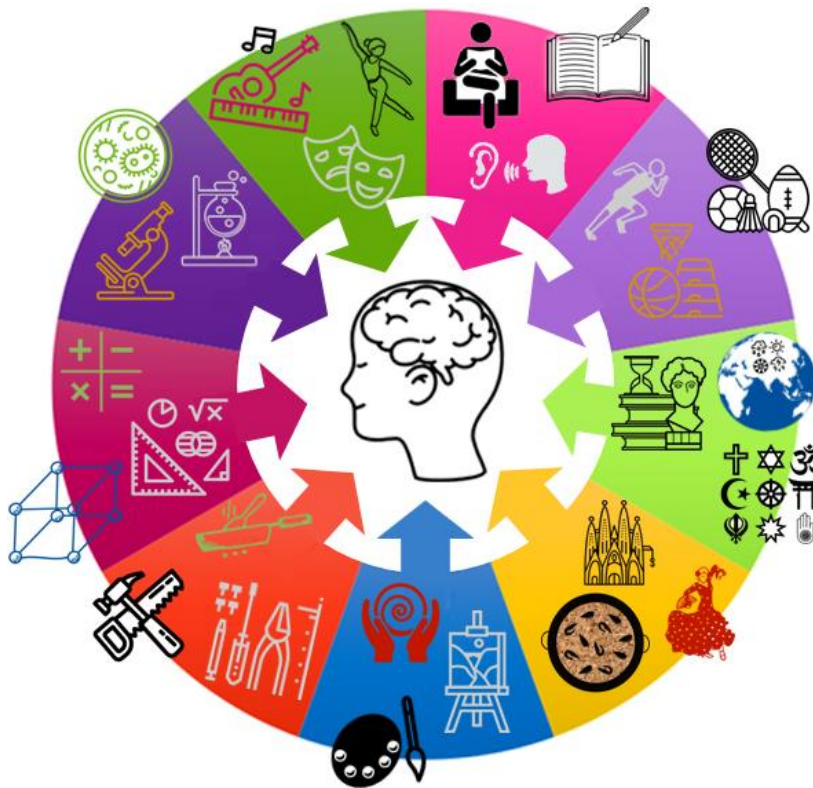


100% book - Year 11 Grammar Stream

Aim to memorise 100% of the knowledge on these Knowledge Organisers.

Term 2



Swindon Academy 2022-23

Name:	
Tutor Group:	
Tutor & Room:	

"If you are not willing to learn, no one can help you.

If you are determined to learn, no one can stop you."

How to use your 100% book of Knowledge Organisers and Quizzable Organisers

Knowledge Organisers

Knowledge Organisers contain the essential knowledge that you **MUST** know in order to be successful this year and in all subsequent years.

They will help you learn, revise and retain what you have learnt in lessons in order to move the knowledge from your short-term memory to long-term memory.

Quizzable Knowledge Organisers

These are designed to help you quiz yourself on the essential Knowledge.

Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

Top Tip

Don't write on your Quizzable Knowledge Organisers! Quiz yourself by writing the missing words in your prep book. That way you can quiz yourself again and again!

Expectations for Prep and for using your Knowledge Organisers

1. Complete all prep work set in your subject prep book.
2. Bring your prep book to every lesson and ensure that you have completed all work by the deadline.
3. Take pride in your prep book – keep it neat and tidy.
4. Present work in your prep book to the same standard you are expected to do in class.
5. Ensure that your use of SPAG is accurate.
6. Write in blue or black pen and sketch in pencil.
7. Ensure every piece of work has a title and date.
8. Use a ruler for straight lines.
9. If you are unsure about the prep, speak to your teacher.
10. Review your prep work in green pen using the mark scheme.

How do I complete Knowledge Organiser Prep?

Step 1

Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use.

The image shows the Epraise website interface. On the left is a 'Planner' for the week of 20th May to 26th May 2020, with columns for Sun, Mon, Tue, Wed, Thu, and Fri. On the right is a 'Knowledge Organiser' for 'Particle Theory'. It contains various sections: 'What is particle theory?', 'What is the law of conservation of mass?', 'What are the different states of matter?', 'What are the differences between the states of matter?', and 'What are the different types of change of state?'. Each section includes definitions and diagrams of particle arrangements for solid, liquid, and gas states.

Step 2

Write today's date and the title from your Knowledge Organiser in your Prep Book.

This image shows a printed page from a knowledge organiser. The date '29th May 2020' and the title 'Particle theory' are handwritten at the top. Below the text, there is a diagram showing three states of matter: 'Solid' (particles in a regular pattern), 'Liquid' (particles arranged randomly but touching), and 'Gas' (particles far apart and moving randomly). To the right of the diagram is a flowchart for changes of state: Melting (solid to liquid), Freezing (liquid to solid), Evaporation (liquid to gas), and Condensation (gas to liquid). It also indicates 'Gaining energy' for melting and evaporation, and 'Losing energy' for freezing and condensation.

Step 3

Write out the keywords/definitions/facts from your Knowledge Organiser in FULL.

Handwritten notes on lined paper. At the top, the date '29th May 2020' is written. Below it, the title 'Properties of the states of matter' is underlined. The notes define 'Particle theory = all matter is made of particles'. It then describes three states: 'Solid = regular pattern particles vibrate in fixed position', 'Liquid = particles are arranged randomly but are still touching each other particles can slide past each other and move around', and 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy'.

Step 4

Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times.

Handwritten notes on lined paper showing the definition of 'Solid' repeated three times: 'Solid = regular pattern particles vibrate in fixed position'.

Step 5

Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book.

This image shows a 'quizzable' version of the knowledge organiser. It has a similar layout to the previous one but with some text boxes for answers. The date '29th May 2020' and title 'Particle theory' are handwritten. The 'What are the different types of change of state?' section has handwritten answers: 'Melting', 'Freezing', 'Evaporation', and 'Condensation'. The 'What are the different?' section has handwritten answers: 'Self quizzing' and 'Arrangement/movement of matter'. The 'What are the different states of matter?' section has handwritten answers: 'Solid = regular pattern pa', 'Liquid =', and 'Gas ='. There are also small diagrams for solid, liquid, and gas states.

Step 6

Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident.

Handwritten notes on lined paper, similar to Step 3, but with corrections and checkmarks. The definition of 'Solid' is 'Solid = regular pattern particles vibrate in fixed position' with a checkmark. The definition of 'Liquid' is 'Liquid = particles are arranged randomly but are still touching each other particles can slide past each other and move around' with a checkmark. The definition of 'Gas' is 'Gas = Particles are far apart and are arranged randomly. Particles carry a lot of energy' with a checkmark. There are also some corrections to the previous notes, such as 'far apart' and 'are X'.

