat délicieux accompagné d'un dessert. Miam, miam.

Qu'est-ce que tu portes normalement, le week-end ?

What do you usually wear at the weekend ?

Normalement, le week-end je porte un pantalon en coton, un tee-shirt multicolore et des baskets car c'est très confortable pour moi et je l'adore vraiment.

Parle-moi d'une journée typique pour toi.

Tell me about a typical day for you.

Pendant la semaine je dois me réveiller à 7 heures. Puis, je m'habille, je prends mon petit-déjeuner et je me brosse les dents pour sortir et être à l'école à l'heure. J'y reste jusqu' à quinze heures.

Quel est ton jour préféré ?

What is your favourite day ?

Mon jour préféré est samedi car je peux faire de la grasse matinée. L'après-midi, je fais de l'escrime avec mon père ce qui est absolument incroyable. Le soir, d'habitude je me rencontre avec mes amis et on va ensemble au cinéma

Parle-moi de ton repas d'hier soir

Talk to me about your dinner last night

Hier soir, j'ai mangé à la maison avec ma famille. Pour le dîner, mon père a préparé du poulet rôti, des pommes de terre et des haricots verts. On l'a aimé car c'était vraiment délicieux!

Quelle est ta fête préférée?

What is your favourite celebration?

Ma fête préférée est Noël car on le célèbre chez ma grand-mère maternelle. On prépare le repas de Réveillon, on chante des cantiques en famille et on reçoit de jolis cadeaux.

Que fais-tu normalement pour fêter Noël ?

What do you normally do to celebrate Christmas?

Normalement, je fête Noël chez moi. On mange ensemble le repas, il y a bien sûr de la dinde ! Puis, on s'offre des cadeaux. J'adore l'ambiance de Noël.

Comment vas-tu fêter ton prochain anniversaire?

How are you going to celebrate your next birthday?

Pour fêter mon prochain anniversaire, je voudrais aller au restaurant avec mes amis. Après avoir mangé ensemble, on va voir un film policier au cinéma car c'est toujours amusant.

Parle-moi d'une occasion spéciale que tu as fêtée en famille

Talk to me about a special occasion that you have celebrated with your family

J'aime célébrer tous les anniversaires dans ma famille parce qu'on prépare un gâteau d'anniversaire avec des bougies, on achète un cadeau spécial et on chante 'Joyeux anniversaire'

Est-il important d'avoir une fête nationale comme le 14 juillet ?

Is it important to have a national celebration like Bastille Day?

Je dois admettre que la fête nationale, comme celle du 14 juillet en France, est très importante pour la nation car c'est le moment où l'on se rappelle des traditions et de l'histoire du pays.

Question you will ask:

Fancy Phrases:

Qualifiers	Un peu a bit Très/Beaucoup very/a lot Assez quite Trop too/too much Quelque chose somewhat
Adverbs	Tous les jours every day Toujours always Ne... jamais never Quelquefois sometimes Constamment constantly
Connectives	Néanmoins nonetheless Pourtant however Pour cette raison because of that Grâce à thanks to Par exemple for example
Comparisons Superlatives	Plus/Moins... que more/less than Mieux/Pire... QUE better/worse than Le plus/Le moins the most/least Le meilleur/le pire the best/worst Ce que j'aime le plus/le moins what I like the most/least
Sequencers	Premièrement firstly Puis then Donc so Depuis afterwards Finalement finally
Negatives	Ne ... jamais never Ne ... plus no longer Ni... ni neither... nor Non plus neither
Opinions with reasons	Je crois que... parce que I believe that... as Je pense que... car I think that... since A mon avis... même si In my opinion... although Il me semble que ... vu que It seems to me that... seeing that... Je suis convaincu que... étant donné que I am convinced that... given that



Time expressions	L'année dernière last year Il y a deux ans two years ago Quand j'étais petit(e) when I was little L'année prochaine next year Dans deux ans in two years' time
Variety of pronouns	Marie aime Marie likes Ce qu'elle adore le plus/le moins What I like the most/least Le meilleur/le pire the best/worst Nous nous entendons bien we get on well
Variety of persons	Il/elle a she/he/it has Il/elle fait she/he/it does/makes C'est it is Nous avons visité we visit/visited C'est bien passé we have/had a good time
Infinitive phrases	Je veux + INF I want to Je dois + INF I have to Je peux + INF I can J'ai l'intention de + INF I intend to J'ai décidé de + INF I decided to
Passé Composé	Je suis allé(e) à I went to J'ai été I was J'ai eu I had J'ai fait I did/made J'ai visité/J'ai rendu visite à I visited
Imperfect	J'allais I used to go J'étais I used to be J'avais I used to have Je faisais I used to do/make Je visitais I used to visit
Immediate future	Je vais être I'm going to be Je vais avoir I'm going to have Je vais faire I'm going to do Je vais aller I'm going to go Je vais visiter I'm going to visit

Simple future	J'irai I will go Je serai I will be J'aurai I will have Je ferai I will do/make Je visiterai I will visit
Conditional	J'irais I would go Je serais I would be J'aurais I would have Je ferais I would do/make Je visiterais I would visit
Si clauses	Si je gagnais au Lotto, j'irais à New York If I won the lottery, I would go to New York Si je pouvais, je travaillerais comme médecin If I could, I would work as a doctor Si je pouvais, j'étudierais le français à la fac If I could, I would study French at university Si j'étais riche, j'achèterais une grande maison If I were rich, I would buy a mansion Si j'avais de l'argent, j'habiterais en France If I had money, I would live in France
Subjunctive	Si seulement je pourrais... I wish I could Si seulement il y aurait I wish there were Quand je serai adulte when I am older Je ne pense pas qu'il soit... I don't think it is Il se peut qu'il ait I/it may have
Idiom	Ça coute les yeux de la tête he/she is a star Je fais la grasse matinée I have a lie in Je dis ça, je dis rien I'm just saying Je saute du coq à l'âne This is unrelated Revenons à nos moutons Back to the matter at hand

What is Urbanisation?		Sustainable Urban Living		Traffic Management	
<p>This is an increase in the amount of people living in urban areas such as towns or cities. In 2007, the UN announced that for the first time, more than 50 % of the world's population live in urban areas.</p>		<p>Sustainable urban living means being able to live in cities in ways that do not pollute the environment and using resources in ways that ensure future generations also can use them.</p>		<p>Urban areas are busy places with many people travelling by different modes of transport. This has caused some urban areas to experience traffic congestion that can lead to various problems.</p>	
<p>Where is Urbanisation happening?</p> <p>Urbanisation is happening all over the world but in LICs and NEEs rates are much faster than HICs. This is mostly because of the rapid economic growth they are experiencing.</p>		<p>Water Conservation</p> <p>This is about reducing the amount of water used.</p> <ul style="list-style-type: none"> Collecting rainwater for gardens and flushing toilets. Installing water meters and toilets that flush less water. Educating people on using less water. 	<p>Energy Conservation</p> <p>Using less fossil fuels can reduce the rate of climate change.</p> <ul style="list-style-type: none"> Promoting renewable energy sources. Making homes more energy efficient. Encouraging people to use less energy. 	<p>Environmental problems</p> <p>Traffic increases air pollution which releases greenhouse gases that is leading to climate change.</p>	
<p>Causes of Urbanisation</p>		<p>Creating Green Space</p> <p>Creating green spaces in urban areas can improve places for people who want to live there.</p> <ul style="list-style-type: none"> Provide natural cooler areas for people to relax in. Encourages people to exercise. Reduces the risk of flooding from surface runoff. 	<p>Waste Recycling</p> <p>More recycling means fewer resources are used. Less waste eventually goes to landfill.</p> <ul style="list-style-type: none"> Collection of household waste. More local recycling facilities. Greater awareness of the benefits in recycling. 	<p>Economic problems</p> <p>Congestion can make people late for work and business deliveries take longer. This can cause companies to lose money.</p>	<p>Social Problems</p> <p>There is a greater risk of accidents and congestion is a cause of frustration. Traffic can also lead to health issues for pedestrians.</p>
<p>Rural - urban migration</p>	<p>The movement of people from rural to urban areas.</p>	<p>Congestion Solutions</p> <ul style="list-style-type: none"> Widen roads to allow more traffic to flow easily. Build ring roads and bypasses to keep through traffic out of city centres. Introduce park and ride schemes to reduce car use. Encourage car-sharing schemes in work places. Have public transport, cycle lanes & cycle hire schemes. Having congestion charges discourages drivers from entering the busy city centres. 			
<p>Push</p> <ul style="list-style-type: none"> Natural disasters War and Conflict Mechanisation Drought Lack of employment 	<p>Pull</p> <ul style="list-style-type: none"> More Jobs Better education & healthcare Increased quality of life Following family members 	<p>Year 9 Geography Summer Term- Urban Issues</p>			
<p>Natural Increase</p>	<p>When the birth rate exceeds the death rate.</p>	<p>Sustainable Urban Living Example: BedZED</p>			
<p>Increase in birth rate</p> <ul style="list-style-type: none"> High percentage of population are child-bearing age which leads to high fertility rate. Lack of contraception or education about family planning. 	<p>Lower death rate</p> <ul style="list-style-type: none"> Higher life expectancy due to better living conditions and diet. Improved medical facilities helps lower infant mortality rate. 	<p>Background & Location</p> <p>BedZED is near Croydon in SE London. It is a development of 100 houses and aims to be carbon neutral.</p>	<p>Sustainable Strategies</p> <ul style="list-style-type: none"> Rainwater is collected and recycled. Cycle routes Electric car share scheme. Houses face south to reduce heating costs. Uses recycled / reclaimed building materials. 	<p>Traffic Management Example: London</p>	
<p>Types of Cities</p>		<p>Integrated Transport System</p> <p>Integrated transport system is the linking of different forms of public and private transport within a city and the surrounding area.</p>			
<p>Megacity</p>	<p>An urban area with over 10 million people living there.</p>	<p>Brownfield Site</p> <p>Brownfield sites is an area of land or premises that has been previously used, but has subsequently become vacant, derelict or contaminated.</p>		<p>Greenbelt Area</p> <p>This is a zone of land surrounding a city where new building is strictly controlled to try to prevent cities growing too much and too fast.</p>	
<p>Megacities</p>		<p>More than two thirds of current megacities are located in either NEEs (Brazil/Nigeria) and LICs (Bangladesh). The amount of megacities are predicted to increase from 28 to 41 by 2030.</p>		<p>Urban Regeneration</p> <p>The investment in the revival of old, urban areas by either improving what is there or clearing it away and rebuilding.</p>	


Urban Change in a Major UK City: Liverpool Case Study



Location and Background	Liverpool's Importance
<p>Liverpool is on the North West coast of England and was established as a trading centre because of its location on the River Mersey.</p> 	<ul style="list-style-type: none"> It was a UNESCO World Heritage Site. Liverpool is a UK centre for manufacturing with 3000 companies employing 50,000 local people. 840,000 people visited Liverpool in 2017 which contributes £358million to the UK economy. Liverpool is a European Capital for Culture.
<p>Migration to Liverpool Liverpool's population size and character has changed due to migration to/from Liverpool.</p>	<p>Liverpool's Opportunities ☺ Liverpool has changed from a manufacturing centre to a modern tourist destination. This has led to many opportunities...</p>
<ul style="list-style-type: none"> Welsh migrants moved to Liverpool in the 1700-1800 because of the work available. When famine struck Ireland in 1845 two million Irish moved to Liverpool. A port was built in Liverpool in 1715 which allowed for international migration. Liverpool has the first UK Chinatown, the oldest Black African community. Liverpool is still very ethnically diverse – 1 in 8 are from an ethnic minority background. 	<p>Social: huge cultural diversity has led to variety in food, festivals and other cultural experiences. £1billion was spent regenerating the city centre to create Liverpool 1 a shopping and recreation centre.</p> <p>Economic: Tourism has created 160,000 jobs in Liverpool. There is a growing film industry in Liverpool who have made use of the old industrial warehouses. Manufacturing of cars.</p> <p>Environmental: 5 acre park at Liverpool ONE and there are many cycle and public footpaths around the city. MerseyTravel is an integrated Travel System that makes using public transport easier.</p>
<p>Liverpool's Challenges ☹️ Liverpool has changed from a manufacturing centre to a modern tourist destination. This has led to many challenges...</p>	<p>Anfield Regeneration Regeneration can be used to solve many urban problems. Anfield suffers from high levels of deprivation. The Anfield Project has tried to solve these problems.</p>
<p>Social: Many children in deprived areas are leaving school without basic qualifications and struggle to find work. Life expectancy in Toxteth (Inner City) is 10 years lower than other parts of the city.</p>	<p>£36 million spent on Anfield regeneration. Refurbished 300 homes and plan to build 600 new homes. Community centre built along with a refurbished health centre and schools.. Stanley Park has been refurbished and a £4.5 million environmental scheme started in 2017 to increase wildlife with trees and build more pedestrian friendly areas.</p>
<p>Economic: Anfield and Toxteth among the most deprived areas in England. And regeneration leads to increased inequality between rich and poor. Unemployment in Anfield is 8.5% (UK average= 2.8%)</p>	
<p>Environmental: Building on greenfield sites destroying habitats. 800 new homes being built on greenfield site in St Helens (Rural-Urban Fringe). The Festival Gardens are being cleared for development in centre of Liverpool, costing £6million to clear up. Larger population leads to more waste to be disposed of.</p>	

