



ASH MANOR SCHOOL
Aspire & Achieve

Year 9 Summer Term Knowledge organiser

Name:

Tutor group:

Tutor:

Tutor room:

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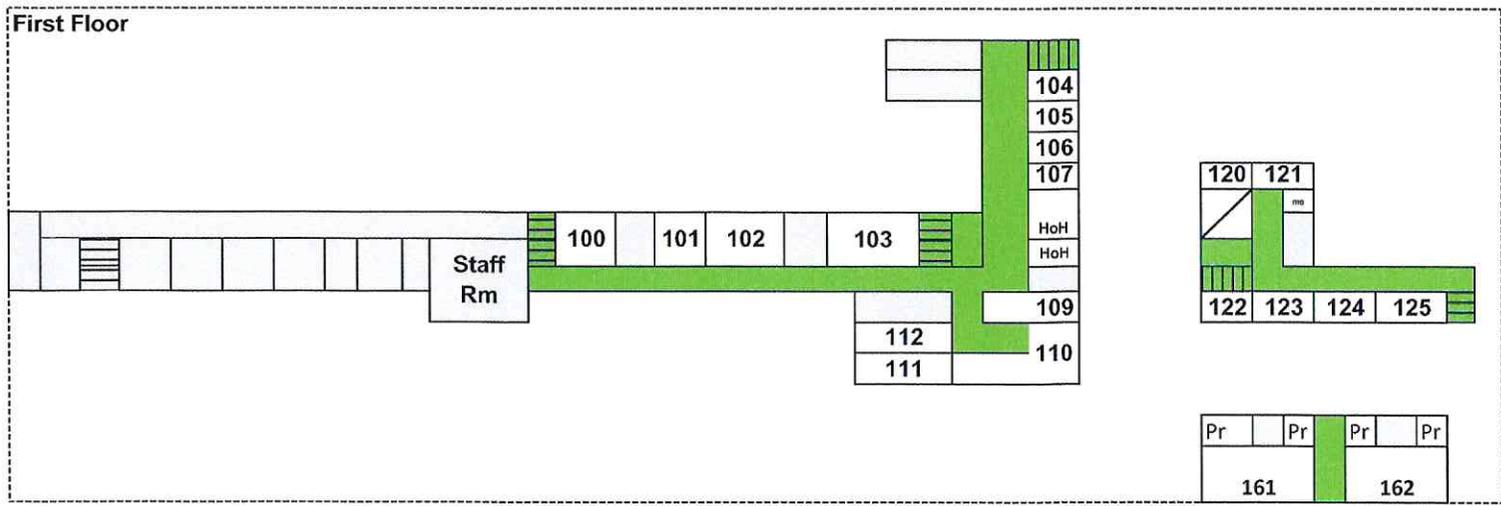
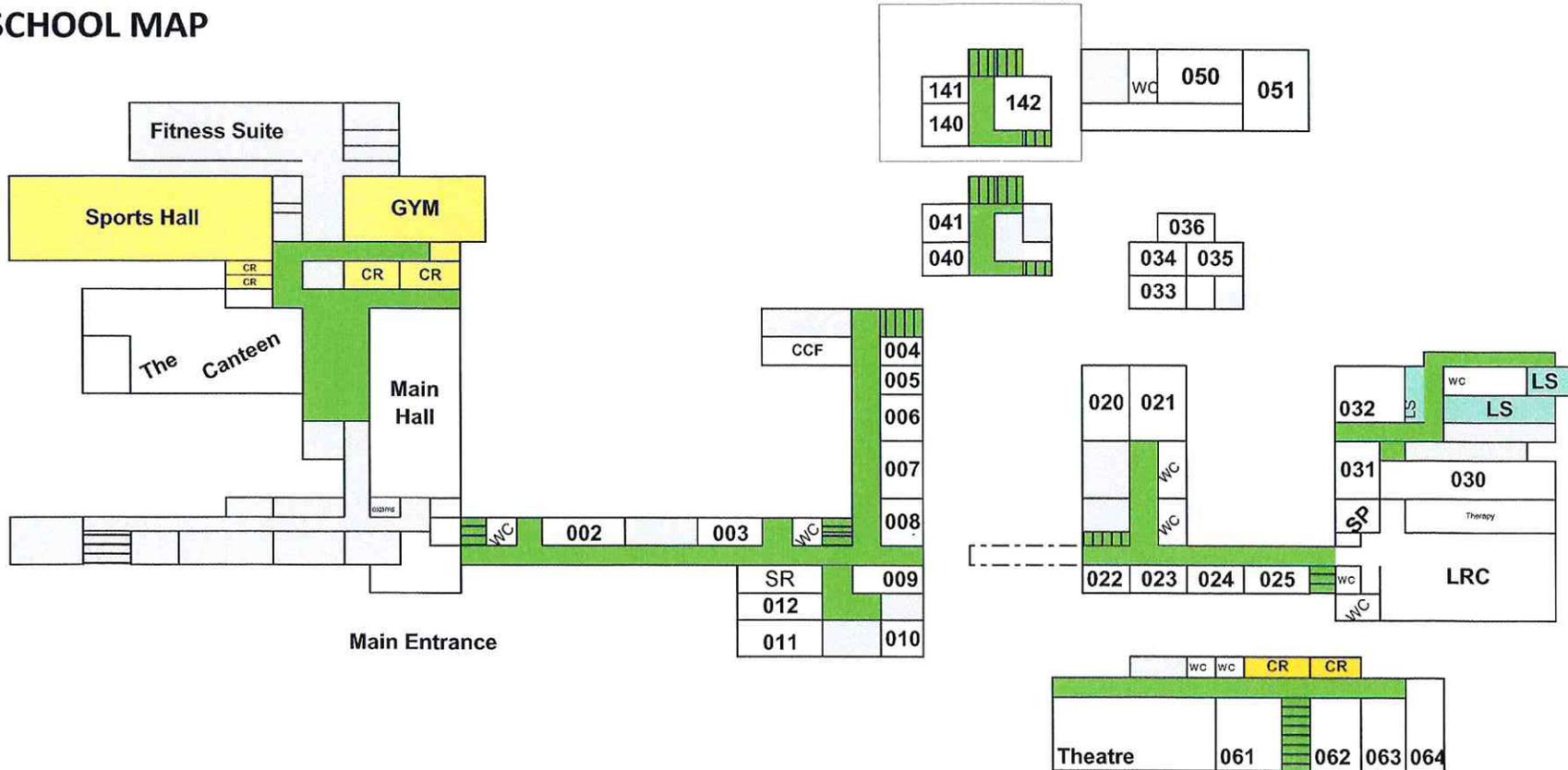
Key School information

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: 01/09/21 to 17/12/21 Y8-11: 02/09/21 to 17/12/21
Half term	25/10/21 to 29/10/21
Spring term	04/01/22 to 01/04/22
Half term	14/02/22 to 18/02/22
Summer term	19/04/22 to 15/07/22 INSET: 27/06/22
Half term	30/05/22 to 03/06/22

Important IT details	
Username	
Password reminder	

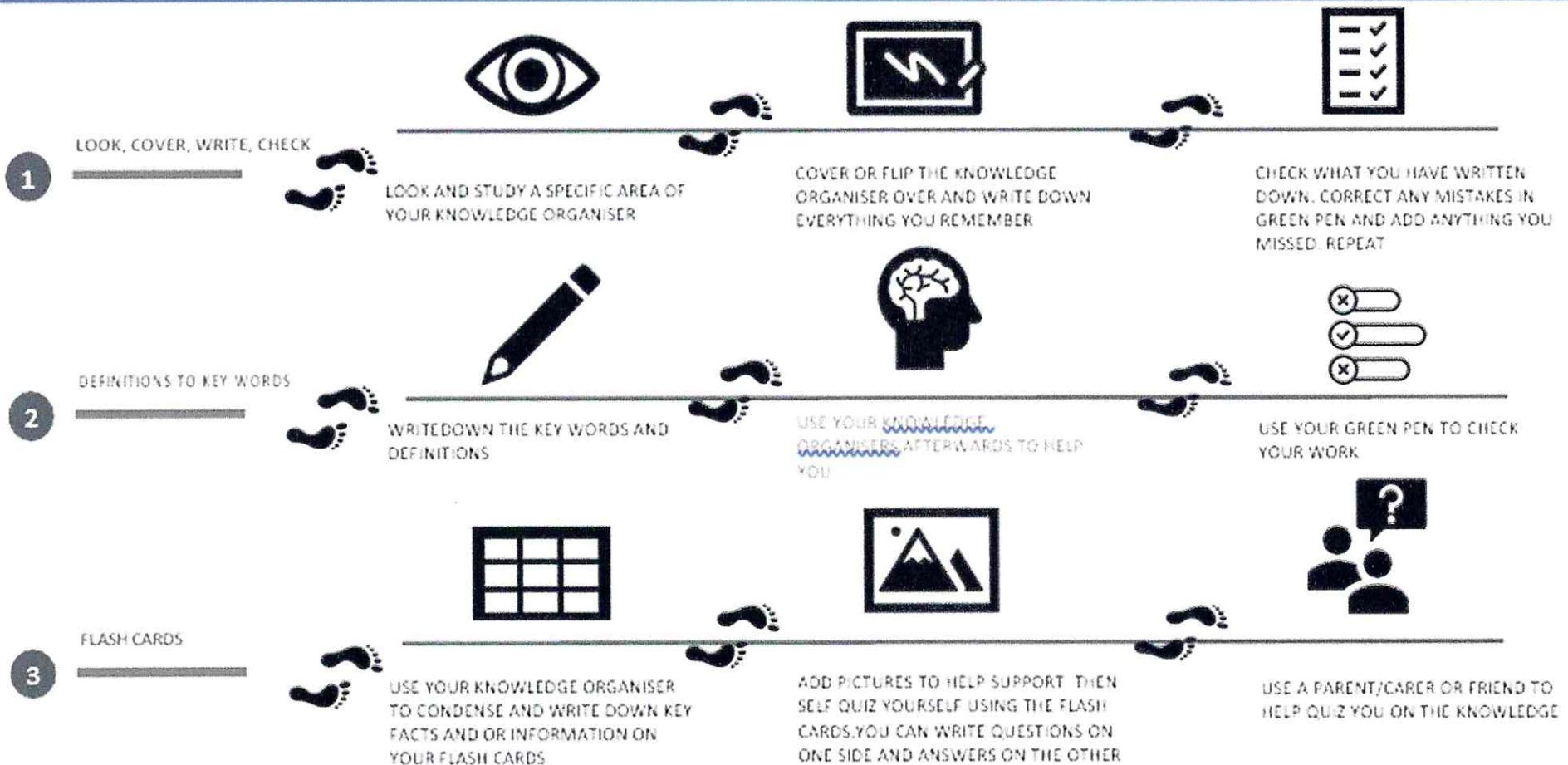
SCHOOL MAP



	Non student areas
WC	Toilet
LRC	Library
CR	Changing room
CCF	Combined Cadet Force
SR	Student Reception
LS	Learning Support
SP	The Sphere
HOH	Head of House office
PR	Practice room