Make sure you bring in your completed Prep notes to demonstrate that you have completed your prep.

Year 11 English: ENGLISH –Poetry cluster 2: The Problem with Power - Grammar

Key Vocabulary		Poem	Context	Events in the poem	Message	Form/ structure
Patriotism	Being devoted to your country	Kamikaze-Beatrice Garland	<ul style="list-style-type: none"> During WW2, the term 'kamikaze' was used for Japanese fighter pilots who were sent on suicide missions. They were expected to crash their planes into enemy warships. The word 'kamikaze' literally translates as 'divine wind'. Flying a kamikaze mission was portrayed as a great honour by the Japanese government. It was claimed that there were many volunteers, although some have argued that not every kamikaze soldier would have been willing. By the end of the war, nearly 4,000 kamikaze pilots had died. 	<ul style="list-style-type: none"> The narrator of this poem is a kamikaze pilot's daughter. Unlike many of his comrades, this pilot turns back from his target and returns home. The poem explores the moment that the pilot's decision is made and sketches out the consequences for him over the rest of his life. Not only is he shunned by his neighbours, but his wife refuses to speak to him or look him in the eye. His children gradually learn that he is not to be spoken to and begin to isolate and reject him. 	<ul style="list-style-type: none"> The poem explores the conflict between personal and national duty and suggests that individual desire and extreme patriotism cannot be achieved together. Through the pilot, Garland may be expressing how it is not honour that gives life meaning, but rather being with loved ones. The poem explores the impossible situation that the pilots were put in by those in power- dying in glory or being shamed and rejected by your family. It also deals with the lasting effects that war can inflict on people, families, and communities. This poem not only deals with the kamikaze pilot's own story, but the implications for those around him. 	<p>Kamikaze is a narrative poem. It begins as a report, summarising another conversation or story told by someone else.</p> <p>Sections of the poem are presented in italics as first-person narrative, where the storyteller speaks directly for herself. This has the effect of heightening the sense of sadness she feels.</p>
		Checking Out Me History- John Agard	<ul style="list-style-type: none"> Since the early 17th century, the country of Guyana has been colonised and controlled by the Dutch, French and British. The indigenous population spoke Arawak, but the British introduced English as the language of the government, courts and education system. For centuries, nations would repress the culture and identity of the countries that they colonised. They did this to control the population and get rid of any rebellion against the colonisers. Born in Guyana in 1949, Agard moved to Britain in 1977 and so sees the culture as both an insider from living there and an outsider from moving to Britain 	<ul style="list-style-type: none"> The poem focuses on the omission of indigenous history and discusses how colonized people were forced to learn about <i>British</i> history—which had little to do with their actual lives. Not only does the poem call attention to the oppressive nature of colonial education, but it also praises important figures who were left out—figures such as Toussaint L'Ouverture, the leader of the Haitian revolution. The poem suggests the curriculum deliberately blinded colonized people to their own histories and argues that in order to understand their own identity they must learn their own history. 	<ul style="list-style-type: none"> Knowledge should not be denied to anyone. No one has the right to oppress others by denying them facts about their past. This can lead to feelings of inferiority and there should be more equality in the world. History is important and there is power in knowing your heritage and culture. There is a sense of caution in this poem in relation to believing what you are told. We are reminded that we should always seek the truth. The education system has power to mould our thinking and we should be aware of this. There is a warning that, when people are denied knowledge, they can become bitter and angry, and this could lead to rebellion, protests and uprisings. 	<p>The open form highlights Agard's rebellion against the status quo and the restrictions of a colonial curriculum. His use of italics separates and celebrates the important historical figures from the history he was a taught.</p> <p>The sing-song rhyme scheme holds a bitterness and anger that he was taught trivial things whilst his own history was omitted.</p>
Dominate	To have power and influence over others	The Émigrée-Carol Rumens	<ul style="list-style-type: none"> Carol Rumens was born in South London in 1944 Published her own poems and translations of Russian poems She has a 'fascination with elsewhere' The Émigrée is not autobiographical poem, but is inspired by living in London (a diverse society) The poem sympathises with people who have been exiled Emigrants are people who have left the country of their birth to settle elsewhere in the world. 	<ul style="list-style-type: none"> A displaced person pictures the country and the city where they were born. The city and country are never named to increase the relevancy to as many people who have left their homelands as possible. The speaker's home country appears to be war-torn, or under the control of a dictatorial government that has banned the language the speaker once knew. Despite this, the émigrée's childhood memories are filled with light and happiness. Though there is a clear sense of fondness for the place, there is also a more threatening tone in the poem, suggesting that not all of her memories are happy and that the country she has emigrated is not always welcoming. 	<ul style="list-style-type: none"> Rumens presents the importance of empathy and sympathy. She reminds us of how traumatic conflict can be and that people are forced to make heart-breaking decisions when they live under cruel leadership. The poem highlights the importance of belonging and is a celebration of diversity – we should make people feel welcome when they move to a new home. Memories are shown to be powerful and to have a strong hold over us with the ability to bring both pain and comfort. The past can be difficult to escape and can restrict us from moving forward in life. There is also a sense of the power of the media – their portrayal of immigrants can lead to a lack of sympathy in society; it is important we do not become insensitive to the pain that can lead to people moving to a new home. 	<p>The use of enjambment reflects the chaos and confusion of her situation. The poem consists of two stanzas with eight lines and a third stanza with nine lines. The added line in the final stanza could suggest she doesn't want to let her memories go, stop writing about her homeland or give up her past.</p>
Defiance	Showing that you don't want to obey someone	Storm on the Island-Seamus Heaney	<ul style="list-style-type: none"> For many centuries, there has been conflict in Northern Ireland. The majority of Northern Ireland's population were unionists, who wanted to remain within the United Kingdom. Most of these were Protestant Christians. Seamus Heaney was a Catholic born in Northern Ireland in 1939. Catholics were seen as the underclass and were discriminated against by the government and police. This resulted in strong political and guerrilla warfare to overthrow British rule and re-unite Ireland. 	<ul style="list-style-type: none"> There are two interpretations of this poem- literal and metaphorical. Literal: The narrator describes how well prepared they are for the storm. The storm attacks the island. As the poem progresses, the narrator's confidence decreases, and they begin to worry. Metaphorical: Heaney uses the storm as a metaphor for the conflict in Northern Ireland. The 'Islanders' suffer under enemy occupation with quiet resignations. 	<ul style="list-style-type: none"> Heaney portrays nature as a powerful force that humans should fear and not attempt to control. Heaney presents the idea that life under constant enemy occupation can leave people accepting this presence with sadness, but stop trying to do anything about it. He warns that the enemy can appear reasonable, but can quickly turn in to a dangerous threat – this threat may not always be physical; the gradual erosion of human rights and liberties is just as perilous. 	<p>Heaney's use of iambic pentameter may appear strange given its use in traditional British poems. However he subverts the traditional structure by swapping the stressed and unstressed syllables on certain lines, resisting the regularity of British control.</p>
Isolated	To be far away from other people or places.	Tissue-Imtiaz Dharker	<ul style="list-style-type: none"> Imtiaz Dharker was born in Pakistan but grew up in Scotland. Her poetry often deals with themes of identity, the role of women in society and the search for meaning. Tissue is from her poetry collection called 'The terrorist at my table'. Most of the poems in that collection relate to religion, terrorism and global politics. 	<ul style="list-style-type: none"> Tissue explores the varied uses of paper and how they relate to life. It is written from the point of view of someone looking out at the conflict and troubles of the modern world; destruction, war and politics, money and wealth as well as issues like terrorism and identity. The poem remarks how nothing is meant to last. 	<ul style="list-style-type: none"> Human power is ephemeral. No matter how much we try to build structures to display our power, nature will always outlast it. Our relationship with paper is unhealthy. We rely on it too much to make records, document ownership and build debt. Instead, we should realise that the significance of human life will outlast the records we make of it on paper or in buildings. Human life is fragile, and not everything can last. We must understand our fragility and should not try to build our lives through making recordings or building with blocks and bricks, we should focus on living. 	<p>The poem has an irregular structure and no rhyme scheme reflecting the irregularity of life and the lack of and predictability. The fragile structure is symbolic of the fragile nature of our lives.</p>
Dictatorial	Telling people what to do in a forceful and cruel way					
Nostalgia	A warm feeling for the past, particularly a very happy time					
Fragility	being easily broken or damaged.					