Urban Change in a Major LIC City: Lagos Case Study



Location and Background	Lagos' Importance
<p>Lagos is a coastal city situated in the south of Nigeria. It is the most populated city in the country (25 million). The average earnings are £670 per year. It is growing at 600 000 people per year.</p> 	<ul style="list-style-type: none"> Used to be the capital city. Still the centre of trade and commerce. 80% of Nigeria's industry is around Lagos. It is the financial centre of West Africa. It has a major international airport. 1% of households in Lagos have reported the murder of a family member.
<p>Migration to Lagos People moving into Lagos has caused rapid urban growth.</p>	<p>Lagos' Opportunities ☺ The growth of Lagos is because of the opportunities here compared to life in rural Nigeria.</p>
<p>The city began when Portuguese developed a small fishing port in 1472. Under British rule, Lagos was made the capital of Nigeria until independence in 1960. Over 7 million people moved to Lagos between 1990-2004. Two causes of this growth:</p> <ol style="list-style-type: none"> Natural Increase: BR is higher than DR (BR= 39 per 1,000 DR= 10 per 1,000) this means Lagos' population is naturally increasing. Lagos has a youthful population= more babies. Rural to Urban Migration: 1,200 migrants arrive in Lagos everyday. Pull Factors: Higher wages, more access to education Push Factors: Low paid jobs in farming (subsistence farming in rural Nigeria) <p>This expanding population has resulted in the rapid urbanisation of Lagos.</p>	<p>Social: Standards of living are gradually improving. Healthcare, and education are better in Lagos than in Nigeria as a whole. 68% of people in Lagos have a secondary education. 68% in Lagos have access to clean water.</p> <p>Economic: More jobs are available in Lagos than anywhere else in Nigeria. Lagos has one of the highest incomes per person in the country. The city has various types of employment including oil, retail and manufacturing. Nollywood is worth \$3billion.</p> <p>Environmental: There is an integrated transport system and a new waterway network of ferries. Bus lanes are being built and a new airport is planned.</p>
<p>Lagos Challenges ☹️ Rapid urban growth has created many problems however...</p>	<p>Improving Quality of life for Urban Poor Urban planning is being used to improve the quality of life of poor people in Lagos...</p>
<p>Social: There is a severe shortage of housing 60% of people live in slums. 15 households share 1 toilet in slums such as Makoko. Diseases such as cholera are common due to dirty drinking water.</p>	<ul style="list-style-type: none"> Makoko is an unofficial squatter settlement built on the lagoon. Densely populated with poor sanitation and limited access to services. A floating school was built to offer education. However this was destroyed in a storm. There are plans to re-build it. Rising sea level is a threat. Eko Atlantic is a new development built on reclaimed land. It has services and utilities. However critics argue it benefits only the rich and that social tension will rise as a result.
<p>Economic: 60% of people work in the informal economy: with low pay and no tax contributions. There is high unemployment in squatter settlements</p>	
<p>Environmental: Traffic congestion is high and air pollution bad. Water availability is limited with vendors selling water from carts. Only 40% of rubbish is officially collected. The rest ends up in dumps such as Olusun dump.</p>	

Year 9 History: Term 3

Superpower Relations

End of WW2

The USA entered WW2 against Germany and Japan in 1941, creating a Grand Alliance of the USA, Britain and the USSR. This uneasy alliance would ultimately break down into the Cold War.



Political ideology:

The alliance of the USA and the USSR brought together two sides that were divided by their political ideologies.

The political and economic systems of the USA was based on **capitalism**. In capitalist countries, people can own private property.

The USSR had based its economy on **communism**. Communism encourages equality and seeks to remove all private ownership.



Tehran Conference 1943

The Big three met to discuss the group's planned invasion of Nazi occupied France.

Outcomes: The USA and Britain would invade France by May 1944. The USSR would join the USA and Britain in the war against Japan, once Nazi Germany was defeated.

Yalta Conference Feb 1945

The aim was to decide what to do with Germany once it had been defeated.

Outcomes:

- Germany would be divided into four zones with the USSR, Britain, France and the USA each controlling a zone,
- All countries freed from the Nazis were guaranteed the right to hold elections.
- The Allies agreed to setting up the UN.



Potsdam Conference July 1945

This final conference was to finalise the post war settlement. However much had changed.

- Roosevelt had been replaced with anti communist Truman.
- The USA successfully detonated an atomic bomb.
- The USSR had set up a communist government in Poland.

Outcomes:

- Berlin, was to be divided into four zones, each controlled by one of the Allied powers.
- Stalin would not allow free elections in Eastern Europe.

Arms Race:

In Aug 1945 America dropped an atomic bomb on **Hiroshima**, Japan. This started the arms race where the USSR and America were competing to have the most powerful weapons.



Soviet Expansion

Stalin wanted to create a buffer zone in Eastern Europe. In 1945, Stalin took control of Poland by putting in place a communist government. In 1948 in Czechoslovakia and Hungary, non-communists won the elections; however, communists were put into power instead. Countries under Soviet influence became known as **Satellite States**.



The USA reacted by producing the **Long Telegram** in 1946. It stated that the Soviets wanted to destroy the American way of life. The Soviets reacted with the **Novikov Telegram** – the stated that the USA wanted world domination.

Concerned about the spread of communism, President Truman made a speech announcing that the USA would contain communism, known as the **Truman Doctrine**. They used the **Marshall Plan, 1947** to achieve this. This gave £12 billion in aid to countries so they could recover after WWII. Stalin did not allow satellite states to take any money.

The Soviets reacted by introducing **Cominform 1947** to share information and **Comecon 1949** to provide economic assistance.



Year 9 History: Term 3

Superpower Relations

First Berlin Crisis 1949

Stalin was unhappy that the West had united their zones in Berlin to create **Trizonia**. They had also strengthened the economy by creating their own currency, the **Deutschmark**.

Thus, he cut off all land access to West Berlin. This meant that:

- Berlin could now only be accessed by air.
- A shortage of food - West Berlin only had enough **food for 36 days**.

The Allies decided to support west Berlin with an **airlift**. It lasted **for 11 months** until the Blockade was **lifted in May 1949**. At the height of the Berlin Airlift, a plane landed **every minute**.

Afterwards, Germany was officially split into 2 countries. The USA then created **NATO in 1949** to defend themselves in case war broke out. So, the USSR created the **Warsaw Pact in 1955**. The world was now divided into two armed military camps.

The Hungarian Uprising 1956

Hungary was a satellite state. It was under tight censorship, they had no freedom of speech. They were led by Rakosi a brutal communist leader. In June 1956, the people began to protest against the regime.

To stop the protests, Khrushchev gave Hungary a new communist leader: **Imre Nagy**. Nagy's reforms included:

- Free elections to choose the government.
- Fair trials.
- Hungary to leave the Warsaw Pact.

Khrushchev refused to accept Hungary leaving the Warsaw Pact as it would leave a gap in the USSR's buffer zone. 1000 Soviet tanks invaded killing 20,000 civilians. Nagy was executed and replaced with Kadar. The USA did nothing, they were unwilling to intervene in the eastern bloc.

Second Berlin Crisis

Many people fled from the East of Berlin to the West. The West had freedom and had economic opportunity. This became known as the Brain Drain and the **Berlin Refugee Crisis**.

In anger, Khrushchev announced the **Berlin Ultimatum**. He demanded that the USA should withdraw their troops from Berlin within six months.

Eisenhower did not want to give in to Khrushchev's demands. They held a **summit** in **Geneva** in May 1959, and then again in September 1959 at **Camp David** in the US. At the **Paris Summit** Khrushchev left in anger as the USA were found to be spying on the USSR. By **Vienna** no agreement had been reached.

On **13 August 1961**, the Berlin Wall was constructed by Khrushchev to stop the refugee crisis.

Cuba

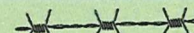
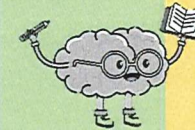
Cuba is 90 miles from the USA and had been under the influence of the USA. In **1959**, Cuba became communist in the **Cuban Revolution** led by **Fidel Castro**. The USA responded with a trade embargo.

When the embargo failed, Kennedy approved a plan to invade Cuba with 1400 Cuban exiles. This was called the **Bay of Pigs**, which failed.

The USA then sent U2 spy planes and spotted the construction of Soviet missile launch sites and 20 Soviet ships carrying nuclear missiles heading for Cuba.

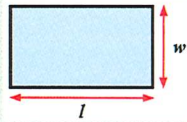
The USA was on the verge of crisis and discussed options - known as the **13 days**. Kennedy's final decision was a **US blockade** of Cuba, which could stop further Soviet missiles coming to Cuba. The Soviet ships turned round.

Kennedy agreed to remove missiles from Turkey (in secret) if Khrushchev removed missiles from Cuba. They set up the **hotline** and **treaties** to help avoid nuclear war in future.



Year 9 Mathematics Key Information

Area of a Rectangle
 $A = l \times w$



Speed

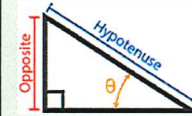


Percentage Change

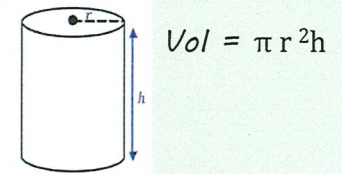
$$\frac{\text{actual change}}{\text{original}} \times 100$$

Sinθ

$$\sin\theta = \frac{\text{Opp}}{\text{Hyp}}$$



Cylinder

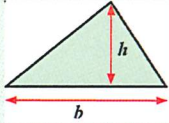


Prime Number

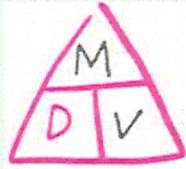
A number that has exactly 2 factors
 2, 3, 5, 7, 11, 13, ...

Area of a Triangle

$$A = \frac{1}{2} \times b \times h$$

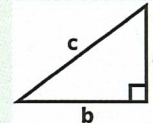


Density



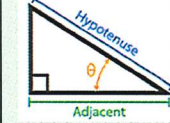
Pythagoras' Theorem

$$a^2 + b^2 = c^2$$

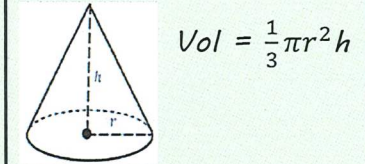


Cosθ

$$\cos\theta = \frac{\text{Adj}}{\text{Hyp}}$$



Cone

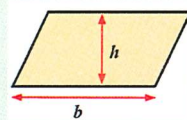


Square Number

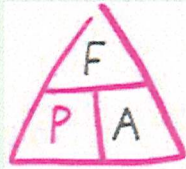
A number multiplied by itself
 $5^2 = 5 \times 5 = 25$

Area of a Parallelogram

$$A = b \times h$$



Pressure

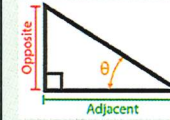


Metric Length Conversions

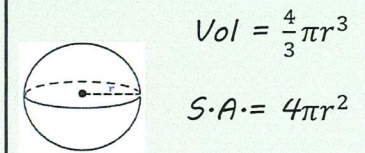
1km = 1000m
 1m = 100cm
 1cm = 10mm

Tanθ

$$\tan\theta = \frac{\text{Opp}}{\text{Adj}}$$



Sphere

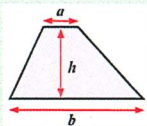


Cube Number

A number multiplied by itself and then itself again
 $5^3 = 5 \times 5 \times 5 = 125$