How to use Knowledge Organisers – a step by step guide

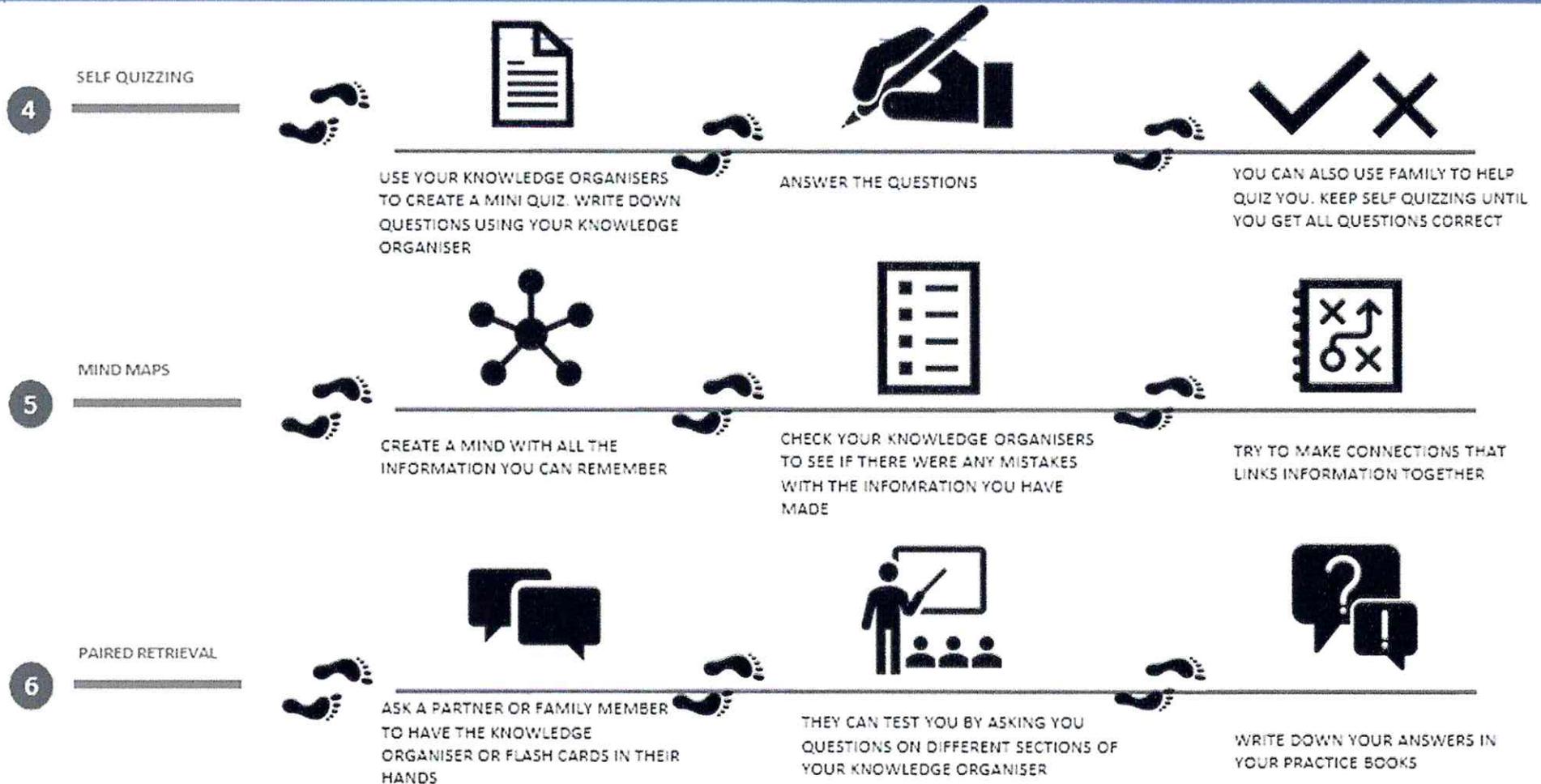
Knowledge organisers contain critical knowledge you must know. This will help you recap, revisit and revise what you have learnt in lessons in order to remember this knowledge for the long term. You must have this for every lesson – it is part of your equipment.



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

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Art

Artist Research

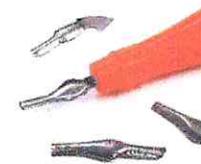
I have done the following:

- ✓ Written relevant facts about the artist - minimum of 3.
- ✓ Included a bold title in an appropriate style to the artist.
- ✓ Included images of the artist's work - minimum of 2.
- ✓ Used appropriate colours in your presentation.
- ✓ Added your own copy of the artists work.
- ✓ Considered the layout of my page before sticking it down.

Key words:

Printing
Line
Texture
Form
Mark Making
Roller
Ink
Lino Cutter

Etching
Registering Prints
Indirect Printing
Direct Printing
Shape
Blending
Negative Space
Tonal Range



Lino cutter



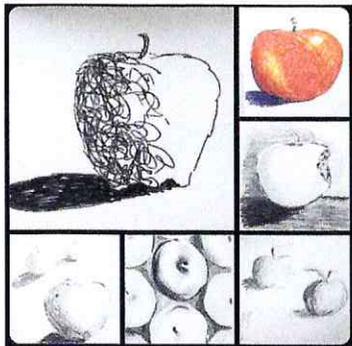
Lino print

Lino printing

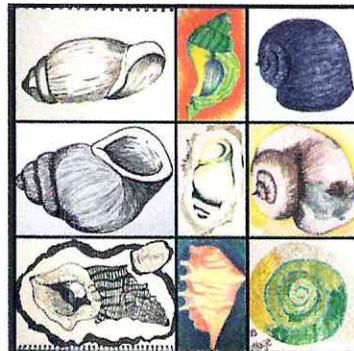
Draw your design on paper and then on the lino. Cut your lino using a lino cut to remove areas you do not want printed. Ink up you lino with a roller and print on to paper.

AQA GCSE Assessment Objectives - you will be marked on each for your coursework

AO1 (24)	AO2 (24)	AO3 (24)	AO4 (24)
Develop your ideas through investigating artists, designers and other appropriate sources. Demonstrate critical understanding of sources.	Refine your work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.	Record your ideas, observations and insights that are relevant to your project intentions as work progresses. Annotate work and include drawings within your sketchbook.	Present a personal and meaningful response that realises your project intentions and demonstrates understanding of visual language.



Mark Making



Media Experiments

Grid drawing

- Carefully measure to get straight lines - line it up with the edge of the paper.
- Add letters across the top and numbers down the side to use as coordinates.

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.



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

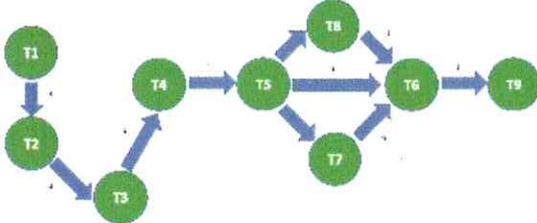
User Requirements	<ul style="list-style-type: none"> • What the client expects from the final product • The project manager refers to them to monitor the project
Success Criteria	<ul style="list-style-type: none"> • Used to determine if the project is successfully completed • Used in phase reviews • 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



Knowledge, understanding and skills for performance

Year 9
Term
3

Expressive Skills

Projection
Focus
Spatial awareness
Facial expressive
Phrasing
Musicality
Sensitivity to other dances
Communication of choreographic intent

Physical Skills

Posture
Alignment
Balance
Coordination
Control
Flexibility
Mobility
Strength
Stamina

Technical Skills

Action
Space
Dynamics
Relationships
Timing
Rhythmic content
Moving in a stylistically accurate way

Mental Skills

Prep for performance:
Systematic repetition
Mental rehearsal
Rehearsal discipline
Planning of rehearsal
Response to feedback
Capacity to improve

During performance:
Movement memory
Commitment
Concentration
Confidence

The GCSE Dance Anthology provides the focus for learning how to critically appreciate professional set works. The anthology contains the following professional set works:

Dance work	Dance company	Choreographer
<i>Artificial Things</i>	Stopgap Dance Company	Lucy Bennett
<i>A Linha Curva</i>	Rambert Dance Company	Itzik Galili
<i>Infra</i>	The Royal Ballet	Wayne McGregor
<i>Shadows</i>	Phoenix Dance Theatre	Christopher Bruce
<i>Within Her Eyes</i>	James Cousins Company	James Cousins
<i>Emancipation of Expressionism</i>	Boy Blue Entertainment	Kenrick H2O Sandy

DANCE

Drama: Macbeth Knowledge Organiser

SKILLS

Physical	Vocal	Spatial
<p>Body Language</p> <ul style="list-style-type: none"> Mannerisms Posture Gesture Gait <p>Facial Expression</p> <ul style="list-style-type: none"> Emotion Eyes Eyebrows Mouth 	<p>Tone</p> <ul style="list-style-type: none"> Volume Accent Pitch Pace Pause Emphasis 	<ul style="list-style-type: none"> Proxemics Levels Choreography Kinaesthetic Spatial Relationship Staging Blocking

How can we analyse the skills being used in a live performance?

When delivering the line "is this a dagger I see before me?" the actor playing Macbeth used their **physical/ vocal skills** by

_____.

This showed the audience _____.

_____.

To develop this the actor should consider using _____ by _____.

_____.

By doing this it would communicate to the audience _____.

_____.

_____.

STYLE

Practitioner	...However	
<p>Shakespeare</p>	<p>Although Shakespeare is the theatre practitioner responsible for Macbeth, many modern day adaptations may be inspired by other practitioners.</p>	
Genre	Conventions	Structure
<ul style="list-style-type: none"> Tragedy 	<ul style="list-style-type: none"> Soliloquy Symbolism Dramatic Irony 	<ul style="list-style-type: none"> Linear Prose Foreshadowing

How can we assess what style of theatre used in a performance?

In our adaptation of Macbeth we decided to focus on using _____ as the style for our performance. We chose this style because _____.

_____.

_____.

_____.

We incorporated this style into our performance by using the convention _____.

This was done by _____.

_____.

_____.

We did this because _____.

_____.

_____.

STIMULUS

Context

- The play was written in 1606 for King James 1st. Banquo was an ancestor of James 1st and was involved in the murder of King Duncan.

Purpose

- The play is a tragedy. A tragedy was written to **instruct** as well as **entertain**. The play contains all the elements of a murder tale, suspense and excitement but at a deeper level the audience are shown that crime doesn't pay.

How do the events in the world inspire our performance?

The purpose of our performance is _____.

_____.

_____.

In our adaptation of Macbeth we were inspired by _____.

_____.

This is due to _____.

_____.

This can be seen in our performance when _____.

_____.

We hope that this makes the audience _____.

_____.

_____.

Drama: Monologue Knowledge Organiser

SKILLS

Physical	Vocal	Spatial
Body Language <ul style="list-style-type: none"> Mannerisms Posture Gesture Gait Facial Expression <ul style="list-style-type: none"> Emotion Eyes Eyebrows Mouth 	Tone <ul style="list-style-type: none"> Volume Accent Pitch Pace Pause Emphasis 	<ul style="list-style-type: none"> Proxemics Levels Choreography Kinaesthetic Spatial Relationship Staging Blocking

STYLE

Practitioners	Convention
Brecht	<ul style="list-style-type: none"> Breaking the 4th wall Episodic structure
Katie Mitchell	<ul style="list-style-type: none"> Voice Over Live Cinema
Stanislavski	<ul style="list-style-type: none"> Naturalistic speech
Paper Birds	<ul style="list-style-type: none"> Verbatim
Lin-Manuel Miranda	<ul style="list-style-type: none"> Use of song Musical Theatre

STIMULUS

Context	Genre	Artistic Intention	Theme
The events which inspire the performance.	<ul style="list-style-type: none"> Romance Comedy Horror Fantasy Sci-fi Historical Western Drama Action 	The purpose of the performance	<ul style="list-style-type: none"> Family Race Feminism Mental Health Circle of Life Religion Power
		<ul style="list-style-type: none"> Entertain Inform Educate 	

How can we evaluate the skills used in a monologue?