Key Vocabulary		The Big Ideas	Notes
Patriotism		Garland questions the importance of honour and patriotism and demonstrates how we must have the individuality to learn for ourselves and not just to follow others.	
Colonialism		Agard explores the importance of identity and the power of history and education.	
Dominate		Rumens demonstrates impact of dictatorial governments and the power of memory. She highlights the need for compassion and empathy.	
Defiance			
Isolated		Heaney warns of the dangers of enemy occupation and the emotional toll of silent resignation.	
Dictatorial			
Nostalgia		Dharker emphasises the fragility of life through the extended metaphor of paper.	
Fragility			

1. Context	
<p>Writer: Charles Dickens (1812-1870) Dates: First published in 1843 Genre: Allegorical; a ghost story. Era: Victorian Set: Victorian London Structure: The novella is divided into 5 staves (chapters).</p>	<p>Biography of Dickens</p> <ul style="list-style-type: none"> Born in Portsmouth in 1812 When Dickens was 12, his father was sent to debtors' prison as he was unable to pay his bills. His mother and youngest siblings were sent with him, whilst Dickens stayed with a family friend. In order to help his family, Dickens had to leave school and work in a factory sticking labels on bottles. Dickens dedicated his life to writing works that revealed the horrors of life in Victorian London for those living in poverty.
<p>Christmas: Dickens grew concerned that, due to capitalism, society had lost sight of traditional values (Christian morals, forgiveness, charity). He felt that Christmas was the perfect time to reconnect with these values and used his novella to do this. He also knew that Christmas would be a popular topic so it would sell well – therefore enabling his message to reach a wider audience.</p>	<p>London and inequality: Dickens juxtaposes scenes of middle-class comfort and poverty to emphasise the close proximity and contrast of the different classes. It highlights the Christian concept of 'love thy neighbour'. The urban setting allows Dickens to exercise his fondness for hyperbole, with the exaggerated extremes of poverty adding to the effect of the 'plight of the poor'.</p>
<p>The Poor Law, 1834 In order to deter poor people from claiming financial help, the government made claimants live in workhouses: essentially, prisons for the poor. Dickens hated this law. He spent 1843 touring factories and mines in England and wished to highlight the situation facing poor people. A Christmas Carol was published soon after – in December 1843.</p>	<p>Malthusian Theory The reformation of The Poor Law was partially informed by the writings of Thomas Malthus. Malthus argued that if living standards increased, population would increase and eventually the number of people would be too great for the food that could be produced. As a result, Malthus argued it was important not to support the poor or improve their standards of living, but to allow them to die if they couldn't support themselves because charity would only prolong their suffering.</p>
<p>The Supernatural: Victorian society was fascinated by the supernatural, including mediums, ghosts, and spiritualism. However, this belief in the supernatural was also heavily influenced by the church, with the belief that ghosts were souls who were trapped in purgatory (a place of suffering where the souls of sinners were trapped).</p>	

2. Key Characters	
<p>Ebenezer Scrooge: The protagonist is initially established as an archetypal villain who dismisses the goodwill and generosity associated with Christmas. After being forced to transform, he feels remorse for his avarice and becomes a symbol of Christmas spirit. Scrooge embodies the relentless capitalist spirit of the time, but also demonstrates that everyone has the capacity to reform.</p>	
<p>Bob Cratchit: Bob is Scrooge's downtrodden but loyal employee. His family are a symbol of Victorian poverty, cheerfulness in adversity, togetherness and Christmas Spirit. Bob shows pity for Scrooge and provides a contrast to Scrooge's isolation and meanness. His son, Tiny Tim, is an emblem for noble poverty; he accepts his disability without complaint.</p>	
<p>Fred: Fred juxtaposes the character of Scrooge and epitomises the concept of goodwill and forgiveness, refusing to be discouraged by his uncle's misery. People speak highly of Fred and his generosity, in contrast to how they speak of Scrooge. Fred shows that Scrooge has chosen isolation and shows forgiveness to Scrooge, welcoming him in Stave Five.</p>	
<p>Marley's Ghost: Marley's ghost is the spiritual representation of Scrooge's potential fate. The chains that drag him down symbolize the guilt caused by his failure to help people in need. Marley's ghost warns Scrooge that he too will experience the same guilt if he continues to deny people help.</p>	
<p>The ghosts: The Ghost of Christmas Past is a symbol of childhood, truth and enlightenment. The Ghost of Christmas Present represents goodwill, plenty and the festival of Christmas. The Ghost of Christmas Yet to Come symbolises a catastrophic future for mankind.</p>	
<p>Belle: The woman that Scrooge was engaged to when he was a young man. Belle's role is crucial in Scrooge's transformation, as the scenes show Scrooge what he might have had in his life if he had not been so avaricious. Through the character of Belle, Dickens sets emotional love directly against Scrooge's love of money and suggests that avarice can lead to a deprivation of kindness, love and empathy.</p>	