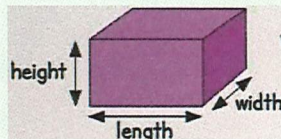
Area of a Trapezium

$$A = \frac{1}{2} \times (a + b) \times h$$



Volume of a Cuboid

$$V = l \times w \times h$$



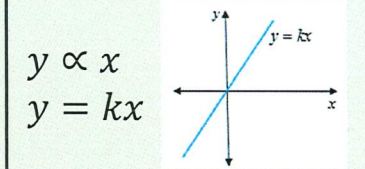
Metric Mass Conversions

1 tonne = 1000kg
 1kg = 1000g
 1g = 1000mg

Exact Values of Sin

θ	0°	30°	45°	60°	90°
sinθ	0	1/2	√2/2	√3/2	1

Direct Proportion

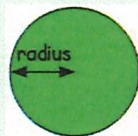


Multiple

The first 5 multiples of 12 are 12, 24, 36, 48 and 60

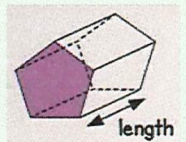
Area of a Circle

$$A = \pi \times r^2$$



Volume of a Prism

$$V = \text{area of cross-section} \times \text{length}$$



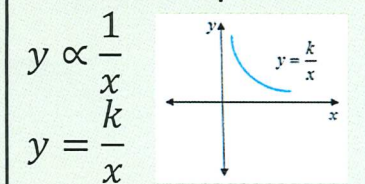
Metric Capacity Conversions

1l = 1000ml
 1l = 100cl
 1cl = 10ml

Exact Values of Cos

θ	0°	30°	45°	60°	90°
cosθ	1	√3/2	√2/2	1/2	0

Inverse Proportion

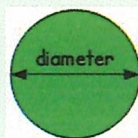


Factor

The factors of 12 are 1, 2, 3, 4, 6 and 12

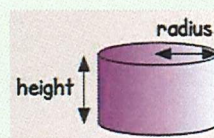
Circumference of a Circle

$$C = \pi \times d$$



Volume of a Cylinder

$$V = \pi \times r^2 \times h$$



Error Interval

7.4 rounded to 1dp
 $7.35 \leq x < 7.45$

Exact Values of Tan

θ	0°	30°	45°	60°	90°
tanθ	0	1/√3	1	√3	

Rules of Indices

Rule 1 $a^0 = 1$	Rule 4 $(a^m)^n = a^{m \times n}$
Rule 2 $a^m \times a^n = a^{m+n}$	Rule 5 $a^{-m} = \frac{1}{a^m}$
Rule 3 $a^m \div a^n = a^{m-n}$	Rule 6 $a^{n/m} = \sqrt[m]{a^n}$



Media Studies

Key Words

Blockbuster	a Hollywood movie that's made with a large budget and big stars.
Independent Film	An indie film is any feature-length or short film that is made without a major studio or big production company attached.
Marketing	the action or business of promoting and selling products or services, including market research and advertising.
Vertical Integration	Vertical integration refers to the process of acquiring business operations within the same production vertical. A company that opts for vertical integration takes complete control over one or more stages in the production or distribution of a product.
Conglomerate	a large corporation.
Subsidiaries	a company controlled by a holding company.
Horizontal Integration	Horizontal integration and vertical integration are competitive strategies that companies use to consolidate their position among competitors. Horizontal integration is the acquisition of a related business. A company that opts for horizontal integration will take over another company that operates at the same level of the <u>value chain</u> in an industry.
Zeitgeist	the defining spirit or mood of a particular period of history as shown by the ideas and beliefs of the time.
Globalisation	the process by which businesses or other organizations develop international influence or start operating on an international scale.
Public Service Broadcaster	Public broadcasting involves radio, television and other electronic media outlets whose primary mission is public service.
Commercial Broadcaster	Commercial broadcasting is the broadcasting of television programs and radio programming by privately owned corporate media, as opposed to state sponsorship.
Manufactured Artist	artists who don't have any input in their music, have writing camps and have a big team of people working with them to make decisions.
Authentic Artist	Artists that influence their own music and image.
Performance Video	A video that is styled to be like a performance to an audience.
Narrative Video	A video with a story.
Convergence	Technological convergence, also known as digital convergence, is the tendency for technologies that were originally unrelated to become more closely integrated and even unified as they develop and advance.
Freemium Gaming	Freemium, a portmanteau of the words "free" and "premium," is a pricing strategy by which a basic product or service is provided free of charge, but money is charged for additional features, services, or virtual or physical goods that expand the functionality of the free version of the software.
Intrinsic Narrative	Story is written for the player to play.
Extrinsic Narrative	Story can be controlled and changed by the player.
Hyperreality	an inability of consciousness to distinguish reality from a simulation of reality, especially in technologically advanced postmodern societies

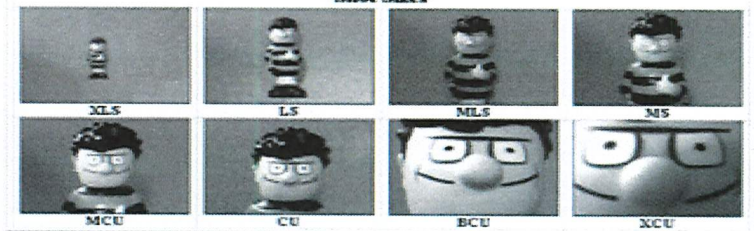
Key Theories

Connell's Theory of Gender	Subordinated Femininity: women are subservient to men and have little power. Emphasised Femininity: the idea that women must conform to the needs and desires of men, through their looks and sexual appeal. Resistant Femininity: women as resisting the stereotypes and presenting themselves as powerful. Hegemonic Masculinity: perpetuates the idea that men are dominant in society/ Stereotypical, manly man. Complicit Masculinity: men who subvert the stereotypes of men, often engaging more with 'feminine' roles such as the stay at home dad. Subordinated Masculinity: LGBTQ+. Considered to lack power in society.
Laura Mulvey's Male Gaze Theory	Laura Mulvey's Male Gaze Theory: Female images in media texts are objectified and viewed through the eyes of a heterosexual man.
Judith Butler's Theory of Gender Stereotypes	Suggests that the existence of stereotypes is due to the fact that they are repeated over and over again in the media.
Propp's Character Theory	Hero, Villain, False Hero, Donor (gives the hero something), Helper, Princess, Father, Dispatcher (sends hero on their way).
Todorov's Theory of Equilibrium	Equilibrium: state of balance. Disequilibrium: state of conflict/chaos. New Equilibrium: resolution.
Binary Opposites	opposition exists in narratives to propel a story forward.
Enigma Codes	questions/mystery exist in media texts to engage the audience.
Active Audience Theories	Suggests that audiences can respond to and interpret media texts in their own ways. Uses and Gratifications Theory: suggests audiences choose to go to media texts to gain: Personal Identity, Information, entertainment, education or social interaction. Dyer's Utopian Theory: suggests audiences go to media texts to gain a sense of escapism from their normal lives.
Passive Audience Theories	Suggests that audiences accept the messages of the media without questioning them. Hypodermic Needle Model: messages are injected into the minds of audiences, without them questioning it. Cultivation Theory: The more an audience is exposed to something, the more likely they are to believe it is true.

Shot Angles



Media Studies



Codes	Technical, written and symbolic tools used to construct or suggest meaning in media forms and products.
Genre	a style or category of art, music, or literature.
Mise-en-scene	the arrangement of the scenery, props, etc. on the stage of a theatrical production or on the set of a film. The setting or surroundings of an event.
Anchorage	Where the meaning of a media text is fixed or stabilised by a caption, shot type, costume or so on (<i>ie: it anchors the meaning</i>).
Semiotics	the study of signs and symbols and their use or interpretation.
Signifier	a sign's physical form (such as a sound, printed word, or image) as distinct from its meaning.
Signified	the idea or meaning being expressed by that signifier.
Denotation	the literal meaning of a sign.
Connotation	the associated meaning of a sign.
Polysemic	a sign with multiple connotations can be described as polysemic.
Representation	the way a person or social group is presented.
Conform	following the rules or expectations.
Subvert	going against the rules or expectations.
Under-representation	a person or social group who isn't represented often or enough in media.
Misrepresentation	a person or social group is represented inaccurately through media.
Stereotypes	an assumption made about a person or social group.
Direct Mode of Address	visually, looking towards the audience, verbally, addressing them with "you."
Indirect Mode of Address	no reference made to the audience; lack of eye contact or direct speech.
Demographic	socioeconomic factors relating to an audience.
Psychographic	specific interests or attitudes of an audience.
Geographic	the location of a specific audience.

Social Mobility	the movement between social class levels.
Cultural Capital	social assets (education, intellect, style of speech, dress, etc.) The term was coined by 1970s French sociologist Pierre Bourdieu, who developed the idea as a way to explain how power in society was transferred and social classes maintained.
Mass Audience	a large audience, made up of varying demographics, psychographics and geographics.
Niche Audience	a specific audience type with specific interests and socioeconomic factors.
Diegetic Sound	Natural, ambient sound.
Non-Diegetic Sound	Edited or added sound.
Dialogue	Speech in a narrative.
Cross Cut	Transitioning between two lines of action, indicating they are happening at the same time.
Cutting on action	Transitioning from one angle of the action, to the other, to show what has happened.
Continuity editing	Editing that creates a smooth flow to the order of events.
Dissolve	A gradual scene transition, where the end of one shot is overlapped by another.
Montage	Many scenes edited together to create a summary of events.
Jump Cut	A cut that creates a lack of continuity, by leaving out parts of the action.
Smash Cut	An abrupt cut, going from loud to quiet, or quiet to loud.
Invisible Cut	Where the cut is hidden, so the audience are unable to see it.
Shot reverse shot	Cutting between over the shoulder shots, to show a conversation taking place.
Shallow Focus	Where the subject closest to the camera is in focus.
Deep Focus	Where the subject furthest away from the camera is in focus.
Focus Pull	Pulling the focus from shallow to deep, or deep to shallow.
J-Cut	Where the audio begins before the scene in which it appears.
L-Cut	When the audio from the previous scene continues into the next scene.
CGI	Computer Generated Image.
Panning, tracking and tilting	Panning – camera stays put, but pans the scene in front. Tracking – camera moves with the subject moving in the shot, or follows the subject around. Tilting – camera stays still, but tilts up and down.

Music - Year 9

Texture – Knowledge Organiser



A. Texture

TEXTURE describes how much is going on in the music at any one time. It is about the different ways instruments and voices are combined in a piece of music. In its simplest form, texture can be described as **how much sound we hear**.

THIN TEXTURE: (*sparse/solo*) – small amount of instruments, sounds or melodies.



THICK TEXTURE: (*dense/layered*) – lots of instruments, sounds or melodies.

B. Monophonic Textures

MONOPHONIC TEXTURE – a single melody line either vocal or instrumental without any harmonies, although it may be played by more than one instrument or voice.



SOLO – a single melody line played or sung (called **A CAPPELLA**) by only one performer without any accompaniment or harmonies.

UNISON – instruments or voices playing or singing notes at the same pitch.

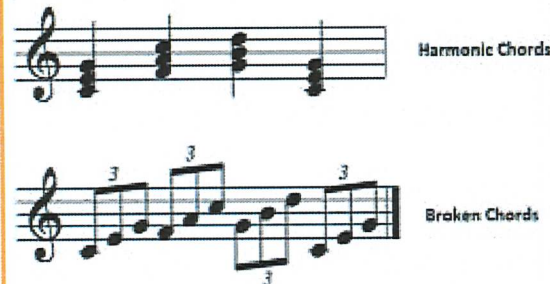
OCTAVES – instruments or voices playing or singing the same note but at different pitches.

C. Homophonic Textures

There are two types of **HOMOPHONIC TEXTURE**:
MELODY AND ACCOMPANIMENT – a melody line with harmonic accompaniment. Since the melody line is the most important, it is usually at the top of the texture.



BROKEN CHORDS are formed of playing the notes of a chord separately, one after another. Broken chord patterns provide a more gentle, flowing accompaniment to a melody than when the notes of a chord are played together.



BLOCK CHORDAL – where voices or parts move together with the same (or very nearly the same) rhythm, with or without a definitive melody line (e.g. *hymn-singing*)



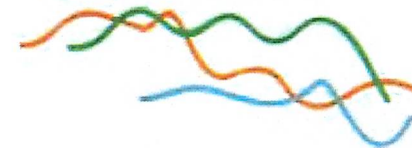
E. Heterophonic Texture

HETEROPHONIC TEXTURE - the **simultaneous performance of different versions of the same melody**. E.g. one voice or instrument performs a melody while, at the same time, another performs a more elaborate, decorated version of it. Other voices or instruments may join in with yet more versions of the melody, perhaps elaborating it further still, or even simplifying it (picking out just a few important notes). **HETEROPHONIC** texture is found in the folk-music of certain European countries, in Turkish music, Japanese *gagaku* music, Indonesian *gamelan* music and in Arabian music.



D. Polyphonic Textures

POLYPHONIC TEXTURE (also called a **CONTRAPUNTAL TEXTURE**) – weaving together two or more equally important vocal or instrumental melodic lines which fit together harmonically and 'interweave' creating a rich, complex, 'busy' web of sound.