When delivering the line _____ I used my **physical/ vocal skills** by _____.

This showed the audience _____.

To develop this I will use _____ by _____.

By doing this it would communicate to the audience _____.

How can we assess what style of theatre used in a performance?

In the monologue I devised I have chosen to focus on _____ as the style for the performance. I chose this style because _____.

_____ was incorporated into the monologue by using the convention _____.

This was done by _____.

I used this because _____.

How do the events in the world inspire our performance?

The purpose of our performance is _____.

In our monologue we were inspired by _____.

This is due to _____.

This can be seen in our performance when _____.

We hope that this makes the audience _____.

WRITING

Where is this skill tested?	What can I expect?	How will I be marked?	
<u>English Language</u>			
<ul style="list-style-type: none"> Paper 2 Section B Q8 or Q9 (40 marks) 	<p>Transactional Writing</p> <p>Choose one of the two writing tasks.</p> <p>Focus on writing in an appropriate tone and style for the text type you are given.</p>	<p>AO5 (24 marks)</p> <ul style="list-style-type: none"> ✓ Writes appropriately for audience and purpose, using a range of techniques ✓ Develops ideas across the text, using paragraphs effectively. ✓ Structures writing to develop meaning. <p>AO6 (16 marks)</p>	<ul style="list-style-type: none"> ✓ Uses a varied vocabulary ✓ Spells words accurately ✓ Punctuates precisely. ✓ Uses a range of sentence structures for effect.
<p>What makes effective writing?</p> <p>Interesting vocabulary choices- aim to use a range of these in your writing.</p> <p>Varied sentences- different ways of starting and varying lengths.</p> <p>Well-planned and structured writing that follows a clear order of ideas- with paragraphs used appropriately.</p> <p>Accurate spelling and punctuation.</p>		<p>How to revise for the writing sections:</p> <p>Create a glossary of interesting vocabulary. Practise using it in your writing.</p> <p>Read a range of texts (fiction and non-fiction). Notice what makes them interesting and effective.</p> <p>Revise punctuation and how to punctuate accurately.</p> <p>Look, cover, write, check, to learn regular spelling corrections and to avoid future mistakes.</p> <p>Revise the different sentence types and practise using these.</p>	

COMPARISON

Where is this skill tested?	What can I expect?	How will I be marked?
<u>English Language</u>		
<ul style="list-style-type: none"> Paper 2 Section A Q7a (6 marks) 	Non-fiction extracts Question: 'The two texts show... What similarities... in these texts?'	<ul style="list-style-type: none"> ✓ Understanding of similarities. ✓ Synthesis (combination) of the two texts. ✓ Relevant evidence
<ul style="list-style-type: none"> Paper 2 Section A Q7b (14 marks) 	Non-fiction extracts Question: 'Compare how the writers of text 1 and text 2 present their ideas and perspectives about...'	<ul style="list-style-type: none"> ✓ Range of comparisons between the texts. ✓ Analysis of the writers' ideas and perspectives including the use of theme, language and/or structure. ✓ Balanced references from both texts.
<u>English Literature</u>		
<ul style="list-style-type: none"> Paper 2 Section B, Part 1 Anthology – 'Time and Place' (20 marks) 	Named poem given – to compare to chosen poem from memory Question: 'Compare how... is presented in the two poems'	<ul style="list-style-type: none"> ✓ Compares and contrasts the poems ✓ Analysis of language, form and structure ✓ Explores the effect on the reader ✓ Comments on the relationship between the poem and context.
<ul style="list-style-type: none"> Paper 2 Section B, Part 2 Unseen Poetry (20 marks) 	Two unseen poems given Question: 'Compare the ways the writers present... in Poem 1 and Poem 2.'	<ul style="list-style-type: none"> ✓ Compares and contrasts the poems ✓ Analysis of language, form and structure ✓ Explores the effect on the reader
<p>Sentence Stems:</p> <p>Both poems explore the idea of...</p> <p>Poem one suggests... whereas poem two implies...</p> <p>Text one conveys feelings of... on the other hand poem two focuses on...</p>		<p>How to revise for comparison:</p> <p>Learn key terminology and poetic devices</p> <p>Revise the key quotations for the poems</p> <p>Be able to recall form and structure information from the poems</p> <p>Make links between the poem and context</p> <p>Practise comparing texts</p> <p>Read non-fiction texts and identify the Genre, Audience and Purpose (GAP)</p>

ANALYSIS

<i>Where is this skill tested?</i>	<i>What can I expect?</i>	<i>How will I be marked?</i>
<u>English Language</u>		
<ul style="list-style-type: none"> Paper 2 section A Q3 (15 marks) 	<p>Non-fiction extract</p> <p>Question: 'Analyse how the writer uses language and structure to interest and engage readers.'</p>	<ul style="list-style-type: none"> ✓ Analysis of the text ✓ Analysis of both language and structure ✓ Explanation of the effect on the reader ✓ Quotations used to support the answer.
<p>Sentence Stems:</p> <p>Throughout the text, the writer uses...</p> <p>The writer's uses the phrase '.....' which suggests that...</p> <p>The writer's use of (technical term) makes the reader feel...because...</p> <p>The writer uses the structure to convey...by...</p> <p>The writer's use of repetition creates the impression that...</p> <p>Throughout the extract, the writer uses sentences to convey...</p>		<p>How to revise for analysis:</p> <p>Learn key terminology for language and structure</p> <p>Know how to identify different sentence types</p> <p>Practise analysing quotations/extracts (ensure you identify language and structure)</p> <p>Write practise responses using the sentence stems (what, how, why paragraphs)</p>

EVALUATION

Where is this skill tested?	What can I expect?	How will I be marked?
<u>English Language</u>		
<ul style="list-style-type: none"> Paper 2 Section A Q6 (15 marks) 	Non-fiction extract Question: 'The writer attempts to engage the reader though... Evaluate how successfully this is achieved.'	
<u>English Literature</u>		
<ul style="list-style-type: none"> Paper 1 Section B 'The Woman in Black' (40 marks) 	'The Woman in Black' whole text question (closed book) Question: 'Explore the importance of ... in the novel' OR 'In what ways is ...significant in the novel.'	<ul style="list-style-type: none"> ✓ Personal response, fully related to the text ✓ Critical style and interpretation ✓ Well-chosen references to support a range of points ✓ Understanding of context ✓ Convincing explanation of the relationship between the text and context
<p>Sentence Stems:</p> <p>The writer successfully explores the theme of...</p> <p>The writer purposefully creates the idea that...</p> <p>The writer effectively describes how...</p> <p>The writer creatively describes the setting as...</p> <p>The writer skilfully conveys...</p>	<p>How to revise for evaluation:</p> <p>Learn the SPECS words</p> <p>Know the key themes, events and ideas in the novel ('The Woman in Black')</p> <p>Learn key quotations for the novels</p> <p>Revise context for 'The Woman in Black' – make links between the text and context</p>	

Food and Nutrition

Gelatinisation

The process of heating starch in a liquid which then **thickens** the liquid to make a sauce is called 'Gelatinisation'.

- When starch (e.g. flour) is heated in a liquid it starts to heat up the starch.
 
- The starch begins to swell up because it is absorbing the liquid.
 
- Starch falls apart in the liquid because it can't hold a lot of liquid.
 
- Once the starch has burst because of the liquid and heat, the sauce can thicken.
 

Emulsifiers

Food products such as mayonnaise, milk, butter and hollandaise sauce are **emulsions** of a mixture of oil and water. **But**, oil and water **do not** mix together permanently.

Emulsifiers are needed for dressing and sauce recipes like **mayonnaise**, **butter** and **Hollandaise sauce**. These recipes contain a **lot of fat** and so need an emulsifier to help stop them from **splitting**.

The emulsifier used in mayo & Hollandaise is **egg yolks**.

Egg yolks contain a natural emulsifier called **LECITHIN**.



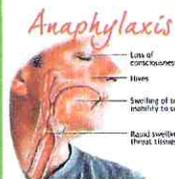
Food Allergens



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.



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.

Traditional Cuisine



In the world of food, the word '**cuisine**' means; "A style of cooking and eating that is characteristic of a particular country or region of the world"

Cuisines around the world have developed over many centuries by;

- Ingredients that are usually grown or gathered **locally** in that area
- Specific **preparation** and **cooking methods**
- Specific cooking **equipment**
- Distinctive **presentation** and/or serving techniques.

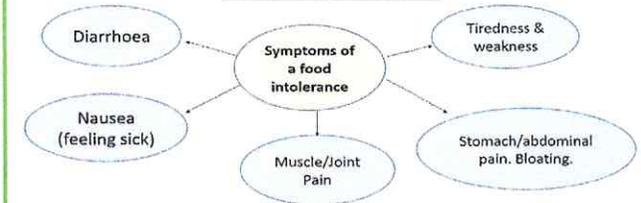
Many cuisines have been influenced by:

Geography and **climate** influences which foods can be produced in a country.

The **immigration** of people from other countries

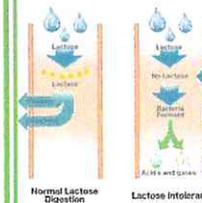
People who settle in countries bring their own traditions, which in turn can become mixed within that countries cuisine.

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.

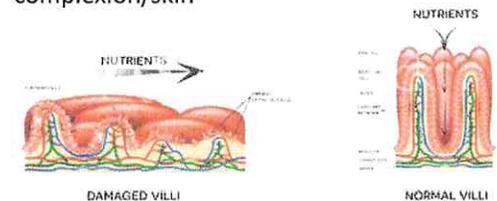
People who are **lactose intolerant** cannot digest a **milk sugar** which is naturally found in milk called **LACTOSE**.



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

Religion & Culture

BUDDHISM

Buddhism considers living beings to be sacred. This belief means that many Buddhists are **VEGETARIAN** or **VEGAN**.

Buddhists **AVOID** the consumption of alcohol.

Buddhist monks fast (do not eat any food) during the afternoons.



JUDAISM

Food that is allowed to be eaten is called 'Kosher'. E.g. animals that chew the cud (i.e. eat grass) and have cloven (split) hooves such as; sheep and cows are permitted to be eaten.

Pork and shellfish are **NOT** eaten by the Jewish community.



HINDUISM

Food is believed to contain particular energies that people receive when they eat.

The cow is a symbol of abundance and so beef is **NOT** eaten by Hindus. The cow is seen as **sacred**.

Many Hindus are **VEGETARIAN**.



CHRISTIANITY

Food and drink are regarded and celebrated as part of God's creation.

There are **NO** strict rules about food and drink that modern Christians are expected to obey.

Shrove Tuesday, Lent, Easter & Christmas are special occasions within the Christian religion.



ISLAM

Muslim dietary laws are found in the Qur'an (the Islamic holy book). The laws state what is lawful (Halal) and requires that animals are to be slaughtered in a special ritual called **Zibah**.