3. Central Themes	
<p>Social injustice</p>	<p>Dickens highlights the unfairness within society through the juxtaposition of the poor and wealthy. Through Scrooge's refusal to give to charity and his exclamation that the poor should be in workhouses or die, Dickens illustrates the selfishness of the higher classes and the injustice of wealth distribution in Victorian society. The children, Ignorance and Want, personify the dangerous consequences of allowing poverty to continue.</p>
<p>Transformation and redemption</p>	<p>By establishing Scrooge as an archetypal villain, Dickens is able to emphasise the idea that everyone is capable of transformation and redemption. From starting as a greedy, avaricious miser, Scrooge is able to reflect upon his actions and to understand that he must live his life helping others to avoid Marley's fate.</p>
<p>Social responsibility</p>	<p>Dickens felt that every individual had a responsibility for those around them. Marley's Ghost conveys the message of the novella when he cries, 'Mankind was my business' demonstrating that the proper 'business' of life is not about seeking financial reward but having concern for others. Dickens highlights the importance of trying to make a difference- whether that be large financial contributions (Scrooge), smaller contributions (Fezziwig) or simply showing compassion and kindness to one another.</p>

4. Key Vocabulary	
Avarice	Extreme greed of possessions or money
Salvation	Saving someone from harm or destruction
Miserly	someone who is greedy and does not like spending money
Callous	Mean or cruel
Antithesis	The exact opposite of something
Epiphany	A moment of sudden understanding
Redemption	The act of being saved or freed from sin or error
Benevolence	Kind and helpful towards others
Philanthropic	Showing concern for others by being charitable
Misanthropic	Someone who has a hatred for other people
Penitence	sincere regret for wrong or evil things that you have done
Remorse	a strong feeling of sadness and regret about something wrong that you have done
Deprivation	When someone is unable to have the things they need or want
Despotism	exercising power in a cruel and controlling way
Capitalism	A political system in which property, business, and industry are owned by private individuals and not by the government

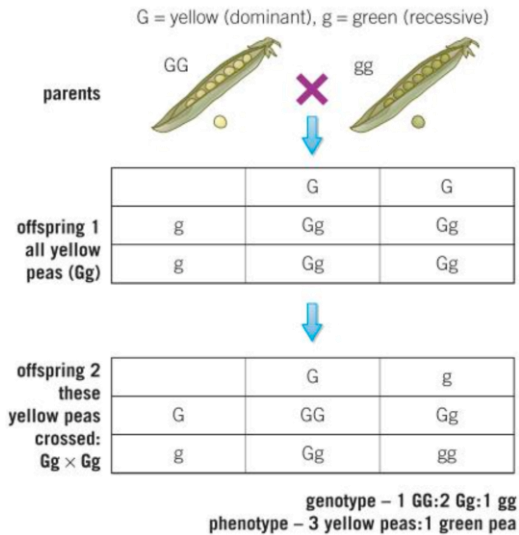
5. Key Terminology, Symbols and Devices	
<p>Stave</p>	<p>Chapters in the novella, but we normally associate staves with music, as if the book is a Christmas carol, and each chapter is part of the song. As Christmas carols are repetitive and easy to remember, it links to how Dicken's wishes his message to be remembered.</p>
<p>Intrusive Narrator</p>	<p>A narrator who interrupts the story to provide a commentary to the reader on some aspect of the story or on a more general topic. In 'A Christmas Carol' the narrator helps to shape our impressions of Scrooge.</p>
<p>Circular structure</p>	<p>Circular narratives cycle through the story one event at a time to end back where the story originated.</p>
<p>Allegory</p>	<p>A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.</p>
<p>Allegorical figures</p>	<p>An allegorical figure is a character that serves two purposes: first, they are an important person in the story in their own right, and, second, they represent abstract meanings or ideas.</p>
<p>Foreshadowing</p>	<p>Foreshadowing is a literary device in which a writer gives an advance hint of what is to come later in the story.</p>
<p>Didactic</p>	<p>A type of literature that is written to inform or instruct the reader, especially in moral or political lessons.</p>
<p>Semantic Field</p>	<p>A set of words that are related in meaning. Dickens frequently uses semantic fields of warmth and coldness that are associated with the characters.</p>

The Big Ideas	Notes
<p>Dickens promotes a social responsibility in which he argues that everyone must contribute.</p>	
<p>Dickens suggests that change is possible, and that everyone has capacity to redeem themselves and reform.</p>	
<p>Dickens illustrates the injustice of wealth distribution in Victorian society and highlights the dangerous consequences of allowing poverty to continue</p>	
<p>Dickens uses contrasting characterisation to demonstrate how we must be generous and socially responsible.</p>	
<p>Dickens uses contrasts in setting to highlight social injustice</p>	

SCIENCE Y10 T2

Mendel

- Mendel was a monk that bred pea plants. The importance of his work was not recognised until after his death.
- He cross bred pea plants and counted the different number of offspring produced.
- He found that characteristics were inherited in predictable patterns.
- He explained this by suggesting that there were separate units of inherited material.
- He realised some characteristics were dominant over others.
- Mendel came to this conclusion before chromosomes and DNA had not been discovered.



Discovering DNA

- Observations showed chromosomes and Mendel's 'units' behaved in a similar way.
- Discovery of the structure of DNA led to the idea of genes which explained the mechanism of inheritance.

1. What plants did Mendel experiment on?
2. What did Mendel's experiments show?
3. Why was Mendel's work not recognised until after his death?

Theories of evolution

Darwin

- Darwin's theory of evolution by natural selection was based on observations from around the world and fossil records.
- This was a controversial theory as it:
 - challenged religious beliefs
 - DNA/genes had not been discovered so the mechanism of inheritance could not be explained.
 - There was not enough evidence

Wallace and Darwin

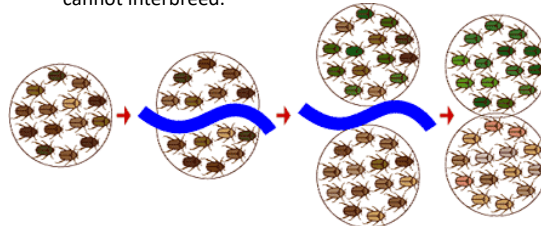
- Alfred Russel Wallace independently proposed the theory of evolution by natural selection.
- He worked worldwide gathering evidence for evolutionary theory.
- Darwin quickly published his book 'On the Origin of Species' after receiving a copy of Wallace's work.