IMITATION – 'to copy': one vocal or instrumental part starts off playing a melody, which is immediately copied, or imitated by another voice or part, though not necessarily at the same pitch. Usually, it is only the first few notes of the melody which are imitated, and several voices or instrumental parts may take turns to imitate the opening of the original melody.

CANON – a particular type of imitation: like a round, where the imitating voice or instrumental part repeats the entire melody, not just the opening. Just as in a round, several voices or instrumental parts might be involved in the canon.



ANTIPHONAL – a special kind of imitation where a musical phrase is passed between different groups of voices or instruments. In some antiphonal music, the instruments or voices are placed in different parts of the building, or on different sides of a concert platform. This produces a kind of stereo or quadraphonic effect as a musical phrase is passed from one group to another.

LAYERED TEXTURE – music made up of different layers of sound which are all important to the rich texture of the music. These could be different rhythmic as well as melodic lines and is a feature of African music as well as Gamelan and modern music.



VARIATIONS

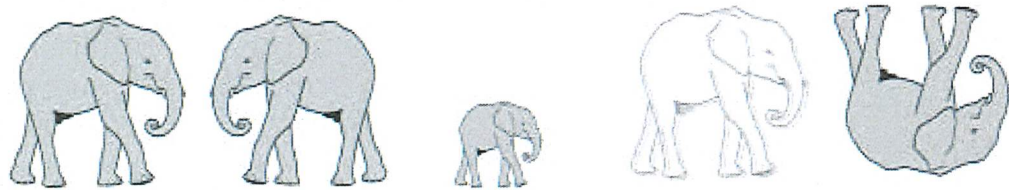
Exploring ways to develop musical ideas



A. Theme and Variations Key Words

MELODY – A tune or succession of notes, varying in pitch, that have an organised and recognizable shape. Often called the main **TUNE** or **THEME** of a piece of music or song and easily remembered.

VARIATION – Where a **THEME** is altered or changed musically, while retaining some of the primary elements, notes and structure of the original. **VARIATION FORM:**



A (Theme) A1 (Variation) A2 (Variation) A3 (Variation) A4 (Variation)

B. Augmentation and Diminution – Note Values and Duration

AUGMENTATION – the process of **DOUBLING** the note values (**DURATION**) of a theme as a means of variation.



DIMINUTION – the process of **HALVING** the note values (**DURATION**) of a theme as a means of variation.

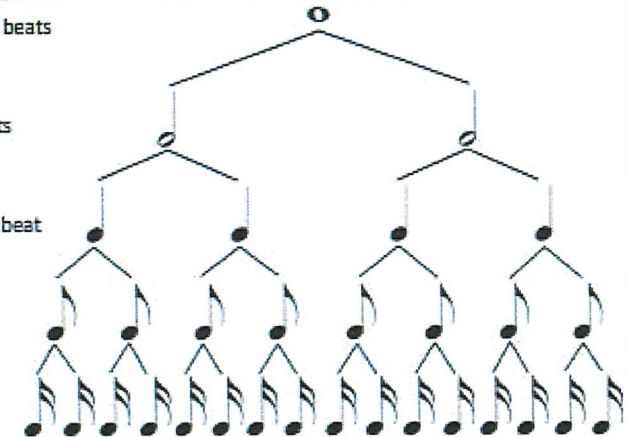
SEMI-BREVE = 4 beats

MINIM = 2 beats






CROTCHET = 1 beat

QUAVER = 1/2 beat

SEMIQUAVER = 1/4 beat

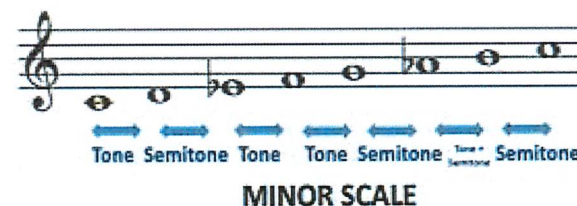
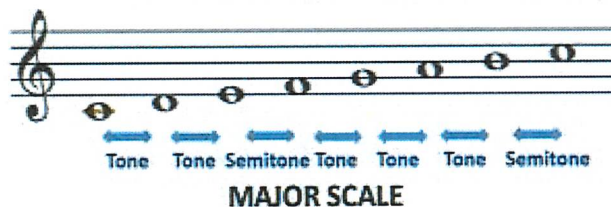


C. Variation Techniques

<p>PITCH – Change the highness or lowness of the theme – play the same notes, but at different pitches e.g. <i>in different OCTAVES.</i></p>	<p>TEMPO – Change the speed of the theme – play it faster or slower.</p>	<p>DYNAMICS – Change the volume of the theme – play it louder or softer.</p> 	<p>TEXTURE – Change the amount of sound we hear – play as a SOLO, add an ACCOMPANIMENT or CHORDS, add a COUNTER-MELODY (an 'extra' melody that is played or sung at the same time as the main melody, often higher in pitch and sometimes called a DESCANT).</p> 	<p>TIMBRE AND SONORITY – Change the SOUND of the theme – play it on a different instrument.</p> 	<p>ARTICULATION – Change the way the theme is played – smoothly (LEGATO – shown by a SLUR) or short, detached and spiky (STACCATO – shown by a dot).</p>	<p>PEDAL – A long (often very long!) note in the bass line of the music over which other parts, including the theme or a variation of the theme can be played. Also called a PEDAL NOTE or PEDAL POINT and often the TONIC note (but can be the DOMINANT or other notes).</p>	<p>DRONE – A long or series of repeated (often long) notes using the TONIC and DOMINANT notes together (a FIFTH).</p>	<p>MELODIC DECORATION – Adding extra notes or embellishments to the theme such as trills, turns, mordents (ORNAMENTS) or PASSING NOTES (extra notes between the main melody notes).</p>	<p>OSTINATO – Adding a repeated musical pattern (rhythmic or melodic) to the main theme as a form of variation.</p> 	<p>CANON/ROUND – A song or piece of music in which different performers sing or perform the same THEME starting one after the other.</p>	<p>GROUND BASS – A repeated musical pattern in the bass part upon which chords, and melodies can be performed and varied "over the top" of.</p> 
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D. Tonality – Major and Minor

TONALITY refers to whether a **THEME** or **MELODY** is in a **MAJOR** or **MINOR** key. Changing the tonality from major to minor or minor to major is one way of providing a variation on the theme of melody. Major and minor scales follow a certain pattern of tones and semitones:

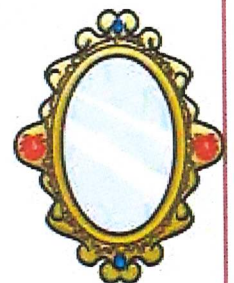


E. Inversion and Retrograde

INVERSION – Changing the **INTERVALS** between the notes of a theme so that they are upside down from the original.

RETROGRADE – A variation technique created by arranging the main theme backwards.

RETROGRADE INVERSION – Arranging the "inverted" variation of the theme backwards!



Skill, Target Setting, Feedback and Guidance

1. Setting Goals

A

S = Specific

- Using a specific target will mean they focus on area for improvement/weakness/relevant aim **(1)** therefore improvement is more likely leading to motivation **(1)**

M = Measurable

- By setting a measurable goal they can see progress / monitor progress **(1)** knowing their training is working/ improving will motivate them to continue with it. **(1)**

A = Accepted

- The target must be accepted / agreed by the performer and the performers coach if they have one.

R = Realistic

- Ensuring target is achievable/realistic so they know they can complete it/they have access to facilities/time **(1)** which motivates them to continue to train/work hard **(1)**

T = Time Bound

- Make time bound/time based so there is a definite point when the target must be achieved **(1)** therefore makes them motivated to work hard to achieve within time frame/keeps training interesting/ challenging as won't get bored with same target as set new target

B

Goal Setting:

Helps motivate performers and gives them a target to aspire to which helps them prepare both physically and mentally.

Performance Goals

- Personal standards to be achieved.
- The performer compares their performance against what they have already done or suggests what they are going to do. E.g. 100m runner hopes for a better start.
- They DO NOT compare themselves to other performers.

Outcome Goals

- Focus on end result. E.g 100m runner aims to win the race.
- They usually involve comparison with other competitors.
- The performer's standards may not be seen as important, it is the final outcome that matters.

C

Use of Performance Goals

- Beginners are better concentrating on performance goals as they do not need to worry about comparing the result to others.
- Elite performers use performance goals to help motivate themselves to work on individual aspects of their performance.

Outcome Goals

- Beginners prefer to avoid outcome goals as failure demotivates them and winning may be unrealistic.
- Elite performers are sometimes driven by outcome goals as they always have the desire to win.

2) Classification of Skills

A

Basic

- Very little decision making is required
- Few decision affect the success of the movement
- Are learnt fairly quickly

Complex

- A lot of decision making is required
- Take considerable time to master
- Tend to be taught after basic skills are done correctly

B

Open

- The environment is constantly changing and people around you affect the skill.
- This type of skills is often externally paced as the changing environment controls what skill is performed and when.

Closed

- Stable environment, meaning the environment does not change.
- The way the skill is performed is not affected by people around you.
- The skill will not change and is done the same way every time.
- Often self paced as performed controls when skill starts.

C

Gross

- Involves big movements using large muscle groups.
- Movements tend not to rely of accuracy and precision.

Fine

- Involves small, precise movements that use small muscle groups.
- Movements tend to involve precision and accuracy.

D

Self Paced

- The start of the movement is controlled by the performer.
- The speed, pace or rate of the movement is controlled by the performer.

Externally Paced

- The start of the movement is controlled by external factors.
- The speed, pace or rate of the movement is controlled by external factors.

3) Feedback

Intrinsic – feedback from within e.g. kinaesthetic feel (how a shot / skill feels like to the performer themselves).

Extrinsic – feedback from an external source e.g. from a coach or teacher.

Positive –. Positive feedback is essential to motivate athletes / performers.

Negative – Negative feedback must include information that helps the performer develop and improve (what they need to do to get better).

Knowledge of results (KR) – Feedback about the outcome (factual e.g. you won etc).

Knowledge of performance – Feedback about the quality of performance e.g. technique.

4) Guidance

Visual

Is when the performer can see something e.g. demonstration by coach, skill performed by another player, DVD footage.

Verbal

Is when the performer is spoken to by another person. E.g. teacher or coach. It is commonly used with visual guidance

Manual

The performer is physically moved by another person e.g. coach

Mechanical

The use of mechanical aids to assist a performer e.g. swimming floats.

GCSE PE TASTER

Socio-cultural influences

1. Gender

Main focus of women's participation.

There are a number of barriers that affect participation rates for women:

Stereotypical Views:

- Women lack the strength or endurance to play the same sports as men.
- Women who play sport are not feminine.
- Playing sport prevents a women's ability of giving birth.
- Women who play sport develop muscles and become more 'man like'. This leads to female performers having their sexuality questioned.
- A women's role is as a carer and manager of the home.

Due to these stereotypical other barriers have been created which put some women off playing sport.

Male Dominated Culture in Sport:

Women have less media coverage, receive less money and have less role models to look up

Support from Peers and Family:

Women get less support from their peers and family. Young girls often need to choose between playing sport or being part of a friendship group, and are put under pressure by their peers to be more like them.

Body Image:

The media portrays women as feminine and objects of desire. Women who choose to play sport do not follow these views and as a result their sexuality is often questioned.

1. Social Groups: People who interact with one another, share similar characteristics, and have a sense of unity / togetherness.

2. Stereotype: Widely held but fixed and oversimplified idea of a particular type of person e.g. females.

3. Discrimination: The unjust or prejudicial treatment of different groups of people, especially on the grounds of race,

4. Barrier to participation: An obstacle that prevents a group within society from participating in sport or physical activity and therefore reduces overall levels of participation.

Facilities / Funding:

Facilities for women have developed more slowly than those for men. There are less clubs / sports for women to get involved with. Funding for women's sport is also much less than their male counterparts, however this is gradually improving.

2) Ethnicity

A group of people who share common origins – be they racial, religious or cultural

Barriers Affecting Participation

- Live in poorer areas in the country – less facilities / lack of money for equipment
- Sporting prejudices / stereotypes that already exist e.g. African-Caribbean's are seen to have less swimming ability.
- Family commitments resulting in less time to participate in sport.
- In many sports there are a lack of role models for black / ethnic people to look up to and aspire to.
- Discrimination – Many people don't take part in sports as they are afraid of being racially abused.

ETHNIC GROUP

Examples of how ethical issues effects a person's participation?

- Muslim women have to keep their bodies covered up preventing them from doing sports e.g. gymnastics / swimming.
- During Ramadan people are not allowed to eat food during daylight hours. This means that during the day they may have little energy when taking part in sports. Also they must eats at night instead of train.
- Muslim / Islamic men are expected to pray at their local mosque every day. This reduces the amount of time they can spend playing sport.