Muslims do **NOT** eat pork products.



SIKHISM

Many Sikhs are **VEGETARIANS**

Some Sikhs do **NOT** drink alcohol, tea or coffee.



Heat Transfers

Food is cooked for a variety of reasons.

High risk foods must be cooked properly to destroy the food poisoning bacteria (**pathogens**) they are likely to contain.

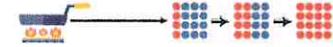
Some foods contain natural **toxins** (poisons) that would be harmful if the food was eaten raw.

Cooking **destroys** these toxins and makes the food safe to eat

CONDUCTION is heat transfer due to the **vibration of particles**.

When a pan is placed on hob, heat energy from the hob causes the particles in pan to **vibrate & gain heat**.

The particles collide with particles nearby & pass on their heat.



When food is placed in the pan, the heat then transfers to food and cooks it.

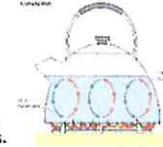
CONVECTION is the heat transfer through **gases and liquids**.

When heating a liquid, the liquid near the heat source heats up.

The warmer liquid rises above the colder surrounding liquid.

The colder moves to the bottom, creating a circular motion, known convection currents.

Convection occurs in ovens as the hot air rises and cool air falls.



Cooking develops flavour by causing **chemical reactions** to take place in the food. E.g. When cooking cakes: the **fat melts**, **proteins in the egg coagulate**, the **sugar caramelises** and the **starch gelatinises**.

Radiation is heat transfer through **waves of radiation**.

There is **no direct contact** between the heat source and the food.

Toasters, grills, microwaves and BBQ's use radiation to cook food.

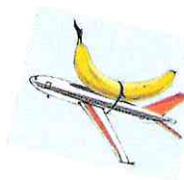
Radiation waves are emitted and as they reach the food they are absorbed and heat up the food.



Food Sources

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.

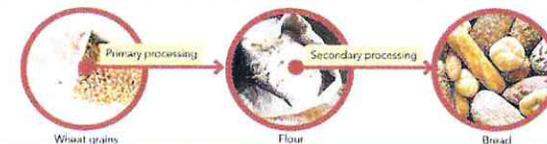
Food Processing

There are **two main stages to food processing**. They are;

Primary 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.

AND

Secondary processing: In this stage, primary processed foods are either used on their own or mixed with other foods and **turned into other food products**. E.g. Flour is turned into bread or pasta.



Chatty mat: GCSE Photo cards

To start off:

Sur l'image ...	In the image
Sur la photo...	In the photo
Il y a...	There is/ are
Je vois...	I see
Je peux voir...	You can see
La photo montre...	The photo shows...

Be specific!

Au premier plan...	In the foreground
Au deuxième plan...	In the background
À gauche...	to the left
À droite...	to the right
Près de..	close to
Devant..	In front of

Weather

Il y a du soleil	it's sunny
Il fait beau	it's nice weather
Il fait mauvais	It's bad weather
Il pleut	it's raining
Il y a du vent	it's windy

What's there?

Un homme/une femme	a man/woman
Des personnes	some people
Beaucoup de personnes	lots of people
Des édifices	some buildings
Des arbres	some trees
Une scène de...	a scene of

Describing people

Il/elle a l'air ...	he/she seems...
Ils/elles ont l'air...	they seem..
Content(e)(s)	happy
Triste(s)	sad
Fatigué(e)(s)	tired
Énervé(e)(s)	angry

What are they doing?

Il/elle est en train de	He/she is...
Ils/elles sont en train de	They are...
parler (talking), sourire (smiling), rire (laughing), se disputer (arguing), marcher (walking), travailler (working), jouer (playing)	

Opinion phrases

Je crois que...	I think that
Je pense que...	I think that...
J'imagine que...	I imagine that...
Je suppose que...	I suppose that...
Je dirais que...	I would say that
Il me semble que..	It seems to me that..
Cela me rappelle...	It reminds me of...

Do you like it?

J'aime/j'adore la photo	→	parce que	→	c'est (it is...)	→	e.g. beau (beautiful)
Je n'aime pas/je déteste la photo		car		c'est plein de... (it is full of)		e.g. couleur (colour)

PERFECT TENSE ("has done/did")

Start with the present tense of *avoir/être*, then add the past participle of the second verb:

-er	-ir	-re
Remove -er Add -é	Remove -r	Remove -re Add -u
jouer → (j'ai) joué	finir → (j'ai) fini	vendre → (j'ai) vendu

VERBS USING ÊTRE e.g. je suis allé(e)

*monter entrer sortir venir aller naître
partir descendre arriver tomber rester
mourir retourner (and all reflexive verbs)*

The past participle for these verbs must agree with the subject in gender and number:

*je suis allé (m) je suis tombée (f)
on est entrés (mpl) on est entrées (fpl)*

PRESENT TENSE ("does/is doing")

Remove the **-er/-ir/-re** and add these endings:

	jouer	finir	vendre
je	joue	finis	vends
tu	joues	finis	vends
il/elle/on	joue	finit	vend
nous	jouons	finissons	vendons
vous	jouez	finissez	vendez
ils/elles	jouent	finissent	vendent

ÊTRE

je suis / tu es / il est / nous sommes / vous êtes / ils sont

AVOIR

j'ai / tu as / il a / nous avons / vous avez / ils ont

SIMPLE FUTURE TENSE ("will/shall do")

Add these endings to the infinitive:

	jouer	finir	vendre
je	joueraï	finirai	vendrai
tu	joueras	finiras	vendras
il/elle/on	jouera	finira	vendra
nous	jouerons	finirons	vendrons
vous	jouerez	finirez	vendrez
ils/elles	joueront	finiront	vendront

IRREGULAR STEMS

*être (ser-) avoir (aur-) faire (fer-)
venir (viendr-) savoir (saur-) aller (ir-)
devoir (devr-) pouvoir (pourr-) voir (verr-)*

IMPERFECT TENSE ("was doing/used to do")

Remove **-ons** from the *nous* form of the present tense, add these endings (*ais/ais/ait/ions/iez/aient*)

	jouer	finir	vendre
je	jouais	finissais	vendais
tu	jouais	finissais	vendais
il/elle/on	jouait	finissait	vendait
nous	jouions	finissions	vendions
vous	jouiez	finissiez	vendiez
ils/elles	jouaient	finissaient	vendaient

NEAR FUTURE TENSE ("is going to do")

Use the present tense of *aller* followed by the infinitive:

	je vais	
je	vais	jouer finir vendre être aller vouloir etc.
tu	vas	
il/elle/on	va	
nous	allons	
vous	allez	
ils/elles	vont	

CONDITIONAL TENSE ("would do")

Begin with the future stem, add imperfect endings:

	jouer	finir	vendre
je	jouerais	finirais	vendrais
tu	jouerais	finirais	vendrais
il/elle/on	jouerait	finirait	vendrait
nous	jouerions	finirions	vendrions
vous	joueriez	finiriez	vendriez
ils/elles	joueraient	finiraient	vendraient

IRREGULAR STEMS

Same as for the simple future

EXTRA MARKS: USE WITH THE IMPERFECT TENSE
Si j'avais le temps, j'irais... (If I had time, I'd go to...)

PLUPERFECT TENSE ("had done")

Very similar to the perfect tense, except you start with the *imperfect* tense of auxiliary verbs *avoir/être*:
e.g. *j'avais joué, il avait fini, nous étions allés, elles s'étaient brossées les dents*

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 reduces the amount that 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>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>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>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>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 		Urban Change in a Major LIC City: Lagos Case Study 	
Location and Background	Liverpool's Importance	Location and Background	Lagos' 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> 	<p>Liverpool is a UNESCO World Heritage Site. Liverpool is a UK centre for manufacturing with 3000 factories employing 50,000 local people. 10 million people visited Liverpool in 2017 which contributes £358million to the UK economy. Liverpool is a European Capital for Culture.</p>	<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 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>	<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>
<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>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>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>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: 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>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> 	<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>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> <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 Olusosun dump.</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.

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

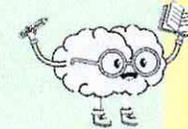
Cuba is 90 miles from the USA and had been under the influence of the USA. In **1959**, Cuba became communist in the **Cuban Revolution** led by **Fidel Castro**. The USA responded with a trade embargo.

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

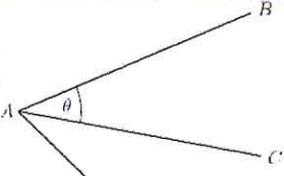
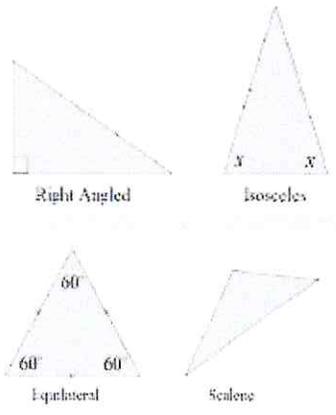
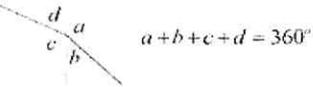
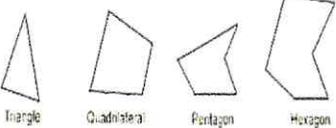
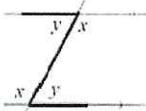
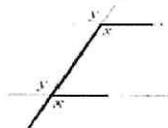
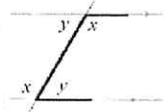
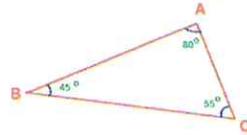
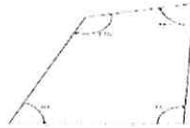
The USA then sent U2 spy planes and spotted the construction of Soviet missile launch sites and 20 Soviet ships carrying nuclear missiles heading for Cuba.

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



Year 9 – Maths Knowledge Organiser – Term 3

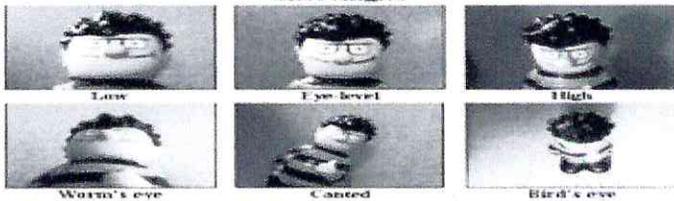
Topic/ Skill	Definition/ Tips	Example	Topic/ Skill	Definition/ Tips	Example
Angle Notation	Can use one lower-case letters, eg. θ or x		Types of Triangles	Right Angle Triangles have a 90° angle in. Isosceles Triangles have 2 equal sides and 2 equal base angles - Base angles in an isosceles triangle are equal. Equilateral Triangles have 3 equal sides and 3 equal angles (60°) . Scalene Triangles have different sides and different angles .	
Angles at a Point	Can use three upper-case letters, eg. BAC Angles around a point add up to 360° .		Polygon	A 2D shape with only straight edges .	Rectangle, Hexagon, Decagon, Kite etc.
Angles on a Straight Line	Angles around a point on a straight line add up to 180° .		Regular	A shape is regular if all the sides and all the angles are equal.	
Opposite Angles	Vertically opposite angles are equal .		Names of Polygons	3-sided = Triangle 4-sided = Quadrilateral 5-sided = Pentagon 6-sided = Hexagon 7-sided = Heptagon/Septagon 8-sided = Octagon 9-sided = Nonagon 10-sided = Decagon	
Alternate Angles	Alternate angles are equal .		Interior Angles	$(n - 2) \times 180$ where n is the number of sides.	Sum of Interior Angles in a Decagon = $(10 - 2) \times 180 = 1440^\circ$
Corresponding Angles	Corresponding angles are equal .		Exterior Angles	The sum of the exterior angles of any polygon sum to 360°	Size of Exterior Angle in a Regular Octagon = $\frac{360}{8} = 45^\circ$
Co-Interior Angles	Co-Interior angles add up to 180° .			$\frac{360}{n}$	
Angles in a Triangle	Angles in a triangle add up to 180° .				
Angles in a Quadrilateral	Angles in a quadrilateral add up to 360° .				