Lamarck

- Jean-Baptiste Lamarck's theory of evolution was based on the idea that change that occurs in an organism during its lifetime can be inherited.

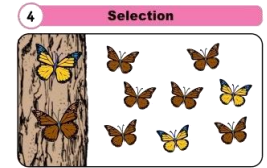
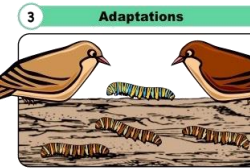
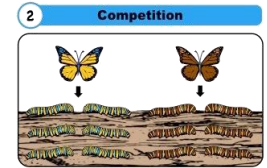
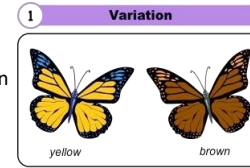
Speciation

- Wallace is best known for his work on speciation.
- A build up of evidence over time has led to our current understanding of the theory of evolution:
 1. Isolation: two populations of a species become separated.
 2. Genetic variation exists between the two populations.
 3. Natural selection acts differently in the two populations
 4. Speciation: the two populations become so different they cannot interbreed.

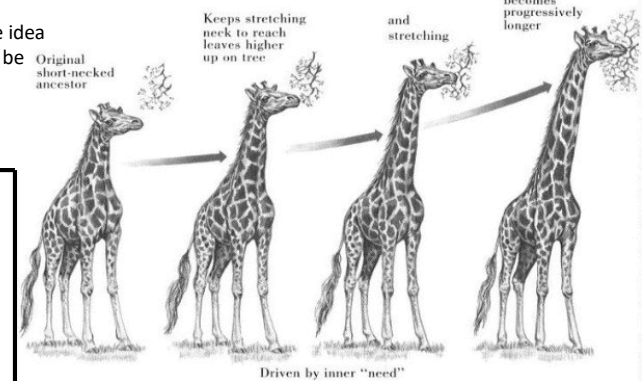


1. How did the discovery of DNA reinforce Mendel's observations?

1. How do new species arise?



LAMARCK'S GIRAFFE



1. What is the name of Darwin's theory of evolution?
2. Why was Darwin's theory not accepted at first?
3. Which scientist proposed a similar theory to Darwin?
4. What was Lamarck's theory of evolution based on?

Science T2 Year 11 Grammar Biology B4.15 – Genetics and Evolution

Extinction

Extinction = no remaining individuals of a species still alive on Earth.

Factors which could cause extinction:

- New disease
- Rapid change in environment (e.g. meteor/volcano eruption)
- New predators
- New competitors (often man)



Evidence for evolution

Fossils

Fossils are the **remains of plants or animals** from **millions of years ago**:

They are formed in different ways:

- Remains of an organism that has not fully decayed as one of the decay conditions was absent (e.g. too cold, not enough O₂)
 - Mineralised forms of the harder parts of an organisms (such as bones)
 - Traces of organisms such as footprints or burrows.
- Many early life forms were **soft bodied** so have left few traces behind, as they decayed so we cannot be sure how life started on Earth. Many have been destroyed by Earth's rock cycle.

Fossils help us understand how much or little organisms have changed as life developed on Earth.

Resistant Bacteria

- Bacteria **evolve** rapidly as they reproduce at a fast rate. (reproduce approx. every 20 mins)
- Mutations of bacteria can produce new strains.

- Some strains are **resistant** to antibiotics (so are not killed).
- They **survive** and **reproduce** – population of resistant strain rises.
- Resistant strain will spread because people are not **immune** and there is no effective treatment.

- **MRSA** is **resistant** to antibiotics.



1 There is variation in the bacterial population. One bacterium develops a mutation by chance that means it is resistant to an antibiotic.

2 The antibiotic kills some of the bacteria, the resistant bacterium survives and reproduces.

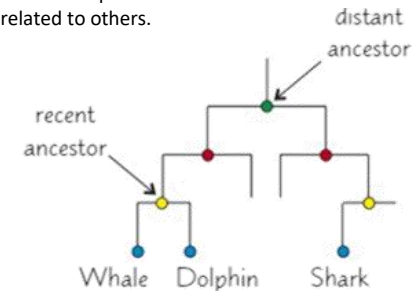
3 The antibiotic kills the rest of the non-resistant bacteria so the person may start to feel a little better. The resistant bacterium has survived the antibiotic and continues to multiply.

How to reduce antibiotic resistant strains:

- Doctors should not prescribe antibiotics for viral infections
- Patients must complete courses of antibiotics
- Agricultural use of antibiotics should be restricted.

Evolutionary trees

Show how species have evolved from and are related to others.



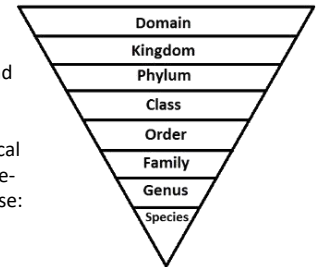
Whales and dolphins have a recent common ancestor so are closely related. They're both more distantly related to sharks.

Classification

Linnaeus classified things into: Kingdom, phylum, class, order, family genus and species.

Organisms are named by the **binomial system** of genus and species. (2 names)

Due to evidence from chemical analysis, there is now a 'three-domain system' by Carl Woese:



Domain	bacteria	archaea	eukaryota			
Kingdom	eubacteria	archaeobacteria	protista	fungi	plantae	animalia

1. What does 'extinct' mean?
2. What are fossils?
3. Describe one way fossils can form
4. What do fossils show us?
5. Why is the fossil record incomplete?
6. What factors can cause extinction?

1. Why do bacteria evolve rapidly?
2. What can cause new strains of bacteria?
3. Name a bacteria which is resistant to antibiotics.
4. What are the three ways to reduce antibiotic resistance strains?

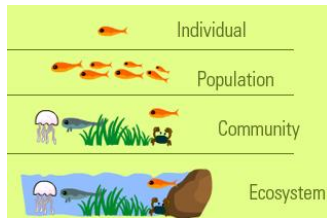
1. What do evolutionary trees show?