Socio-cultural influences

3) Disability

A physical or mental condition that limits a person's movements, senses or activities.

Three main categories of disability:

- Mobility impairments
- Sensory impairments
- Mental impairments

Having a disability can limit the type of physical activity that you can take part in. Many sports centres nowadays have facilities for disabled people which has led to an increase in opportunities to take part.

What prevents disabled people from taking part in sport?

- Lack of facilities in the local area.
- Lack of clubs / teams.
- Lack of media coverage (apart from when the Paralympics is on)
- Knowledge of activities available in local area e.g. advertising.

Benefits of Integration

- Reduced possibilities of discrimination
- Less stereotyping
- Fewer barriers

Adapted Sports: Competitive sports for individuals with disabilities. While they often parallel existing sports played by able-bodied athletes, there may be some modifications in the equipment and rules to meet the needs of the participants.

4) Age

All school children participate in sport but when they leave school participation often drops. This is referred to as 'post-school dropout'

- Older people often take part in less sport due to family and work commitments as well as economic issues which they might have.
- Also as people get older their fitness levels often decline, resulting in participation levels dropping.

Post-school dropout: The reduction in participation levels in young adults after they leave full-time education

5) Family/Friends/ Role models

Role Models

A person looked up to by others as an example to be copied.

Positive:

- Encourage people to play sports so by increasing numbers participating.
- Their good behaviour can positively effect the behaviour of children who look up to them.

Negative:

- Poor behaviour can be seen by children as the correct way to behave.
- Can lead to people copying behaviour e.g. taking drugs, swearing at officials.

Family

Positive:

- Parents will encourage their children to take part in certain sports / activities
- Children rely on their parents to get them to the sport / activity.
- Parents / brothers or sisters may play a sport which you may watch resulting in you getting involved in.

Negative:

- Some parents may not provide support or encouragement due to safety concerns over participation or lack of interest in sport or may have had a negative experience of the sport (earlier in life).
- Some parents may pressure young people to concentrate on academic work rather than practical physical activity.
- Some parents cannot supply financial support / in the form of equipment or kit / coaching / transport.

Friends

Positives:

- People are more likely to play sports / for teams that their friends play for.
- Peers / friends often encourage other children to take part in their sport as they understand / appreciate the benefits that can be gained from the activities.

Negatives:

- Peers might not be interested in the activity. As they are not interested / they may encourage friends not to train / take part in sport.
- Verbally pressure friends by saying they are better going out with them or that they will not be their friend.

Product Design - Chairs

Softwoods come **coniferous** trees. These trees are **evergreen** and grow all year round. They usually have thin spikey leaves and produce nuts

Softwoods	Key info	Uses/ Examples
Pine	Light, easy to work with but can split	Cheap furniture, construction and decking

Manufactured Boards are man-made using a mixture of natural timbers and adhesives

Board	Key info	Uses/ Examples
Plywood	Thin layers of wood are placed at 90 degrees from each other and glued. These angles prevents warping and helps strength	Indoor furniture, floorboards
Aeroply	Plywood made from birch. Thin and lightweight. Easy to bend.	Jewellery, gliders and furniture
Flexi-ply	The two outer layer of the plywood are made from open-grained timber, allowing it to flex.	Laminated furniture and curved panels
Chipboard	Wood chips compressed with resin	Kitchen units, shelving and flat-pack furniture
MDF	Compressed wood dust/fibres with resin	Model making and furniture

Hardwoods come from **deciduous** trees. These trees loose their leaves, and stop growing, in winter and produce fruit and flowers in spring.

Hardwood	Key info	Uses/ Examples
Oak	Hard, tough and good weather resistance. Attractive grain.	Furniture, flooring, joinery

Orthographic Drawing

The drawing shows three views of a chair seat. The **Top** view is a rectangle with a width of 36 and three vertical lines dividing it into three equal sections of 12 each. The **Front** view shows a stepped profile with a total height of 30. The **Right Side** view shows a stepped profile with a total width of 36 and three equal sections of 10 each.

Final Idea Modelling:

- Remember to take pictures/screenshots along the way.
- What materials could you use to model your idea?
- Did it work? Explain your answer.
- Describe the quality of your work.
- What could you do to improve and refine your idea?
- What finishes will you apply to the final product?

Modelling:

- Remember to take pictures along the way.
- What materials could you use to model your idea?
- Did it work? Explain your answer.
- Describe the quality of your work.
- What could you do to improve and refine your idea?
- What finishes will you apply to the final product?



Annotation

WHAT
 What have you done?
 What was your inspiration?

WHY
 Why did you make the piece, how does it link to the project?
 Why did you make the piece that way?

WWW/EBI
 What has gone well?
 What can be improved?
 Which is the best one and why?

HOW
 How did you come up with your ideas?
 How did you create the piece?
 How does the piece link to your artist/designer?

NEXT –
 Your next steps are...?

DRUGS AND THE LAW

Recall: Drug

Drugs are chemicals that alter, block, or mimic chemical reactions in the brain. This causes alterations of the body's normal process's causing physical or mental changes.

Define: Substance

The generic term that includes alcohol and other drugs that may be legal or illegal.

Define: Dependency

A state in which a person relies upon a substance to feel normal to function as normal, this can be physical and/or psychological.

Where to go for help and advice:

Speak to your tutor/HoH/The Bridge
 Speak to an adult you trust



Talktofrank.com 03001236600
 Turningpoint.co.uk
 Childline.org.uk 0800 1111

Fearless.org – To anonymously report a crime

Drug	Analgic	Hallucinogen	Stimulant	Depressant
Caffeine			✓	
Cocaine			✓	✓
Heroin	✓			✓
Cannabis		✓		✓
Crack Cocaine			✓	
Amphetamines		✓	✓	
Ecstasy			✓	
Alcohol				✓
Inhalants		✓	✓	
Tobacco				✓
LSD		✓		
Magic Mushrooms		✓		
Steroids	✓			

Define: Possession

Being caught with a small amount of drugs that could reasonably be used by one person.

Define: Intent to Supply

Being stopped whilst holding drugs and the police have reasonable suspicions that you will share with others or sell.

Define: Supply

Being caught selling drugs or medicines to other people.

Class	Examples	Sentence for Possession	Sentence for Dealing
Class A	Ecstasy, LSD, heroin, cocaine, crack, magic mushrooms, amphetamines (if prepared for injection).	Up to seven years in prison or an unlimited fine or both.	Up to life in prison or an unlimited fine or both.
Class B	Amphetamines, Methylphenidate (Ritalin),	Up to five years in prison or an unlimited fine or both.	Up to 14 years in prison or an unlimited fine or both.
Class C	Tranquilizers, Cannabis, some painkillers, Gamma hydroxybutyrate (GHB), Ketamine.	Up to two years in prison or an unlimited fine or both.	Up to 14 years in prison or an unlimited fine or both.
Temporary Class	The government can ban new drugs for 1 year under a 'temporary banning order' while they decide how the drugs should be classified.	None, but police can take away a suspected temporary class drug	Up to 14 years in prison, an unlimited fine or both

These are the maximum sentences that could be imposed but there are a number of factors which will determine the sentence given if someone is charged and convicted of a drug offence. In most cases a first-time possession offence will lead to a caution and confiscation. A caution is not a criminal conviction, but it could be used as evidence of bad character if you go to court for another crime.

LGBTQ+ Terms

Recall: Lesbian

Refers to a woman who has a romantic and/or sexual orientation towards women. Some non-binary people may also identify with this term.

Recall: Gay

Refers to a man who has a romantic and/or sexual orientation towards men. Also a generic term for lesbian and gay sexuality - some women define themselves as gay rather than lesbian. Some non-binary people may also identify with this term'

Recall: Bi

Bi is an umbrella term used to describe a romantic and/or sexual orientation towards more than one gender.

Recall: Trans

An umbrella term to describe people whose gender is not the same as, or does not sit comfortably with, the sex they were assigned at birth.

Recall: Questioning

The process of exploring your own sexual orientation and/or gender identity.

Describe: Sexual orientation

A person's sexual attraction to other people, or lack thereof. Along with romantic orientation, this forms a person's orientation identity.

Define: Pan

Refers to a person whose romantic and/or sexual attraction towards others is not limited by sex or gender.

Describe: Sex

Assigned to a person on the basis of primary sex characteristics (genitalia) and reproductive functions. Sometimes the terms 'sex' and 'gender' are interchanged to mean 'male' or 'female'.

Describe: Gender Identity

A person's innate sense of their own gender, whether male, female or something else (see non-binary below), which may or may not correspond to the sex assigned at birth.

Define: Pronouns

Words we use to refer to people's gender in conversation - for example, 'he' or 'she' or 'they'.

Understand: Dead Naming

Calling someone by their birth name after they have changed their name. This term is often associated with trans people who have changed their name as part of their transition.

Define: Heterosexual/Straight

Refers to a man who has a romantic and/or sexual orientation towards women or to a woman who has a romantic and/or sexual orientation towards men.

Define: Homosexual

This might be considered a more medical term used to describe someone who has a romantic and/or sexual orientation towards someone of the same gender. The term 'gay' is now more generally used.

Define: Asexual

A person who does not experience sexual attraction. Some asexual people experience romantic attraction, while others do not. Asexual people who experience romantic attraction might also use terms such as gay, bi, lesbian, straight and queer in conjunction with asexual to describe the direction of their romantic attraction.

Define: Intersex

A term used to describe a person who may have the biological attributes of both sexes or whose biological attributes do not fit with societal assumptions about what constitutes male or female.

Intersex people may identify as male, female or non-binary.

Define: Non-binary

An umbrella term for people whose gender identity doesn't sit comfortably with 'man' or 'woman'.

Define: Gender Fluid

A person who feels as if their gender isn't fixed and someone who feels their gender identity changes.

Define: Ally

A (typically) straight and/or cis person who supports members of the LGBT community.

Define: Cisgender or Cis

Someone whose gender identity is the same as the sex they were assigned at birth. Non-trans is also used by some people.

Where to get more information:

Rainbow Club 050 Tuesday lunchtime






Surrey County Council
<http://switchboard.lgbt>



www.nhs.org
www.stonewall.org.uk
www.childline.org.uk 08001111

Year 9 Term 3 Buddhism

Key Words			
Buddha	An awakened or enlightened person	Jataka Tales	The Jataka Tales are stories about the previous lives of the Buddha
The Four Noble Truths	Dukkha, Samudaya, Nirodha, Magga (suffering, the cause of suffering, the end of suffering, the path to the end of suffering).	Kamma/karma	Literally 'action'. Deliberate actions that affect the believer's circumstances in this and future lives; cause and effect.
The Four Sights	Gautama's four encounters with illness, old age, death and a holy man	Meditation	A spiritual experience that opens a person up to the highest state of consciousness. One of the six perfections
Dukkha	Suffering; everything leads to suffering; unsatisfactoriness.	Nibanna/Nirvana	Literally 'blowing' out. To reach a state of perfect peace where the individual experiences liberation from the cycle of birth, death and rebirth.
The Eightfold Path	The fourth Noble Truth. Magga. The Middle Way. The way to wisdom; mental training and the way of morality (Eightfold Path). Eight stages to be practised simultaneously	Karma	Literally 'action'. Deliberate actions that affect the believer's circumstances in this and future lives; cause and effect.
Enlightenment	Wisdom or understanding enabling clarity of perception; this allows a Buddhist to be freed from the cycle of rebirth	Karuna Metta	Compassion or pity. Part of the spiritual path. Loving kindness. A pure love, which is not possessive and which does not seek to gain.