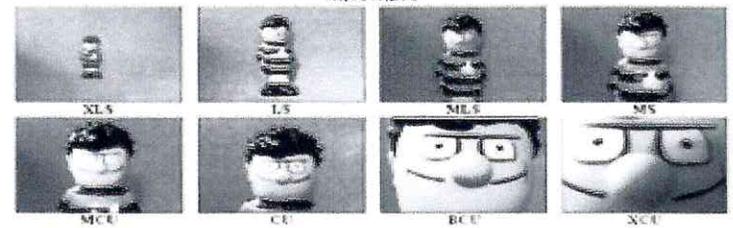
Key Words	
Blockbuster	a Hollywood movie that's made with a large budget and big stars.
Independent Film	An indie film is any feature-length or short film that is made without a major studio or big production company attached.
Marketing	the action or business of promoting and selling products or services, 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.



Harmonic Chords



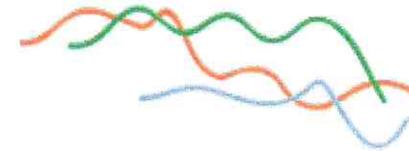
Broken Chords

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*)



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.



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.



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.

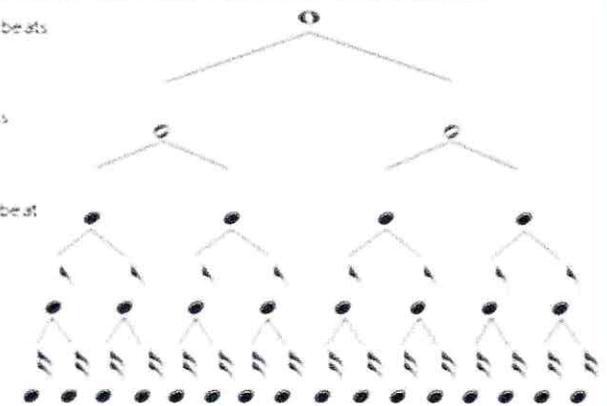
SEMIBREVE = 4 beats

MINIM = 2 beats

CROTCHET = 1 beat

QUAVER = 1/2 beat

SEMIQUAVER = 1/4 beat



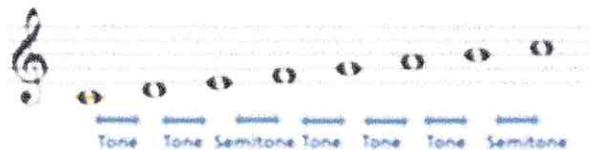
C. Variation Techniques

<p>PITCH – Change the highness or lowness of the theme – play the same notes, but at different pitches e.g. OCTAVES</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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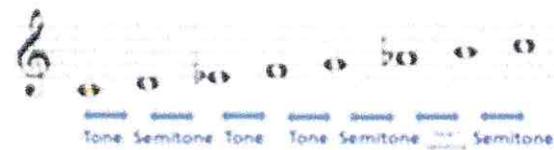
D. Tonality – Major and Minor



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:



MAJOR SCALE



MINOR SCALE

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!



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	Analgasic	Hallucinogen	Stimulant	Depressant
Coffeine			✓	
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	Tranquillizers, 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>



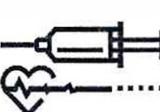
www.nhs.org

www.stonewall.org.uk

www.childline.org.uk 08001111

Year 9 Term 2 Matters of Life

Key Words			
Conception	The moment the sperm fertilises the egg	Foetus	Fertilised ovum from 8 - 14 weeks
Fertility treatment	Medical procedure to assist an infertile couple to have a child	Human genetic engineering	The modification of gene make-up to change the features of a human
Embryo	Fertilised ovum at about 12 – 14 days when implanted into the wall of the womb	In vitro fertilisation (IVE)	A procedure in which eggs are removed from a woman's ovaries and fertilised
Embryology	The study of human embryos	Quality of life	A measure of fulfilment; how comfortable life is
Euthanasia	Assisted suicide; helping someone who is terminally ill to die	Sanctity of life	Life is sacred because it is God-given
Saviour siblings	A child conceived by IVF with pre-implantation genetic diagnosis to save the life of an incurably ill sibling through the use of the cord blood	Surrogacy	Fertility treatment in which a woman's egg is fertilised artificially by another woman's partner or an embryo from another couple is created through IVF and then implanted into the 'host' woman. The woman carries the baby throughout pregnancy and gives it to the other couple for adoption after birth

Key Information	
 <p style="text-align: center; font-weight: bold;">Sanctity of Life</p>	<p>Sanctity of life: meaning that all life is sacred</p> <p>Christians believe life is given by God so only God can take life away</p> <p>Buddhists believe in reincarnation and human life is the one where this cycle can be stopped and nirvana can be reached</p> <p>In all cultures, taking life is the most serious crime.</p>
  <p style="text-align: center; font-weight: bold;">Religious Beliefs about Life and Death</p>	<p>Christian Beliefs: Genesis 1: 27 the Bible says: 'So God created mankind in his own image, in the image of God he created them; male and female he created them.'</p> <p>Exodus chapter 20: 13 or The 10 Commandments: "Thou shalt not kill"</p> <p>Ecclesiastes 3: 1-3 says 'There is a time for everything. A time to be born and a time to die ...'</p> <p>Many Christians believe that life begins at conception (when the sperm meets the egg). This Embryo has the potential for life. They also believe that only God can give and take life.</p> <p>Buddhist Beliefs: The five precepts (guidelines for living): Precept 1. To not harming living things</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 to be reborn as a single blind turtle swimming a huge ocean would surface with his head in a ring.</p>
 <p style="text-align: center; font-weight: bold;">Science Starting Life</p>	<p>IVF: a scientific method of making a woman pregnant which does NOT involve sex. Conception occurs via sperm and egg being placed into a test tube.</p> <ol style="list-style-type: none"> 1. Egg cells are taken from the mother. 2. The egg is mixed with a sperm sample to allow fertilisation. 3. The fertilised eggs are incubated (= kept warm) to let them grow for a few days 4. The embryo is implanted back into the mother. Hormone treatment will make her womb ready to be pregnant. <p>Artificial Insemination by Donor (AID)</p> <p>This involves a mother having her eggs fertilised by a donor, either because her husband is infertile or it's a same sex couple. DO NOT confuse this with AIDS!!!</p> <p>Artificial Insemination by Husband (AIH)</p> <p>The mother's eggs are fertilised using her husband's sperm. This is necessary if e.g. the woman has blocked fallopian tubes or the husband has a low sperm count making natural conception very difficult.</p> <p>Surrogacy: This is where another woman carries the pregnancy to full term for the couple. In the UK it is illegal to pay someone to do this</p>
 <p style="text-align: center; font-weight: bold;">Science Ending Life</p>	<p>Euthanasia means 'gentle and easy death'. The term is used to describe the deliberate ending of a person's life for compassionate reasons because they are suffering, eg from a painful or incurable disease. Euthanasia is illegal in the UK.</p> <p>Active euthanasia is where something is done to a person to make them die more quickly, this is illegal in the UK. Passive euthanasia is where any form of treatment that might extend a person's life is withdrawn (e.g. a life support machine is turned off) This is legally allowed in the UK, and so would not be called euthanasia.</p>

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

4) Age

All school children participate in sport but when they leave school participation often drop. 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

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.

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.

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 performers 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.

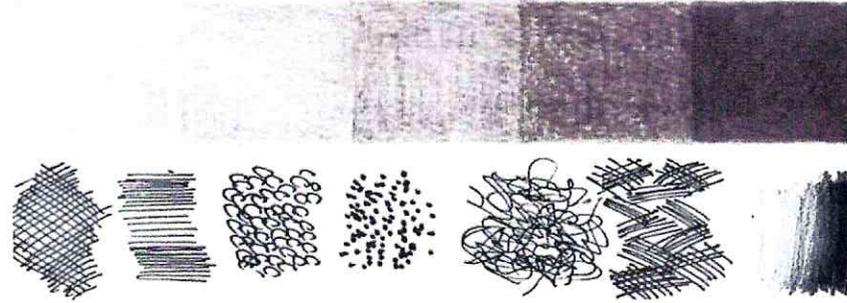
Product Design

Final Idea 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?

Tone and Texture

Different marks/tones can be used to render a design idea to make it look 3D.



Annotating

All of your work must be accompanied by a brief annotation.

WHAT

What have you done?
What was your inspiration?

HOW

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

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?

NEXT –

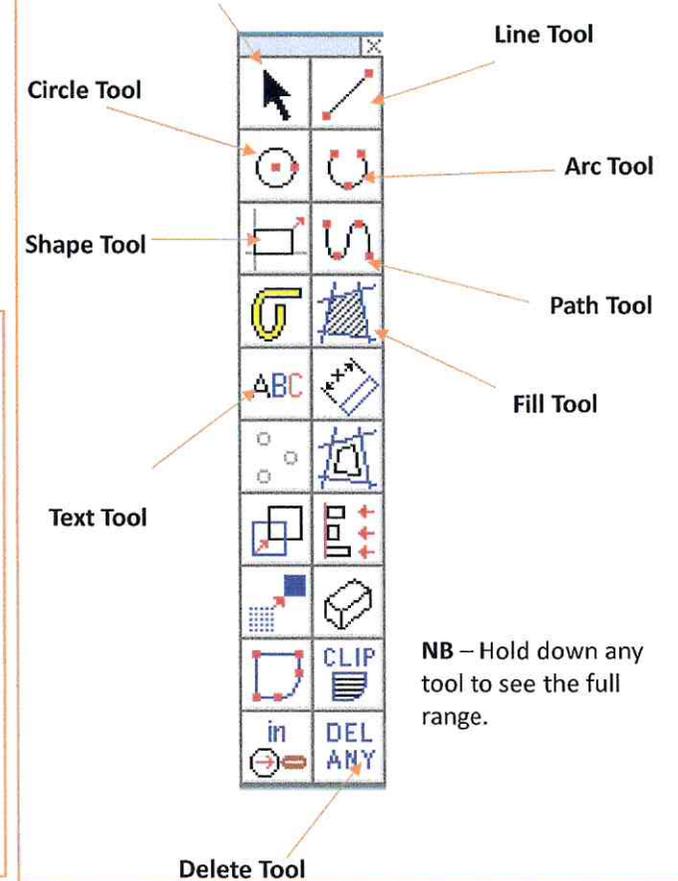
Your next steps are...?