1. How did Linnaeus classify organisms?
2. What are Carl Woese's three domains?
3. What does 'binomial' mean?

Science T2 Year 11 Grammar Biology B5.16 Adaptations, interdependence, and competition

Ecosystems

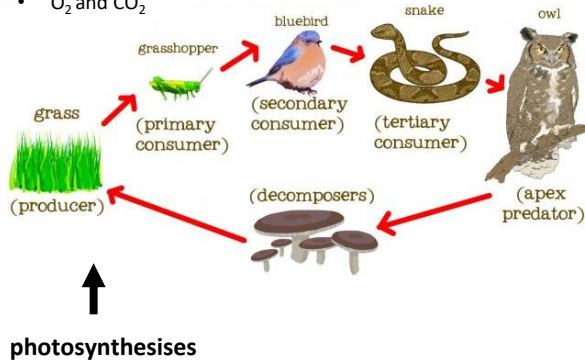
An ecosystem is all the living organisms within an area (community) plus the physical habitat



Interdependence

Organisms rely on each other for...

- Food
- Shelter / nesting sites
- Seed dispersal
- O₂ and CO₂



Competition

Competition between organism occurs when resources within an ecosystem are limited.

Animals and plants compete for different resources.

Plants	Animals
Light	Food
Space	Mates
Minerals ions	Territory
Water	

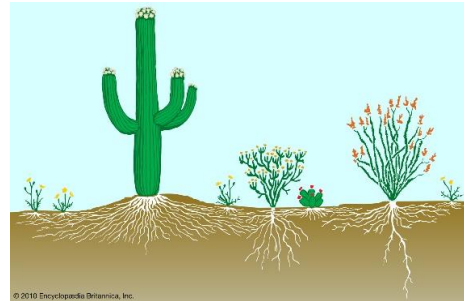
1. What is a community?
2. What is an ecosystem?
3. Give two things that animals rely on plants for
4. Give two things that plants rely on animals for
5. What is the term given to the predator at the very top of a food chain?
6. Why are green plants known as producers?
7. Name two resources plants compete for
8. Name two resources animals compete for

Biotic and Abiotic Factors

Factors that affect the number of organisms

Biotic – living	Abiotic – non-living
<ul style="list-style-type: none"> • availability of food • new predators arriving • new pathogens • one species outcompeting another so the numbers are no longer sufficient to breed. 	<ul style="list-style-type: none"> • light intensity • temperature • moisture levels • soil pH and mineral content • wind intensity and direction • carbon dioxide levels for plants • oxygen levels for aquatic animals.

Plant adaptations



Plants in desert areas have :

- deep roots to maximise water uptake
- thin/no leaves to minimise water loss
- Spines to stop them being eaten

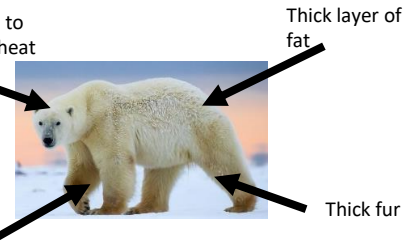
Animal Adaptations



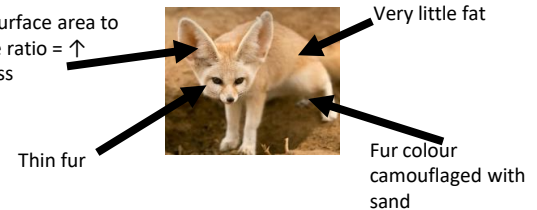
Can be:

- Structural – a feature of the organism's body (e.g. thick fur, bright colours, camouflage)
- Behavioural – responses from the organism (e.g. hibernation, migration, huddling together)
- Functional – a body process (e.g. camel breaking down hump of fat into water, producing little urine)

Small surface area to volume ratio = ↓ heat loss



Large surface area to volume ratio = ↑ heat loss



Extremophiles

Extremophiles are organisms that live in extreme environments. Extreme environments = high temperatures, high pressure or high salt concentration.

E.g. bacteria living in deep sea vents = extremophiles.

1. Name two biotic factors that can affect organisms within a habitat
2. What does the term 'abiotic' mean?
3. Name two abiotic factors
4. Why do some plants have spines instead of leaves?
5. Name two ways plants are adapted for living in desert climates.

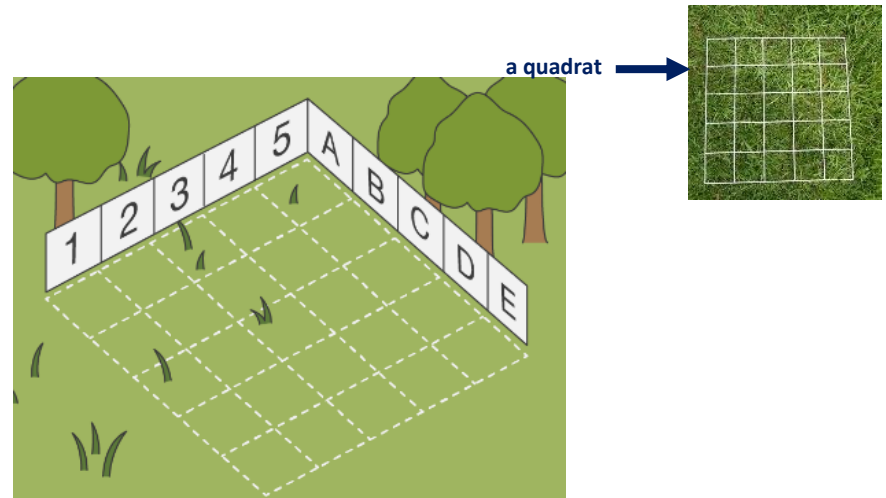
1. Name the three types of adaptations
2. Name one behavioural adaptation
3. How are animals adapted to live in cold climates?
4. What are extremophiles?
5. What is the surface area : volume ratio like on desert animals?
6. Give an example of an extremophile

Science T2 Year 11 Grammar Biology B5.16 Adaptations, interdependence, and competition

Required practical – Estimating Populations (Measuring abundance)