Key Information	
<p style="text-align: center;">The Early Life of the Buddha</p> 	<p>Birth: Lumbini, Nepal – born to a wealthy ruling family, walked and talked immediately and said 'No more rebirths have I', named Siddhartha Gautama</p> <p>Prophecy: A holy man prophesised that Siddhartha would become either a great ruler or a holy man</p> <p>Life of luxury: grew up in a palace and lived a luxurious life, protected from suffering by his father as he did not want Siddhartha to become a holy man</p> <p>Family: Siddhartha married his cousin Yasodhara and had a son, Rahul</p>
<p style="text-align: center;">The Four Sights</p> 	<p>Siddhartha grew up in a palace in a life of luxury and was shielded from the world. One day, aged 29, he left the palace with a friend, Channa to a city nearby. The four things he saw had a deep effect on his life. They were all about suffering (dukkha), that his father had tried to protect him from:</p> <p>Old Age: Siddhartha was shocked to see an old person for the first time</p> <p>Sickness: He was disturbed to see a sick person suffering.</p> <p>Death: This was the first time he encountered death and it shocked him but he also realised that it happens to everyone.</p> <p>Holy Beggar: This person inspired Siddhartha to go on a quest to discover why people suffered and how to stop suffering</p> <p>After seeing these four sights Siddhartha left the palace and following the Holy Beggar's example went to find the cure for suffering by living as an ascetic and meditating.</p>
<p style="text-align: center;">Enlightenment and The Eightfold Path</p> 	<p>Siddhartha lived an ascetic life, denying himself all pleasure, and meditated every day. After several years, he discovered that he was no closer to understanding and ending suffering. He stopped his fasting and decided to follow the 'middle way' between his life of luxury and his life of denial. He began to meditate under a tree and during the night he became enlightened. He understood three important things, one of which was the way/cure to end suffering: The Noble Eightfold Path.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The Eightfold Path consists of eight aspects that Buddhists can follow in order to achieve enlightenment.</p> <ol style="list-style-type: none"> 1. Right View 2. Right Intention 3. Right Speech 4. Right Action 5. Right Livelihood 6. Right Effort 7. Right Concentration 8. Right Mindfulness </div>
<p style="text-align: center;">Meditation</p> 	<p>Buddhist Beliefs:</p> <p>Compassion (karuna): helping someone in pain is better than doing the right thing and causing suffering</p> <p>Right Intention: your reasons are more important than your actions</p> <p>Rebirth and Karma: Our words, thoughts and deeds create energies which shape our future rebirths. We need to make sure these are positive</p> <p>Buddhists believe that life is special and must be protected, as this is the only way humans can achieve enlightenment. They say that rebirth is as rare as a single blind turtle swimming a huge ocean would surface with his head in a ring.</p>
<p style="text-align: center;">The Five precepts</p> 	<p>The Five Precepts are moral guidelines for living a good Buddhist life and lead to good karma:</p> <ol style="list-style-type: none"> 1. To not harming living things 2. To not take what is not freely given 3. No sexual misconduct 4. Refrain from speaking wrongly 5. To not take intoxicating substances

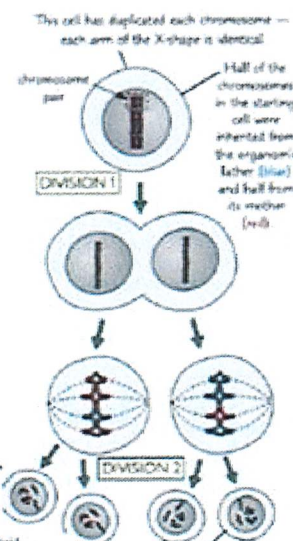
Meiosis is a type of cell division. In humans only happens in reproductive organs (ovaries and testes)

Cells divide by Meiosis to form gametes

Copies of the genetic information are made.

The cell divides **twice** to form **four daughter cells** each with half the number of chromosomes

All **haploid** gametes are **genetically different** from each other.



Gamete	Sex cells produced in meiosis.
Zygote	Single cell that results from fusion of egg and sperm cell.
Chromosome	A long chain of DNA found in the nucleus.
Gene	Small section of DNA that codes for a particular protein.
Allele	Alternative forms of the same gene.
Dominant	A type of allele — always expressed if only one copy present and when paired with a recessive allele.
Recessive	A type of allele — only expressed when paired with another recessive allele.
Homozygous	Pair of the same alleles, dominant or recessive.
Heterozygous	Two different alleles are present 1 dominant and 1 recessive.
Genotype	Alleles that are present for a particular feature e.g. Bb or bb
Phenotype	Physical expression of an allele combination e.g. black fur, blonde hair, blue eyes.

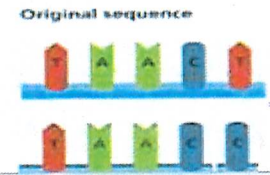


B3 GENETICS

Dominant and recessive allele combinations

Dominant	Recessive
Represented by a capital letter e.g. B.	Represented by a lower case letter e.g. b.

3 possible combinations:
 Homozygous dominant BB
 Heterozygous dominant Bb
 Homozygous recessive bb



A **mutation** is any change on the DNA sequence

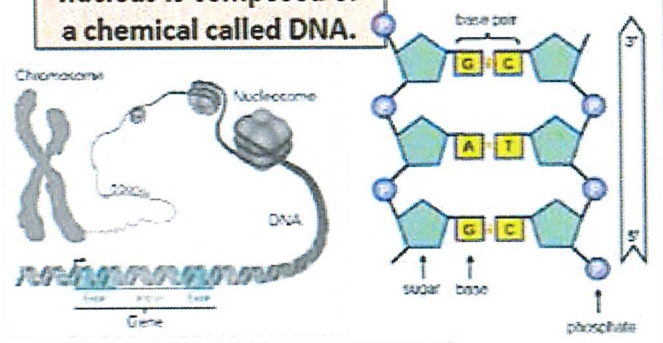
DNA structure

Polymer made up of two strands forming a double helix.

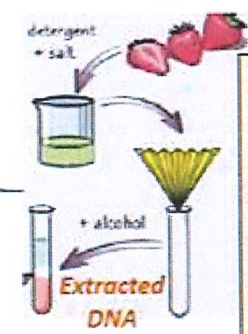
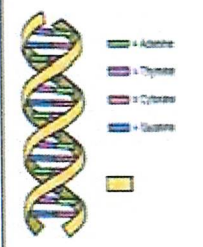
called chromosomes. A gene is a small section of DNA on a chromosome. Each gene codes for a sequence of amino acids to make a specific protein.

In DNA the complementary strands C, A, T, G always link in the same way. C always linked to G on the opposite strand and A to T. A and T and G and C are held by hydrogen bonds

Genetic material in the nucleus is composed of a chemical called DNA.



DNA is polymer made from four different nucleotides. Each nucleotide consists of a common sugar, phosphate group and one of 4 different bases A, C, G & T



Extracting DNA

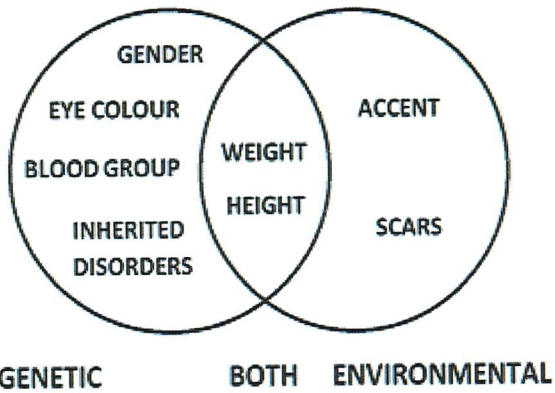
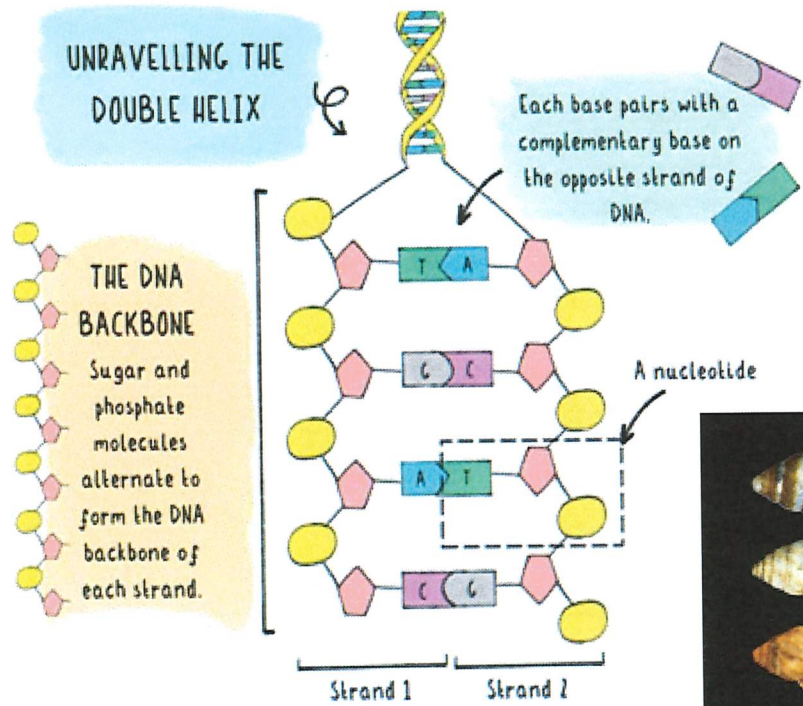
DNA can be extracted from fruit

Dissolve salt and washing up liquid together with a mashed up sample of fruit (kiwi fruit is good) and place in a 60°C water bath for 15 minutes.

Filter and add protease solution to the filtrate in a boiling tube. Tilt the boiling tube and carefully add ice cold ethanol.

The white layer that forms at the interphase is DNA and can be pulled out on a glass rod

UNRAVELLING THE DOUBLE HELIX



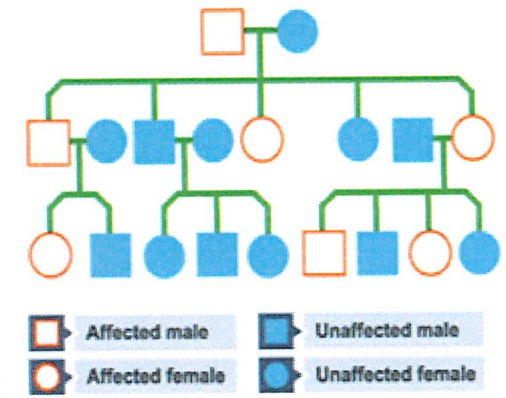
All species show a lot of natural variation. Notice how the phenotypes for the shell colour is different in these individual sea snails.



The Human Genome Project

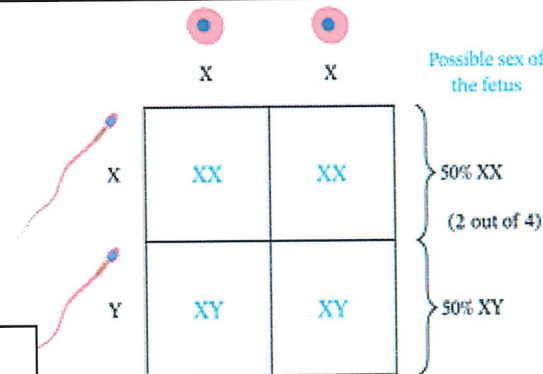
The genome of an organism is the entire genetic material of that organism. Each of your diploid body cells (not sperm, eggs or red blood cells) has one copy of your entire genome.

The Human Genome Project started in 1990 and was completed in 2003. Hundreds of scientists from different universities all over the world collaborated together to determine the sequence of base pairs that made up the genome of a random man and woman. There are more than three billion of these!



Uses of the Human Genome Project:

- Search for genes linked to different types of disease
- Understand inherited disorders and their treatment
- Trace human migration patterns from the past



All phenotypes are produced by random mutations. Most mutations have no effect on phenotype, some mutations can have a small effect and, rarely, a single mutation will significantly affect a phenotype.