Research Types:

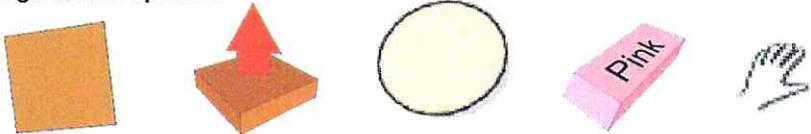
- ✓ Location Analysis
- ✓ Product Analysis
- ✓ Designer
- ✓ Design Movement
- ✓ Museum
- ✓ Existing Product
- ✓ Materials
- ✓ Joining Methods
- ✓ Technique Trials

2D Design CAD Software

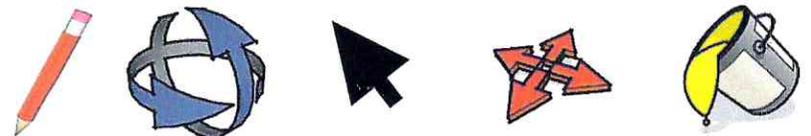
Select Tool



Google Sketch Up Tools



Rectangle Tool Push/Pull Tool Shape Tool Eraser Tool Pan Tool



Line Tool Orbit Tool Select Tool Move Tool Paint Bucket Tool

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?

Freehand Drawing

Light Sketch

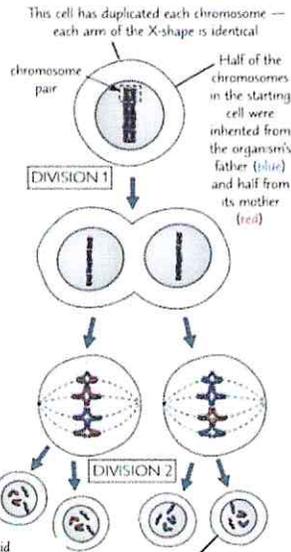
Refine

Refine

Define

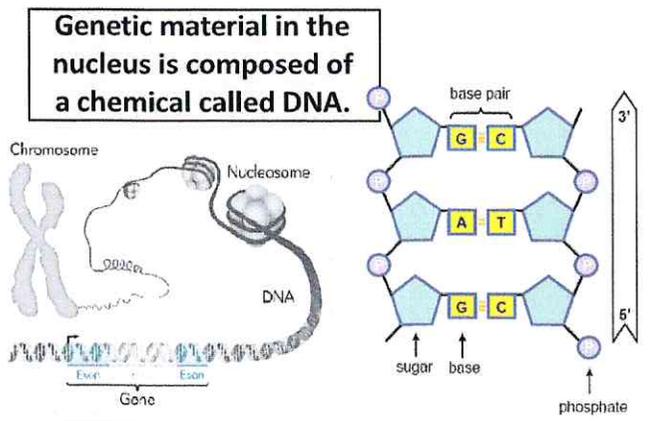


<p>Meiosis is a type of cell division. In humans only happens in reproductive organs (ovaries and testes)</p>	<p><i>Cells divide by Meiosis to form gametes</i></p>	<p>Copies of the genetic information are made.</p>
		<p>The cell divides twice to form four daughter cells each with half the number of chromosomes</p>
		<p>All haploid gametes are genetically different from each other.</p>



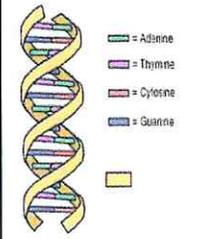
DNA structure
Polymer made up of two strands forming a double helix.

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.

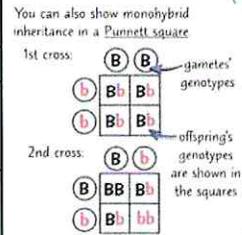


In DNA the complementary strands C, A, T, G always link in the same way. C always linked to G on the opposite strand and A to T. A and T and G and C are held by **hydrogen bonds**

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

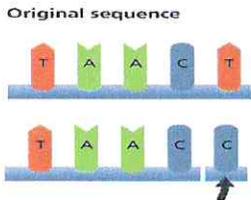


Genetics Key Concepts	Gamete	Sex cells produced in meiosis.
	Zygote	Single cell that results from fusion of egg and sperm cell.
	Chromosome	A long chain of DNA found in the nucleus.
	Gene	Small section of DNA that codes for a particular protein.
	Allele	Alternative forms of the same gene.
	Dominant	A 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.	

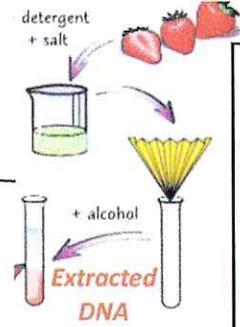


B3 GENETICS

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



Extracting DNA	<p><i>DNA can be extracted from fruit</i></p>	<p>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.</p>
		<p>Filter and add protease solution to the filtrate in a boiling tube. Tilt the boiling tube and carefully add ice cold ethanol.</p>
		<p>The white layer that forms at the interphase is DNA and can be pulled out on a glass rod</p>

Relative formula mass (M_r): This is the mass in grams of 1 mole of the substance. To calculate it you need to add up the atomic mass (bigger number) of all of the atoms in the molecule.

e.g 1. $\text{NaCl} = \text{Na} + \text{Cl} = 23 + 35.5 = 58.5$

e.g 2. $\text{MgF}_2 = \text{Mg} + (2 \times \text{F}) = 24 + (2 \times 19) = 62$

The Mole

A mole of an element is simply 6.02×10^{23} atoms (this number is known as Avogadro's number).

Obviously, if the atoms are larger, then 1 mole of that atom will be heavier.

For example, one mole of hydrogen atoms weighs 1 gram but 1 mole of carbon weighs 12 grams.



To calculate the number of moles in an element you need to divide the mass by the relative atomic mass:

For example, how many moles are there in 6 grams of carbon? $6/12 = 0.5$

Empirical formula:

You have 0.96g of magnesium and 2.84g of chlorine, deduce the empirical formula

Conservation of mass

The law of conservation of mass states that no atoms are lost or during a chemical reaction so the mass of the products equals the mass of the reactants.

YEAR 9 CHEMISTRY CALCULATIONS INVOLVING MASSES

Calculating Masses in Reaction



1. Write the balanced equation.
2. Calculate the relative formula masses of the substances (M_r).
3. Multiply the M_r values by the balancing numbers (big numbers before the element/compound) shown in the equation.
4. Work out the mass for 1g of the reactant or product (use the substance we already know the value for).
5. We now know the 1g makes Xg. Scale up or down from the question.

Calculating empirical formula

symbol	Mg	Cl
mass	0.96	2.84
$\div A_r$	$\frac{0.96}{24}$ = 0.04	$\frac{2.84}{35.5}$ = 0.08
\div smallest	$\frac{0.04}{0.04}$	$\frac{0.08}{0.04}$
ratio	1	2
empirical formula	MgCl_2	

KEY TERMS

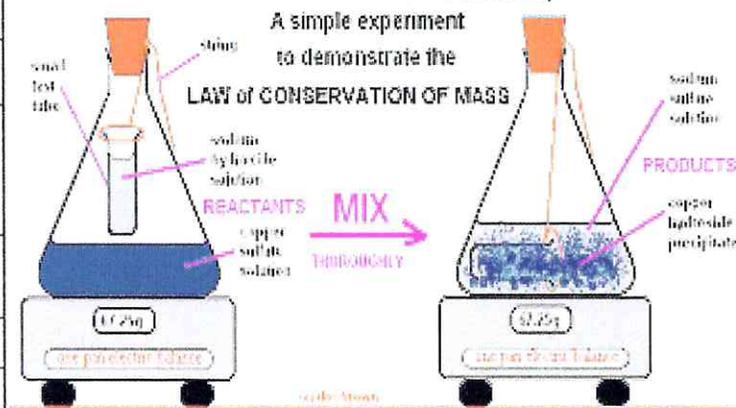
KEY TERMS	DEFINITIONS
Mole	6.02×10^{23} atoms of an element or molecules in a compound
Avogadro's number	6.02×10^{23}
Relative Formula Mass	The total atomic mass of elements in compound
Empirical Formula	Is the simplest whole number ratio of atoms or ions of each elements in a substance.

EQUATION

$$\text{moles} = \frac{\text{mass}}{M_r}$$

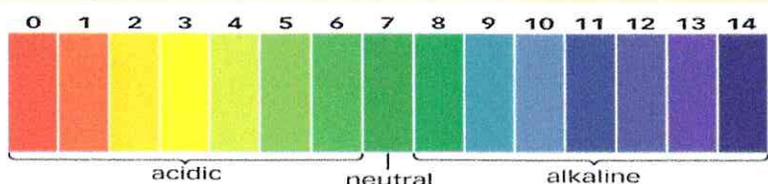
MEANING OF TERMS IN EQUATION

Mass is the mass of the substance in grams M_r is the relative formula mass of the compound (or use the relative atomic mass if it is an element)



- **Acids produce hydrogen ions (H^+) in aqueous solutions.**
- **Alkalis are aqueous solutions which contain hydroxide ions (OH^-).**

You can use universal indicator or a pH probe to measure the acidity or alkalinity of a solution against the pH scale



Strong acid

Completely dissociates in aqueous solution

Weak acid

Only partially dissociated in aqueous solution

Hydrogen ion concentration

As the pH decreases by one unit the hydrogen ion concentration increases by a factor 10

YEAR 9 CHEMISTRY

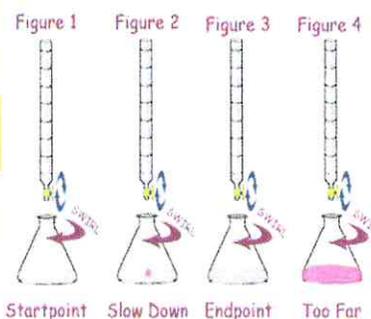
Acids

Acids can be neutralised by alkalis and bases An **alkali** is a soluble base e.g. metal hydroxide. A **base** is a substance that neutralises an acid e.g. a soluble metal hydroxide or a metal oxide.