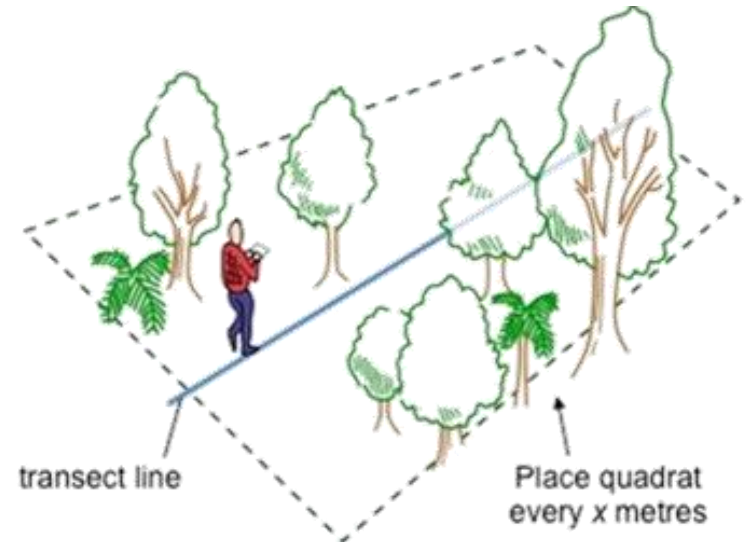
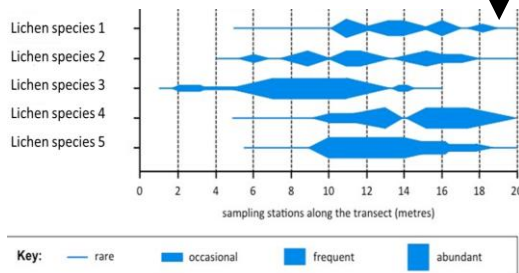
1. Calculate area of site.
2. Divide site up into a numbered grid
3. Use a random number generator to pick coordinates.
4. Randomly throw the 0.25m² quadrat at those coordinates.
5. Count the number of particular organism in the quadrat.
6. Repeat steps 3-5 **ten times (minimum)**.
7. Calculate mean number of organism.
8. Calculate estimated number organism in site using the following equation:

$$\frac{\text{area of site}}{\text{area of quadrat}} \times \text{mean}$$



Required Practical – How populations may change over a distance (Measuring distribution)

1. Place tape measure (a transect line) through ecosystem being investigated.
2. Place quadrat at regular, random intervals along the transect line and count the number of particular organisms.
3. Draw a distribution graph of your results. (They might look like this.)



1. What is the minimum number of times the organism should be counted when estimating population size?
2. What is a quadrat?
3. What is the equation used to estimate population size?
4. How can you ensure the quadrat is randomly placed throughout the site?

1. What is a transect line?
2. What is a transect line used to investigate?
3. How is the quadrat placed?

Science T2 Year 11 Grammar Physics P4.15 Electromagnetism

Magnets

- Have two poles - **north** and **south**.

Opposite poles attract



Same poles repel



- **Like poles** will **repel** each other (e.g. N-N or S-S)
- **Opposite poles** will **attract** (e.g. N-S)

- Magnetism is a **non-contact** force – magnets do not need to be touching for effect to be observed.

Magnetic materials: only **iron/steel, cobalt** and **nickel** are magnetic.

Types of magnets

Permanent magnet

- Produces its own magnetic field.
- Magnetism cannot be turned on or off.

Induced magnet

- Induced magnet = a material which becomes magnetic when placed in a magnetic field.
- Induced magnets only attract other materials and lose magnetism when removed from the magnetic field.

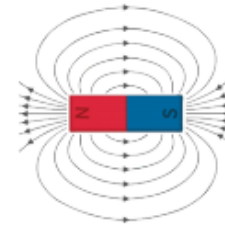
1. Name the two poles on a magnet.
2. What will like poles do?
3. What will opposite poles do?
4. Why is magnetism a 'non-contact' force?
5. Which metals are magnetic?

Magnetic Fields

Magnetic field = the area surrounding a magnet where the force will act on another magnet or magnetic material.

- Magnet field is strongest at the **poles** where the field lines are **closest together**.

- Field lines always go away from **magnetic north** and towards **magnetic south**.



Earth's Magnetic Field

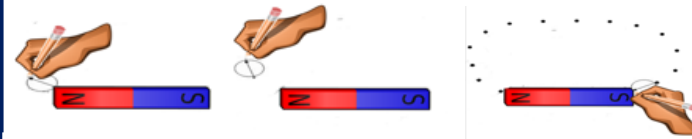
- Earth produces a magnetic field.
- Magnetic compasses use this to help navigation.
- The core of the Earth is made of **iron** (magnetic).

Plotting Magnetic Field Lines

A magnetic compass can be used to plot and draw the magnetic field lines around a magnet.

You need to be able to describe this method!

1. Place the bar magnetic in centre of paper.
2. Place a plotting compass at one end of the magnet.
3. Put a pencil dot at the place the compass arrow is pointing to
4. Move the compass to line up the tail of the compass needle to the dot you just made.
5. Repeat until you reach the other end of the magnet



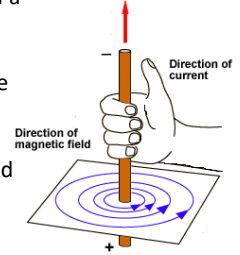
6. Join the dots using a line – this is the magnetic field line. Mark on the direction the arrow pointed – it should run N→S

1. What is a magnetic field?
2. Where is the magnetic field the strongest?
3. Which direction do the field lines go?
4. Draw the magnetic field around a bar magnet.
5. What is the Earth's core made of?
6. What can the Earth's magnetic field be used for?

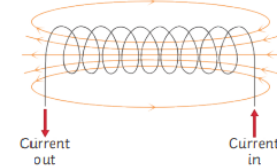
1. Describe a method to plot the magnetic field of a bar magnet.

Electromagnetism

- When a current passes through a wire, a **magnetic field** is produced
- The direction of the field can be found by the **right hand thumb rule**
- curl the fingers of the right hand around the wire and point the thumb in the direction of the current (+ to -)
- The direction of the circular field is shown by the fingers
- Strength of magnet can be increased by increasing the current
- When the current is switched off, the magnetic field is lost



Coiling the wire will form a **solenoid**.



To increase strength of magnetic field around a solenoid you can:

- Add an **iron core**
- **Increase number of turns** in coil
- **Increase the current** passing through wire

Electromagnets

- Electromagnet is a solenoid with an iron core.
- Are **induced magnets** (can be turned on and off)

Uses = electric motors, loudspeakers, electric bells, scrapyards.

1. What is produced when a current flows through a wire?
2. How can you increase the strength of a magnetic field of a straight wire?
3. What is produced when you coil the wire?
4. How can you increase the magnetic field around a solenoid? (3 ways)
5. What is an electromagnet?
6. What is meant by induced magnet?
7. State 2 uses of electromagnets.

1. What are the two types of magnets?
2. Name two differences between these two types of magnets.

Science T2 Year 11 Grammar Physics P4.15 Electromagnetism

The Motor Effect (HT only)

- When a wire carry a **current** is placed in a magnetic field, the two magnetic fields interact and a **force** is exerted on the wire. .
- This is called **motor effect**.