YEAR 9 CHEMISTRY EXTRACTING METALS



Please
Stop
Calling
Me
A
Careless
Zebra
Instead
Try
Learning
How
Copper
Saves
Gold

increasing reactivity

potassium
sodium
calcium
magnesium
aluminium
carbon
zinc
iron
tin
lead
hydrogen
copper
silver
gold
platinum

More reactive than carbon
Extracted by electrolysis

Less reactive than carbon
Extracted by reduction

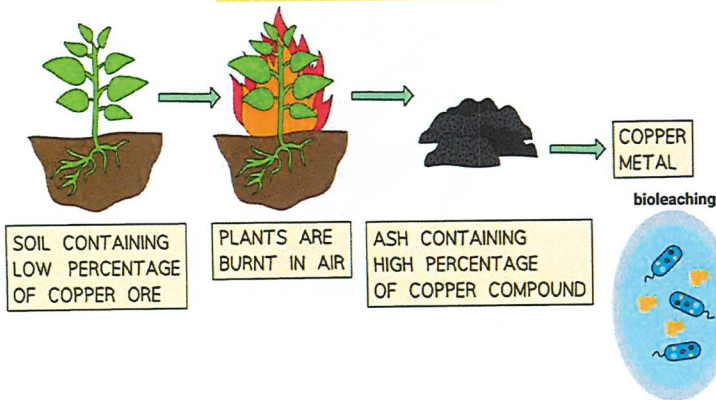
Very unreactive
Found in their native state

Metal	Reaction with water	Reaction with dilute acids
Potassium	Violent with cold water	Violent
Sodium		
Calcium	Slow with cold water Rapid with steam	Rapid
Magnesium		
Aluminium	Usually no reaction	
Zinc		Slow
Iron	Rusts slowly	
(Hydrogen)		
Copper		
Silver	No reaction	No reaction
Gold		

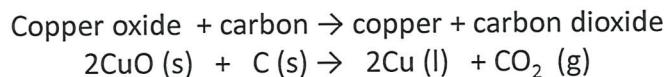
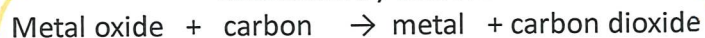
Keywords

Ore	A rock that contains enough of a metal or metal compound to make extracting the metal worthwhile.
Low-grade ore	Contain a small percentage of the metal or its compound
High-grade ore	Contain a larger percentage of the metal or its compound
Life-cycle assessment	'Cradle to grave' analysis of the impact of a manufactured product on the environment

Phytomining

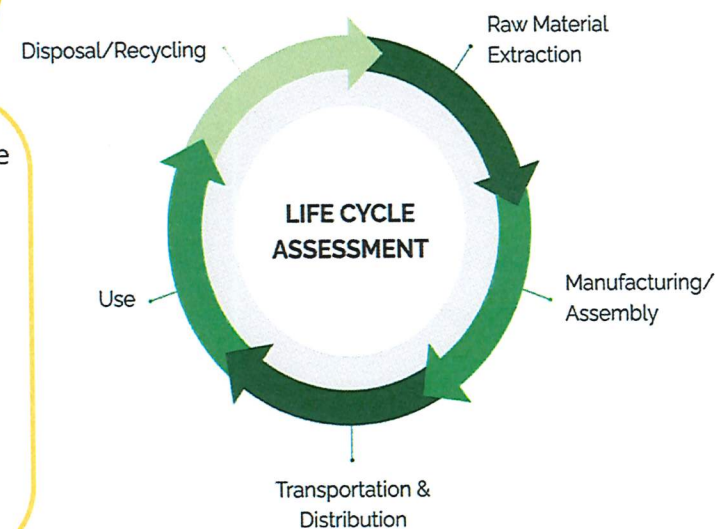


Reduction by carbon:



O- oxidation
I- is
L- loss
R- reduction
I- is
G- gain

of electrons



YEAR 9 CHEMISTRY GROUPS IN THE PERIODIC TABLE

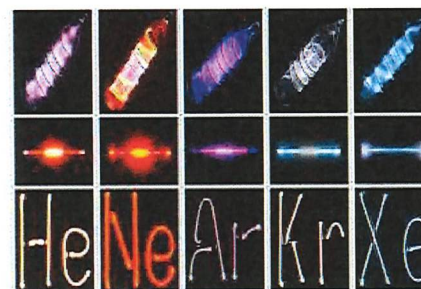
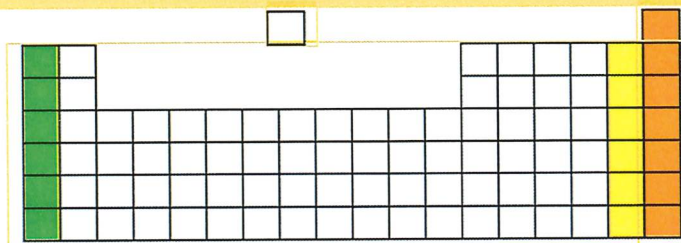
Group 1 - Alkali metals

Li
Na
K
Rb
Cs

More reactive down group

Because:
More electron shells

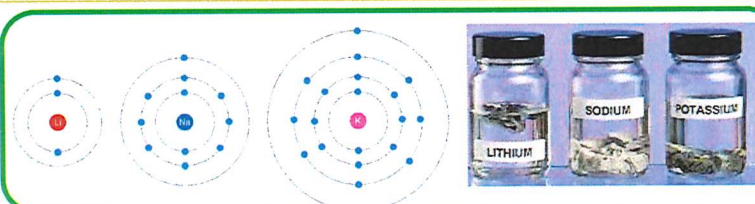
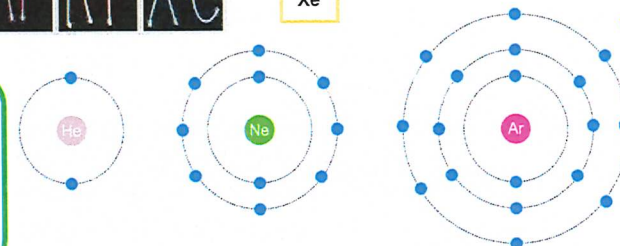
Outer shell electron easier to remove



Group 0- Noble gases

He
Ne
Ar
Kr
Xe

X Unreactive
Full outer shell



Alkali metals have characteristic properties because of the single electron in their outer shell.

- Alkali metal + water → alkali metal hydroxide + hydrogen
- Alkali metal + chlorine → Alkali metal chloride
- Alkali metal + oxygen → Alkali metal oxide

Trends in Group 1

Trends are patterns of behaviour in **physical** or **chemical** properties
Following these trends seen in lithium, sodium and potassium, we can say that:

Rubidium, caesium and francium will react even more vigorously with air and water than the first three alkali metals

Of the alkali metals, lithium is the **least** reactive (as it is at the top of group 1) and francium would be the **most** reactive (as it's at the bottom of group 1)

Using the information given in the trends we would predict that **rubidium**:

- would be a **soft grey solid**
- would appear **shiny when freshly cut**
- would be **more dense** than potassium ($> 0.86 \text{ g cm}^{-3}$)
- would have a **lower melting point** than potassium ($< 63.5 \text{ }^\circ\text{C}$)

Group 7 - Halogens

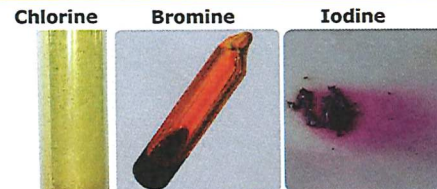
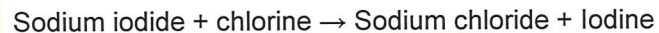
F
Cl
Br
I
At

Less reactive down group

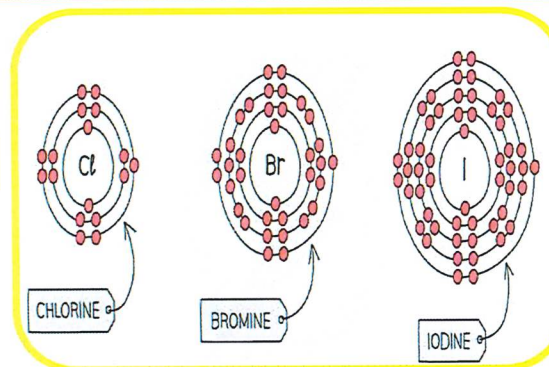
Because:
More electron shells

Harder to gain electron

Displacement reactions:
More reactive halogen displaces less reactive



As with other groups, there are trends in the physical properties of the noble gases
The noble gases have very **low melting** and **boiling** points
They show an **increase** in boiling point as we move **down** the group due to an increase in the **relative atomic mass** (the atoms get larger as you move down the group).



The periodic table of the elements

1												3	4	5	6	7	0											
												1 H hydrogen 1						4 He helium 2										
		Key relative atomic mass atomic symbol name atomic (proton) number										11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10											
7 Li lithium 3		9 Be beryllium 4												27 Al aluminum 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18									
23 Na sodium 11		24 Mg magnesium 12		39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36							
85 Rb rubidium 37		88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54										
133 Cs cesium 55		137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86										

* The elements with atomic numbers from 58 to 71 are omitted from this part of the periodic table.

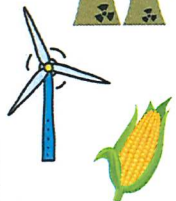
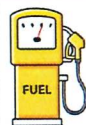
The relative atomic masses of copper and chlorine have not been rounded to the nearest whole number.

Summer Term - Year 9 Physics: Topic 3 Energy Resources and Numeracy

Energy Resources: What are they?

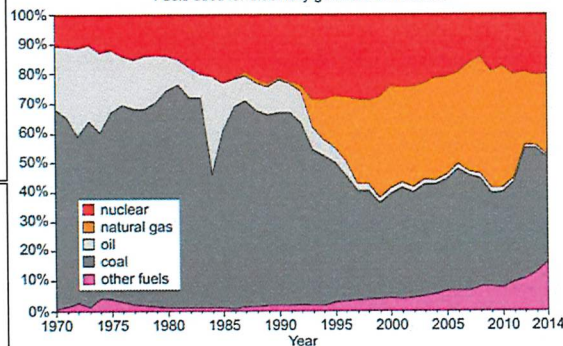
The main energy sources available on earth are:

- **Fossil fuels – Non renewable**
(Coal, oil and natural gas dug up from underground. Used in transport as petrol and diesel, gas used to heat homes and for cooking)
- **Nuclear fuel – Non renewable**
(Radioactive decay of uranium releases a lot of energy per gram. Used in spacecraft as it is lightweight)
- **Bio-fuel – Renewable**
(Fuel made from plants or animal waste)
- **Wind – Renewable**
(Wind turbines spin when the wind blows)
- **Hydroelectricity – Renewable**
(Water trapped in high reservoirs spins a turbine as it falls down.)
- **Tides – Renewable**
(Huge dams built across rivers have turbines that turn when the tide moves.)
- **Sun – Renewable**
(Convert solar energy to useful energy. Can be used to heat water)



Energy Resource	Advantages	Disadvantages
Fossil Fuels	Quick and cheap	CO ₂ released causing global warming Sulphur dioxide released causing acid rain Will run out one day
Nuclear	Energy dense No CO ₂ produced	Long lasting radioactive waste Risk of nuclear disaster Expensive to decommission
Biofuel	Carbon neutral (almost) Uses up uneaten crops and animal waste	Requires lots of land Causes increased food prices
Wind	No CO ₂ produced	Not always available Lots of turbines needed Spoil landscape
Hydroelectricity	Lots of energy produced No CO ₂ produced	Spoil landscape Destroy habitat by flooding
Tidal	Quick production Huge amounts of energy produced No CO ₂ produced	Destroy important habitats
Sun	No CO ₂ produced	Not always available Need lots of space Not suitable for all climates

Fuels used for electricity generation in the UK



Data

You will be asked to analyse data in the form of graphs.

- Natural gas has been used for the past 30 years.
- Renewable fuels are increasing but only make up about 20% of all energy in the UK

Numeracy Corner

Percentages

To find a percent: divide the number by the total then multiply by 100.

Eg: 336 villages out of 756 have decided to start using wind power.

$$\frac{336}{756} \times 100 = 44.4\%$$

Averages

To find an average: add up all the numbers and divide by how many there are.

Eg: Aldershot's Wind turbine has a power of 13 megawatts.

Ash's wind turbine has a power of 10.5 megawatts

Farnborough's wind turbine has a power of 12.5 megawatts

$$\text{Average} = \frac{13 + 10.5 + 12.5}{3} = \frac{36}{3} = 12 \text{ megawatts}$$

Decimal places

Count the number of decimal places

If the next number is 5 or bigger then round up

If the next number is 4 or less then keep the number.

Eg: 34.82J to 1 decimal place = 34.8J

Eg: 87.9537m/s to 3 decimal places = 87.954m/s

Significant Figures

This how many numbers you keep before the rest have to be zero

Eg: 95,613 to 2 significant figures = 96,000

Eg: 102,773 to 3 significant figures = 103,000

Eg: 0.04871 to 1 significant figure = 0.05

Standard Form

Standard form is a way to write really big number or small numbers

The number on the power tells you how many decimal places to shift.

Eg: $7.1 \times 10^5 = 710000$ (decimal shifted 5 places bigger)

Eg: $6 \times 10^9 = 6000,000,000$ (decimal shifted 9 places bigger)

Eg: $9.5 \times 10^{-4} = 0.00095$ (decimal shifted 4 places smaller)

De costumbre *As usual*

Identity and Culture



¿Qué te gusta comer? ¿Por qué?

What do you like to eat? Why?

Me encanta la comida! Normalmente, como algo dulce para el desayuno como cereales con leche. Pues, tomo un bocadillo con queso para el almuerzo. Por la noche, prefiero comer pollo o carne con patatas fritas y unas verduras porque es muy sabroso. A veces tomo pastel y me gusta helado con fresas.

¿Has probado la comida española? ¿Te gusta? ¿Por qué?

Have you tried Spanish food? Did you like it? Why?

Sí! He probado la paella en un restaurante español y fue muy picante pero a mí me gustó. También he probado la horchata con fartones cuando fui de vacaciones a Valencia. Fue un sabor muy extraño.

¿Prefieres cenar en casa o en un restaurante? ¿Por qué?

Do you prefer to dine at home or in a restaurant? Why?

Normalmente prefiero comer en casa porque es más económico pero si tuviera bastante dinero, comería en restaurantes al menos dos veces a la semana porque la comida es tan rica y hay más variedad que comer en casa.