In neutralisation reactions, hydrogen ions react with hydroxide ions to produce water: $H^+ + OH^- \rightarrow H_2O$

The pH scale and neutralisation

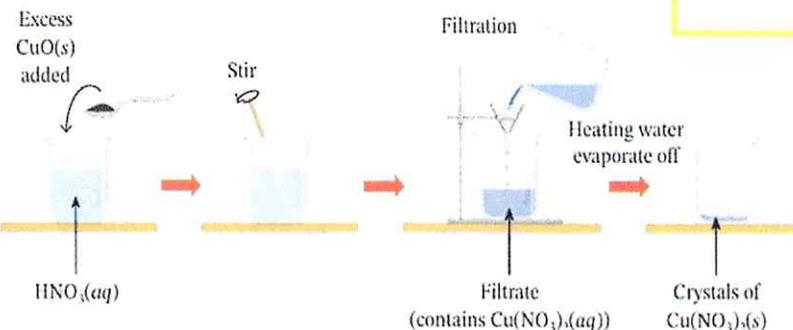
Titration: core practical



Acid	Salt formed
Hydrochloric acid	chloride
Sulphuric acid	sulphate
Nitric acid	nitrate

Common acids	Formula
hydrochloric	HCl
sulfuric	H ₂ SO ₄
nitric	HNO ₃
Common alkalis	Formula
sodium hydroxide	NaOH
potassium hydroxide	KOH
calcium hydroxide	Ca(OH) ₂
Soluble in water	Insoluble in water

Preparation of soluble salts: core practical



Examples of reactions of acids to make salts:

- sodium hydroxide + hydrochloric acid \rightarrow sodium chloride + water
- zinc + sulphuric acid \rightarrow zinc sulphate + hydrogen
- calcium carbonate + sulfuric acid \rightarrow calcium sulfate, + carbon dioxide + water

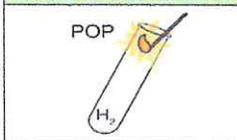
Corrosive



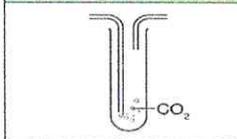
Irritant



burns with a pop sound



turns limewater milky



All nitrates

Most chlorides

Most sulphates

All common sodium, potassium and ammonium salts

Sodium, potassium and ammonium carbonates

Sodium, potassium and ammonium hydroxides

Insoluble in water

Silver and lead chlorides

Lead, barium and calcium sulphates

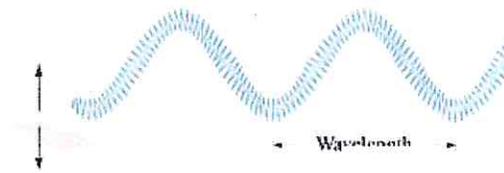
Most carbonates

Most hydroxides

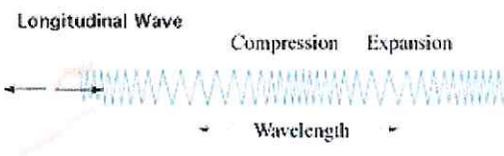
PHYSICS Waves

Transverse waves

Vibrations are **perpendicular** to the direction of energy transfer. E.g. Light



Transverse Wave



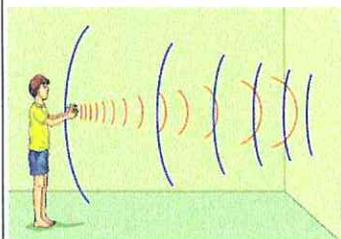
Longitudinal Wave

Longitudinal wave

Vibrations are **parallel** to the direction of energy transfer. E.g. sound.

Compression is an area when the particles are bunched up.

Rarefaction is when the particles are spread out.

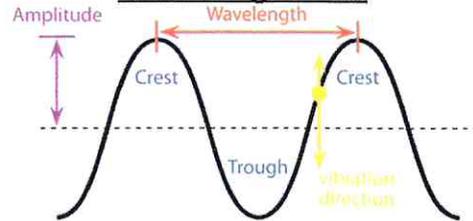


An **echo** is a reflection of the sound wave.
However, remember the distance travelled is 2x the distance to the wall!

To work out a sound's speed;

$$\text{Speed (m/s)} = \text{distance (m)} \div \text{time (s)}$$

Describing waves



Amplitude (m) – maximum displacement rest point.

Wavelength (m) – distance from the point on one wave to the next.

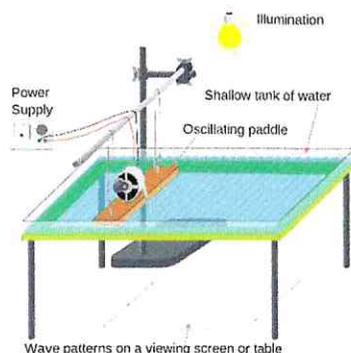
Frequency (Hertz, Hz) – number of waves per second. A frequency of **5Hz** means there are 5 complete waves passing a point in 1 second. **Frequency = 1 ÷ time period (s)**

Time period (T) is the time taken to complete one wavelength.

Wave Speed (m/s) – speed at which the energy transfers through a media.

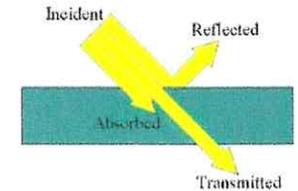
Wave speed = frequency x wavelength
 $v = f \times \lambda$

Ripple Tank



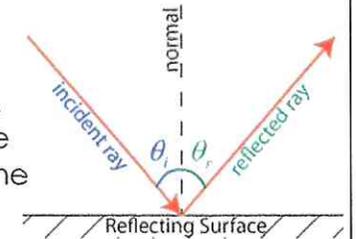
Reflection and refraction of waves

Waves can **reflected** or **absorbed** or **transmitted** at a boundary between two different media.



Reflection

The dashed line represents the **normal**. It is drawn at 90° to the boundary and is the line from which all angles are measured.

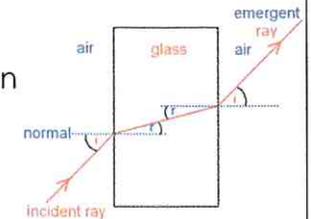


Law of reflection

Angle of incidence (i) = angle of reflection (r).

Refracted:

A wave changes direction when it enters a different medium. The glass block above is **denser** than the air, so the light slows down and bends towards the normal. The **refracted angle (r)** and is smaller than the **incident angle (i)**. Light exiting the block returns the speed it enters. Bending away from the normal with a larger refracted angle in comparison to the incident angle.



The **direction** of refraction depends on:

- **Angle** it hits the boundary
- The **density** of the material.

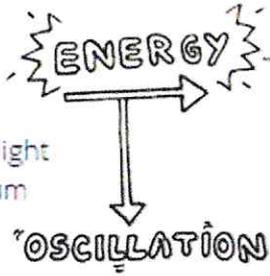
Higher **density** materials slow down the wave.

Electromagnetic Waves

Increasing energy/Increasing frequency/ decreasing wavelength

Similarities

- transverse waves
- travel at the speed of light
- travel through a vacuum



Differences

- frequency
- wavelength
- amount of energy transferred



Radio waves

- low frequency, low energy, long wavelength

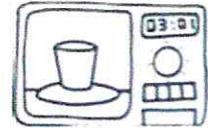


- used for TV and radio signals, and satellite communications

Micro waves



- used for mobile phone signals, and cooking



Infrared

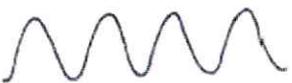
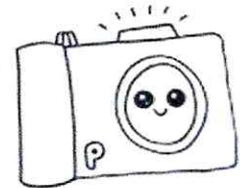
- felt as heat, used for thermal imaging cameras and night vision goggles



Visible light



- the only EM wave we can see, made up of seven colours

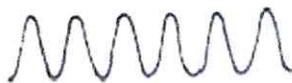


Ultraviolet

- used in tanning beds, can cause skin cancer
- Used in fluorescent scanning to detect



X rays

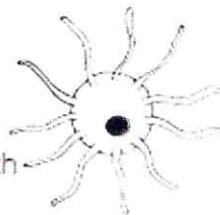


- used to detect broken bones and in airport scanners to detect concealed weapons



Gamma rays

- high frequency, high energy, short wavelength



- can be focused to kill cancerous cells but prolonged exposure can cause cancer

Wavelength and speed affects how it is transmitted, absorbed, reflected or refracted by a media, and use.

Shorter wavelengths transfer more energy. This means they are harmful to living cells.

THE PERIODIC TABLE OF THE ELEMENTS

1 IA 1A H Hydrogen 1.008																	18 VIIIA 8A He Helium 4.003
3 Li Lithium 6.941	4 Be Beryllium 9.012											5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.007	8 O Oxygen 15.999	9 F Fluorine 18.998	10 Ne Neon 20.180
11 Na Sodium 22.990	12 Mg Magnesium 24.305	3 IIIB 3B	4 IVB 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8 VIII 8	9 VIII 8	10 VIII 8	11 IB 1B	12 IIB 2B	13 Al Aluminum 26.982	14 Si Silicon 28.086	15 P Phosphorus 30.974	16 S Sulfur 32.065	17 Cl Chlorine 35.453	18 Ar Argon 39.948
19 K Potassium 39.098	20 Ca Calcium 40.078	21 Sc Scandium 44.956	22 Ti Titanium 47.88	23 V Vanadium 50.942	24 Cr Chromium 51.996	25 Mn Manganese 54.938	26 Fe Iron 55.933	27 Co Cobalt 58.933	28 Ni Nickel 58.693	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.723	32 Ge Germanium 72.61	33 As Arsenic 74.922	34 Se Selenium 78.972	35 Br Bromine 79.904	36 Kr Krypton 84.807
37 Rb Rubidium 84.960	38 Sr Strontium 87.62	39 Y Yttrium 88.906	40 Zr Zirconium 91.224	41 Nb Niobium 92.906	42 Mo Molybdenum 95.95	43 Tc Technetium 98.907	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.906	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.71	51 Sb Antimony 121.760	52 Te Tellurium 127.6	53 I Iodine 126.904	54 Xe Xenon 131.29
55 Cs Cesium 132.905	56 Ba Barium 137.327	57-71 Lanthanide Series	72 Hf Hafnium 178.49	73 Ta Tantalum 180.948	74 W Tungsten 183.85	75 Re Rhenium 186.207	76 Os Osmium 190.21	77 Ir Iridium 192.22	78 Pt Platinum 195.08	79 Au Gold 196.967	80 Hg Mercury 200.59	81 Tl Thallium 204.383	82 Pb Lead 207.2	83 Bi Bismuth 208.980	84 Po Polonium [209]	85 At Astatine [209]	86 Rn Radon [222]
87 Fr Francium [223]	88 Ra Radium [226]	89-103 Actinide Series	104 Rf Rutherfordium [261]	105 Db Dubnium [262]	106 Sg Seaborgium [266]	107 Bh Bohrium [264]	108 Hs Hassium [269]	109 Mt Meitnerium [268]	110 Ds Darmstadtium [269]	111 Rg Roentgenium [271]	112 Cn Copernicium [277]	113 Uut Ununtrium [288]	114 Fl Flerovium [289]	115 Uup Ununpentium [288]	116 Lv Livermorium [293]	117 Uus Ununseptium [294]	118 Uuo Ununoctium [294]

57 La Lanthanum 138.905	58 Ce Cerium 140.115	59 Pr Praseodymium 140.908	60 Nd Neodymium 144.24	61 Pm Promethium 144.913	62 Sm Samarium 150.36	63 Eu Europium 151.966	64 Gd Gadolinium 157.25	65 Tb Terbium 158.925	66 Dy Dysprosium 162.50	67 Ho Holmium 164.930	68 Er Erbium 167.26	69 Tm Thulium 168.934	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.967
89 Ac Actinium 227.028	90 Th Thorium 232.038	91 Pa Protactinium 231.036	92 U Uranium 238.029	93 Np Neptunium 237.048	94 Pu Plutonium 244.064	95 Am Americium 243.061	96 Cm Curium 247.070	97 Bk Berkelium 247.070	98 Cf Californium 251.080	99 Es Einsteinium [254]	100 Fm Fermium 257.095	101 Md Mendelevium 258.1	102 No Nobelium 259.101	103 Lr Lawrencium [262]

- Alkali Metal
- Alkaline Earth
- Transition Metal
- Basic Metal
- Semimetal
- Nonmetal
- Halogen
- Noble Gas
- Lanthanide
- Actinide



Chatty mat: GCSE Photo cards



To start off:

En la imagen...	In the image
En la foto ...	In the photo
Hay...	There is/ are
Veo...	I see
Se puede ver...	You can see
La foto muestra...	The photo shows...

Be specific!

En primer plano...	In the foreground
Al fondo..	In the background
A la izquierda..	to the left
A la derecha..	to the right
Cerca de..	close to
Delante de..	Infront of

Weather

Hace sol	it's sunny
Hace buen tiempo	it's nice weather
Hace mal tiempo	It's bad weather
Está lloviendo	it's raining
Está nublado	it's cloudy

What's there?

Un hombre/una mujer	a man/woman
Unas personas	some people
Mucha gente	lots of people
Unos edificios	some buildings
Unos árboles	some trees
Una escena de...	a scene of

Describing people

Parece(n)...	he/she/they seem(s)
Contento/a(s)	happy
Triste(s)	sad
Cansado/a(s)	tired
Enfadado/a(s)	angry

What are they doing?

Está(n) hablando	They are talking
Está(n) discutiendo	They are arguing
Está(n) sonriendo	They are smiling
Está(n) riendo	They are laughing
Está(n) trabajando	They are working
Está(n) jugando	They are playing

Opinion phrases

Creo que...
I think that

Pienso que...
I think that...

Imagino que...
I imagine that...

Supongo que...
I presume that...

Diría que...
I would say that

Me parece que
It seems to me
that..

Me recuerda a...
It reminds me of...

Do you like it?

(No) Me gusta la foto → porque/ya que/dado que → es (it is...)
I (don't)like the photo → because → está llena de... (it is full of) → e.g. bonita (pretty)
e.g. color (colour)

PRESENTE			FUTURO SIMPLE			PRETERITO			
hablar to speak	comer to eat	vivir to live	nadar to swim	beber to drink	abrir to open	preguntar to ask	comer to eat	escribir to write	
habl-o	com-o	viv-o	nadar-é	beber-é	abrir-é	pregunt-é	com-í	escrib-í	
habl-as	com-es	viv-es	nadar-ás	beber-ás	abrir-ás	pregunt-aste	com-iste	escrib-iste	
habl-a	com-e	viv-e	nadar-á	beber-á	abrir-á	pregunt-ó	com-ió	escrib-ió	
habl-amos	com-emos	viv-imos	nadar-emos	beber-emos	abrir-emos	pregunt-amos	com-imos	escrib-imos	
habl-áis	com-éis	viv-ís	nadar-éis	beber-éis	abrir-éis	pregunt-ásteis	com-ísteis	escrib-ísteis	
habl-an	com-en	viv-en	nadar-án	beber-án	abrir-án	pregunt-aron	com-ieron	escrib-ieron	
The present tense is used to describe what you're doing at the present moment in time, e.g. "I am eating breakfast" or what you do routinely, e.g. "I eat breakfast every day".			The future tense is used to say what you will do in the future.			The preterite is sometimes known as the simple past. It's used to talk about events in the past, e.g. I asked, I ate, I wrote.			
PRESENTE CONTINUO			CONDICIONAL			IMPERFECTO			
hablar to speak	comer to eat	vivir to live	nadar to swim	beber to drink	abrir to open	trabajar to work	comer to eat	escribir to write	
estoy hablando	estoy comiendo	estoy viviendo	nadar-ía	beber-ía	abrir-ía	trabaj-aba	com-ía	escrib-ía	
estás hablando	estás comiendo	estás viviendo	nadar-ías	beber-ías	abrir-ías	trabaj-abas	com-ías	escrib-ías	
está hablando	está comiendo	está viviendo	nadar-ía	beber-ía	abrir-ía	trabaj-aba	com-ía	escrib-ía	
estamos hablando	estamos comiendo	estamos viviendo	nadar-íamos	beber-íamos	abrir-íamos	trabaj-ábamos	com-íamos	escrib-íamos	
estáis hablando	estáis comiendo	estáis viviendo	nadar-íais	beber-íais	abrir-íais	trabaj-ábais	com-íais	escrib-íais	
están hablando	están comiendo	están viviendo	nadar-ían	beber-ían	abrir-ían	trabaj-aban	com-ían	escrib-ían	
The present continuous tense is used to indicate what is happening at the time of speaking, or when one action is happening at the same time as another. <i>Estar+past participle</i>			The conditional is recognised in English by the use of the word "would" or sometimes "should", e.g. "I would swim"			The imperfect tense is used for things that 'used to happen' or 'were happening' e.g. I worked, I used to work, I was working			
PARTICPIO PRESENTE		PARTICPIO PASADO		FUTURO INMEDIATO (I am going to +Verb)			PRESENTE PERFECTO		
-AR	-ando hablando	-AR	-ado hablado	voy	a	trabajar I am going to work	hablar to speak	comer to eat	vivir to live
-ER	-iendo comiendo	-ER	-ido comido	vas	a	estudiar	he hablado	he comido	he vivido
-IR	-iendo viviendo	-IR	-ido vivido	va	a	beber	has hablado	has comido	has vivido
				vamos	a	comer	ha hablado	ha comido	ha vivido
				vais	a	abrir	hemos hablado	hemos comido	hemos vivido
				van	a	vivir	habéis hablado	habéis comido	habéis vivido
							han hablado	han comido	han vivido
The present participle or gerund is recognised in English by the ending -ing .e.g. talking, eating, living. To find the past participle of a verb in English, just imagine that the words 'I have' are in front of it. E.g. 'to eat' put 'I have' in front of it you would say 'I have eaten' so 'eaten'.				The immediate future tense can be used to express what is going to happen in the future. E.g. I am going to work, I am going to study, I am going to drink, I am going to eat....			The present perfect in English always contains 'has' or 'have' in it. E.g. I have spoken, I have eaten, I have lived.		
There is/are= hay There was/were= había				Most verbs in Spanish have six forms which correspond to their respective pronouns and which will be listed in the following order: 1) yo (I) 2) tú (you-familiar a person you know well, a familiar relationship) 3) él/ella/usted (he/she/you-formal a person you don't know, a formal relationship) 4) nosotros/nosotras (we) 5) vosotros/vosotras (you-plural-familiar [only used in Spain]) 6) ellos/ellas/ustedes (they/you-plural-formal [Spain]/you-plural [L. America]) It's essential that you get the correct ending for the person you're talking about in Spanish because pronouns don't tend to be used in Spanish.			PASADO PERFECTO		
In Spanish the infinitive form of a verb always ends with the letter r and falls into three categories: 1) those which end with -ar (ar verbs) e.g. hablar = to speak 2) those which end with -er (er verbs) e.g. comer = to eat 3) those which end with -ir (ir verbs) e.g. vivir = to live For regular verbs in the present, preterite and imperfect tenses, you must first remove the -ar, -er or -ir endings from the infinitive form of the verb, and then add the correspondent endings.							hablar to speak	comer to eat	vivir to live
							había hablado	había comido	había vivido
							habías hablado	habías comido	habías vivido
							había hablado	había comido	había vivido
							habíamos hablado	habíamos comido	habíamos vivido
							habíais hablado	habíais comido	habíais vivido
							habían hablado	habían comido	habían vivido
							The past perfect is used to indicate an action that happened and was completed before another action took place in the past. E.g. I had spoken/lived/eaten		

Textiles

Techniques we've looked at:

- Embroidery - hand and machine
- Heat trapping
- Machine stitching
- Applique
- Weaving
- Tie dye
- Disperse dye
- Batik
- Printmaking - repeat pattern and experimental
- Felting



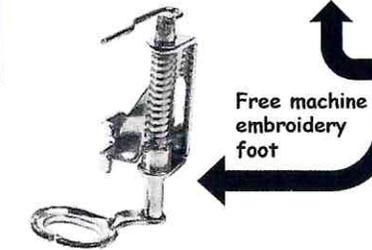
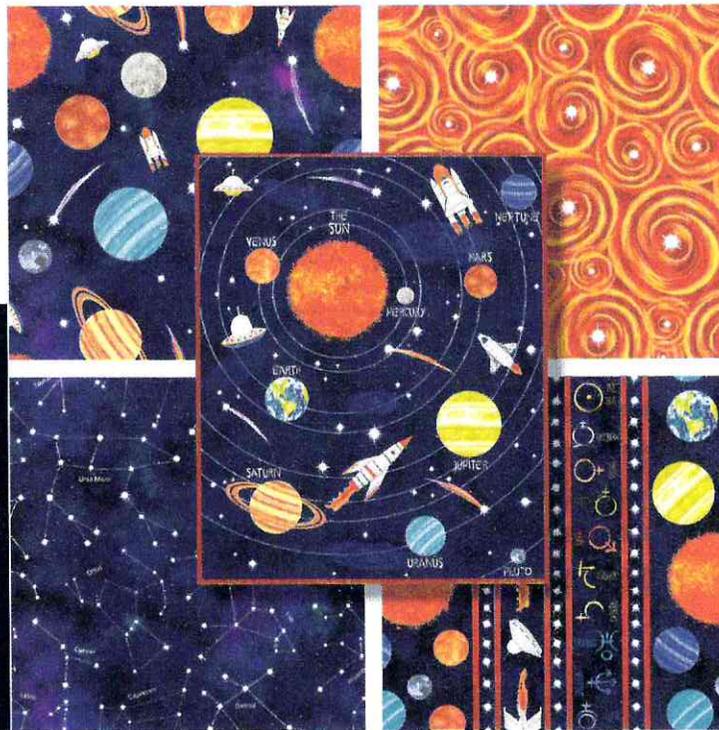
Designing your tote bag:

I have done the following:

- ✓ Plan at least 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.

Statement of intent:

- In my final piece I am going to...
- I am going to explore...
- The techniques are inspired by...
- I plan to use... and... because...
- I won't be using... because...



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.

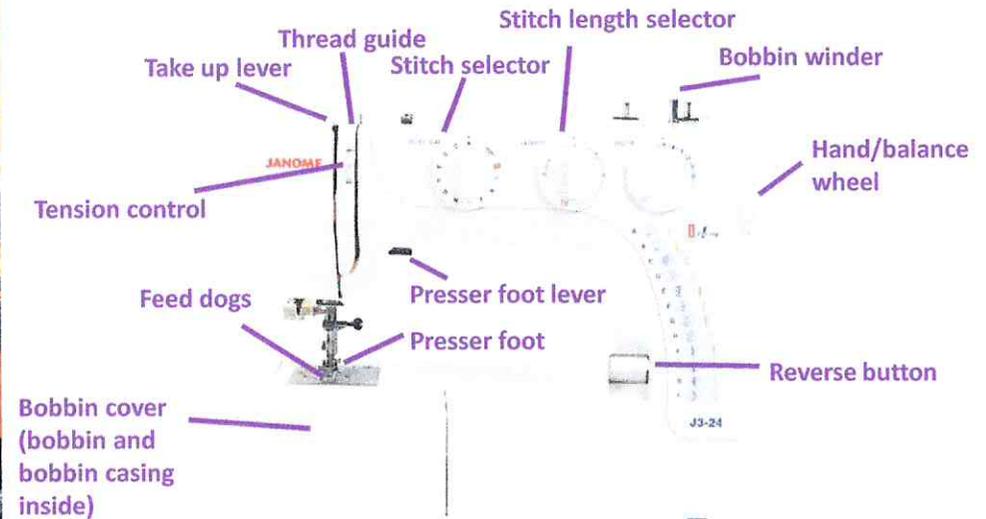
The feed dogs are lowered which prevents the sewing machine from gripping to the fabric.

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 ...

Notes

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Notes