Háblame de lo que hiciste en un día especial reciente

Tell me about what you did during a recent special day

Recientemente, celebré Pascua con mi familia y fue muy especial. Por la mañana, nos levantamos muy temprano y buscamos huevos en el jardín. Pues comimos una cena de cordero asado con verduras - ¡qué delicioso!

¿Cómo vas a celebrar tu próximo cumpleaños?

How are you going to celebrate your next birthday?

El año que viene, tengo la intención de celebrar mi cumpleaños con mis amigos al parque o a la playa con una barbacoa si hace buen tiempo. Pues, celebraré con mi familia en casa con un pastel grande - ¡ñam ñam!

¿Has asistido a un festival de música? ¿Puedes describirlo?

Have you been to a music festival? Can you describe it?

Sí, el año pasado, fui al festival de Reading con mi mejor amiga y fue interesante. Vi muchos grupos y mi artista preferida fue inolvidable. Desafortunadamente, los servicios fueron asquerosos.

Háblame de lo que hiciste por Navidad el año pasado

Tell me about what you did for Christmas last year?

El año pasado, celebré Navidad con mi familia en casa. La Nochebuena, fuimos a la iglesia para un servicio donde cantamos villancicos. Pues el Día de Navidad, abrimos los regalos por la mañana y cenamos pavo por la noche. También comimos muchos dulces navideños.

¿Cuál es la fiesta más importante, en tu opinión?

What is the most important festival, in your opinion?

Desde mi punto de vista, la fiesta más importante es la Nochevieja porque es una fiesta para todos cuando podemos crear resoluciones de año nuevo y celebrar lo que logramos también.

¿Crees que las fiestas tradicionales son importantes?

Do you think that traditional celebrations are important?

A mi modo de ver, las fiestas tradicionales son tan importantes ya que nuestra cultura necesita estas fiestas. Son una fuente de felicidad y podemos pasar tiempo todos juntos, lo que es esencial para nuestras comunidades.

Háblame de una fiesta a la que te gustaría asistir

Tell me about a festival that you would like to attend

Si tuviera bastante dinero, me gustaría visitar Sevilla durante Pascua porque aprendí mucho sobre esta fiesta y me parece fascinante ver los desfiles.

Question you will ask:

Fancy Phrases:

Qualifiers	UN POCO <i>a bit</i> MUY/MUCHO <i>very/a lot</i> BASTANTE <i>quite</i> DEMASIADO <i>too/too much</i> ALGO <i>somewhat</i>
Adverbs	TODOS LOS DÍAS <i>every day</i> SIEMPRE <i>always</i> NUNCA <i>never</i> A VECES <i>sometimes</i> CONSTANTEMENTE <i>constantly</i>
Connectives	A PESAR DE TODO <i>nonetheless</i> NO OBSTANTE <i>however</i> POR ESO <i>because of that</i> GRACIAS A <i>thanks to</i> POR EJEMPLO <i>for example</i>
Comparisons Superlatives	MÁS/MENOS QUE <i>more/less than</i> MEJOR/PEOR QUE <i>better/worse than</i> EL MÁS/EL MENOS <i>the most/least</i> EL MEJOR/PEOR <i>the best/worst</i> LO QUE MÁS/MENOS ME GUSTA <i>what I like the most/least</i>
Sequencers	PRIMERO <i>firstly</i> LUEGO <i>then</i> ENTONCES <i>then</i> DESPUÉS <i>afterwards</i> FINALMENTE <i>finally</i>
Negatives	NUNCA <i>never</i> YA NO <i>no longer</i> NO... NI... NI <i>neither... nor</i> TAMPOCO <i>neither</i> JAMÁS <i>never, ever</i>
Opinions with reasons	Creo que... ya que <i>I believe that... as</i> Pienso que... puesto que <i>I think that... since</i> Opino que... aunque <i>I think that... although</i> Me parece que... porque <i>it seems to me that... because</i> Estoy convencido de que... dado que <i>I am convinced that... given that</i>

Time expressions	EL AÑO PASADO <i>last year</i> HACE DOS AÑOS <i>two years ago</i> CUANDO ERA PEQUEÑO/A <i>when I was little</i> EL AÑO QUE VIENE <i>next year</i> DENTRO DE DOS AÑOS <i>in two years' time</i>
Variety of pronouns	A ANA LE GUSTA <i>Ana likes</i> LO QUE MÁS/MENOS ME GUSTA <i>What I like the most/least</i> LO BUENO/MALO <i>the good/bad thing</i> LO MEJOR/LO PEOR <i>the best/worst</i> NOS LLEVAMOS BIEN/MAL <i>we get on well/badly</i>
Variety of persons	TIENE <i>she/he/it has</i> HACE <i>she/he/it does/makes</i> ESTÁ <i>Is (location)</i> VISITAMOS <i>we visit/visited</i> LO PASAMOS BIEN <i>we have/had a good time</i>
Infinitive phrases	QUIERO <i>I want to</i> TENGO QUE <i>I have to</i> PUEDO <i>I can</i> SOLÍA <i>I used to</i> PREFIERO <i>I prefer</i>
Preterit	FUI <i>I went</i> FUI <i>I was</i> TUVE <i>I had</i> HICE <i>I did/made</i> VISITÉ <i>I visited</i>
Imperfect	IBA <i>I used to go</i> ERA <i>I used to be</i> TENÍA <i>I used to have</i> HACÍA <i>I used to do/make</i> VISITABA <i>I used to visit</i>

Immediate future	VOY A IR <i>I'm going to be</i> VOY A SER <i>I'm going to be</i> VOY A TENER <i>I'm going to be</i> VOY A HACER <i>I'm going to do</i> VOY A VISITAR <i>I'm going to visit</i>
Simple future	IRÉ <i>I will go</i> SERÉ <i>I will be</i> TENDRÉ <i>I will have</i> HARÉ <i>I will do/make</i> VISITARÉ <i>I will visit</i>
Conditional	IRÍA <i>I would go</i> SERÍA <i>I would be</i> TENDRÍA <i>I would have</i> HARÍA <i>I would do/make</i> VISITARÍA <i>I would visit</i>
Si clauses	Si ganara la lotería, iría a Nueva York <i>If I won the lottery, I would go to New York</i> Si pudiera, trabajaría de médico <i>If I could, I would work as a doctor</i> Si pudiera, estudiaría español en la universidad <i>If I could, I would study Spanish at university</i> Si fuera rico/a, compraría una mansión <i>If I were rich, I would buy a mansion</i> Si tuviera dinero, viviría en España <i>If I had money, I would live in Spain</i>
Subjunctive	OJALÁ PUDIERA <i>I wish I could</i> OJALÁ HUBIERA <i>I wish there were</i> CUANDO SEA MAYOR <i>when I am older</i> NO CREO QUE SEA <i>I don't think it is</i> PUEDE QUE TENGA <i>I/it may have</i>
Idiom	ES UN SOL <i>he/she is a star</i> HABLANDO CON LA MANO EN EL CORAZÓN <i>being honest</i> ESTOY EN MI SALSA <i>I am in my element</i> ME HACE ILUSIÓN <i>I am excited about</i> CUESTA UN OJO DE LA CARA <i>it's expensive</i>

TEXTILES

Designing your tote bag:

I have done the following:

- ✓ Planned 2 x designs following the space theme.
- ✓ Added labels to show different techniques.
- ✓ Included colour on your favourite/chosen design.
- ✓ Annotated with a statement of intent to show how my idea links to artist research and techniques explored.

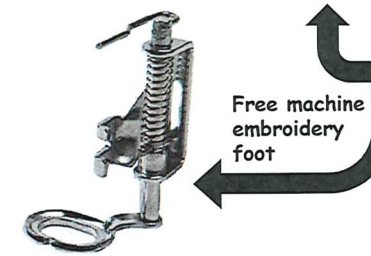


Applique

The process of decorating the surface of a piece of fabric using other, cut out, pieces of fabric.

These are usually arranged to form an image. Fabric can be hand or machine stitched together.

Challenging ways of doing this would be to use embroidery stitches or machine embroidery.



Free machine embroidery foot

Free machine embroidery

This is a process of using a sewing machine to attach fabric details, draw or write with.

A different foot is used, the spring on the foot allows it to bounce.

The feed dogs are lowered which prevents the sewing machine from gripping to the fabric.

Tips:

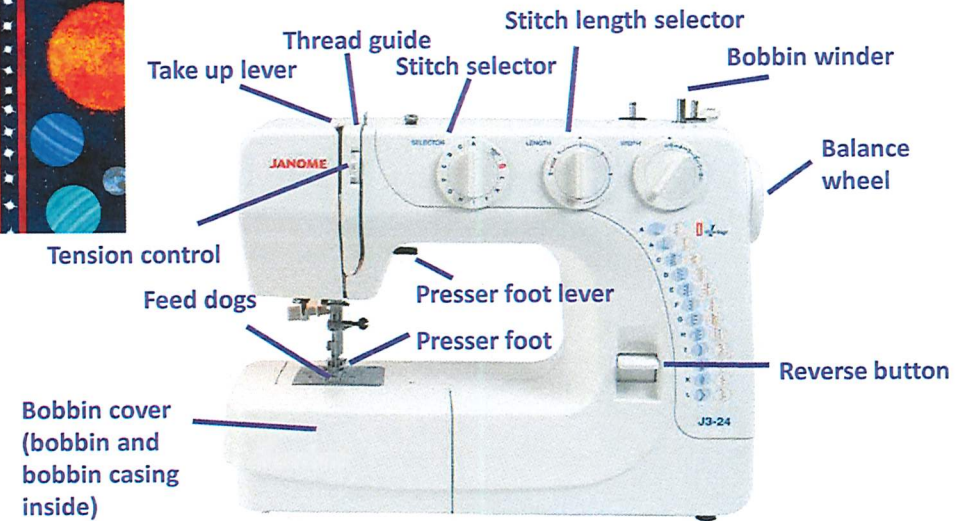
You must have really fast foot and very slow hands to control your embroidery.

Sewing machine settings:

Stitch length - 0

Stitch style - A

Tension - lower the number if the bobbin is showing through.



The first part of the document discusses the importance of maintaining accurate records in a business setting. It highlights how proper record-keeping can help in decision-making, legal compliance, and financial management. The text emphasizes that records should be organized, up-to-date, and easily accessible.

Next, the document addresses the challenges of data management in the digital age. It notes that while digital storage offers convenience, it also introduces risks such as data loss, security breaches, and information overload. Solutions like cloud storage, encryption, and regular backups are suggested to mitigate these risks.

The third section focuses on the role of records in legal and regulatory contexts. It explains that businesses must adhere to various laws and regulations that require the retention of specific records for certain periods. Failure to do so can result in penalties and legal consequences.

Finally, the document concludes by stressing the long-term value of a well-maintained record system. It suggests that businesses should invest in training and technology to ensure their record-keeping practices are efficient and effective. A robust record system is not just a compliance requirement; it's a strategic asset.

In conclusion, the document provides a comprehensive overview of record management. It covers the basics of record-keeping, the challenges of digital data, the legal implications, and the strategic benefits of a well-organized system. The key takeaway is that records are a vital part of any business's infrastructure, and investing in their proper management is essential for long-term success.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The text suggests that a systematic approach to record-keeping is essential for identifying trends and making informed decisions.

Next, the document addresses the issue of budgeting. It states that a well-defined budget is crucial for controlling costs and maximizing resources. By setting clear financial goals and allocating funds accordingly, organizations can avoid overspending and ensure that they are meeting their obligations. The text provides several tips for creating an effective budget, such as reviewing it regularly and adjusting it as needed.

The third section focuses on the importance of regular financial reviews. It explains that periodic assessments of the financial health of the organization allow management to spot potential problems early and take corrective action. This process involves comparing actual performance against the budget and identifying areas where adjustments may be necessary. The text stresses that these reviews should be conducted in a transparent and collaborative manner.

Finally, the document concludes by highlighting the role of technology in modern financial management. It notes that many organizations now use specialized software to streamline their accounting processes, reduce errors, and improve efficiency. While technology is a valuable tool, it is also important to ensure that the data is secure and that users are properly trained to use the systems effectively.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses and income. The document provides a detailed explanation of how to categorize these transactions and how to use the accounting cycle to ensure that all entries are properly recorded and balanced.

The second part of the document focuses on the preparation of financial statements. It outlines the steps involved in calculating the net income or loss for a period and how to present this information in a clear and concise manner. The document also discusses the importance of comparing the current period's results with those of the previous period to identify trends and potential areas of concern.

Finally, the document addresses the issue of closing the books at the end of the accounting period. It explains how to transfer the balances of the temporary accounts to the permanent accounts and how to ensure that the books are closed in accordance with the applicable accounting standards. The document concludes by emphasizing the importance of regular audits and reviews to ensure the accuracy and reliability of the financial information.

Notes

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