- The force produced by the motor effect can be calculated using:

$$\text{Force (N)} = \text{magnetic flux density (T)} \times \text{current (A)} \times \text{length (m)}$$

$$F = B \times I \times l$$

For example:

A current of 8A is flowing through a wire that is 75cm long. The magnetic field acting at a right angle on the wire is 0.5T. Calculate the force.

Remember: the equation uses length in m. The question has given you the length in cm so you need to convert it before you answer.

$$F = 0.5 \times 8 \times 0.75$$

$$F = 3\text{N}$$

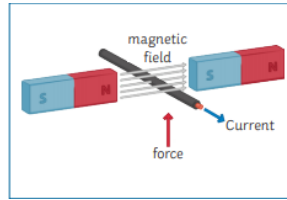
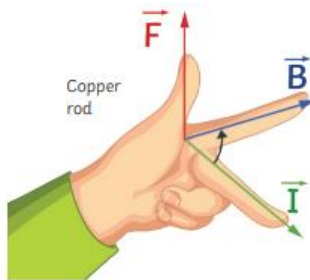
- If current flowing through wire is **parallel** to magnetic field, **no force** is produced.

Fleming's left-hand rule.

- You may be asked a diagram and asked to indicate direction of force.
- You can use Fleming's left-hand rule to do this (picture)

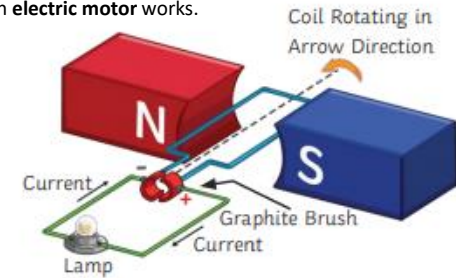
Remember (**F B I**):

- Use your **left hand!**
- The angle between index and middle should be **right angle**.
- Thumb = direction of **force**
- First finger = direction of **magnetic field**
- Second finger = direction of **current** through wire.



Electric Motors (HT only)

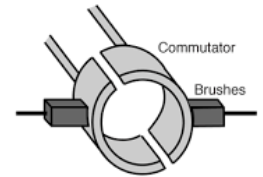
- When wire carrying current is **coiled**, the motor effect causes wire to **rotate**.
- This is how an **electric motor** works.



- Current flows force produced acts in **opposite directions** causing coil to **rotate** overall.

- When coil reaches a **vertical position**, force is parallel so would be zero – stops rotating.

- A gap in the **split ring commutator** in the motor cuts the current temporarily.



- Momentum ensures the coil carries on moving

- The commutator reconnects and **changes the direction of the current** to maintain a **constant rotation** in one direction overall.

- Increase speed of rotation by increasing the:

- current
- strength of magnet
- number of turns on the coil

1. What is the 'motor effect'?
2. State the equation for calculating the force produced by the motor effect.
3. What happens to the force if the current flowing through the wire is parallel to the magnetic field?
4. What is Fleming's left-hand rule used to indicate?
5. What does your thumb represent?
6. What does your first finger represent?
7. What does your second finger represent?

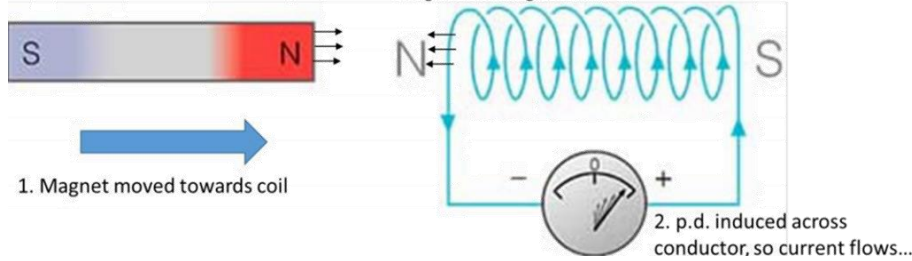
1. What happens when a wire carrying a current is coiled?
2. How does an electric motor work?
3. Why is a **split ring commutator** used?
4. How can we increase the speed of rotation of the motor?

Science T2 Year 11 Grammar Physics P4.15 Electromagnetism

The generator effect

- Movement can be used to produce a current in a wire.
- When a coil of wire spins in a magnetic field an electrical current is produced. An alternating current is **induced**.
- This is called the **generator effect**.
- This also works if you keep the coil still and move the magnetic field.
- The current in the conductor produces a magnetic field, which **acts to oppose the change**.

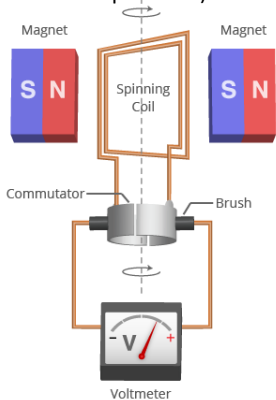
3. Current flows such that the magnetic field **opposes** the change – it repels the magnet moving towards it!



Factors affecting induced potentials

The size of the induced potential in the generator effect depends on:

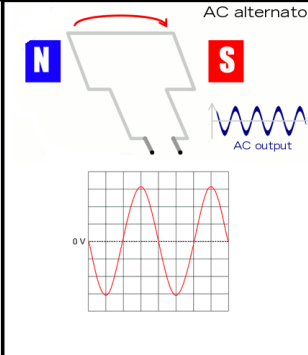
- The size/strength of the magnetic field (increasing the magnetic field increases the induced potential)
- The number of turns on the solenoid (increasing the number of turns increases the induced potential)
- The speed of movements/changes to the magnetic field faster changes increases the induced potential)



1. What is the generator effect?

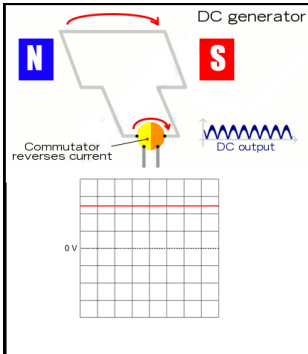
1. What factors affect the size of an induced potential?

Alternating current generator



- An alternating current is also called an alternator.
- Each end of the coil of wire spins inside the magnetic field and makes contact with a complete loop of conductor that is connected to the rest of the circuit.
- Every 180° turn the current flips direction.
- This produces an alternating current.

Direct current generator



- A direct current generator is also called a dynamo.
- A commutator can be used to generate a direct current.
- The commutator prevents the current flipping direction every half turn.
- This ensures the current only flows in one direction.

1. How does an alternating current generator work?

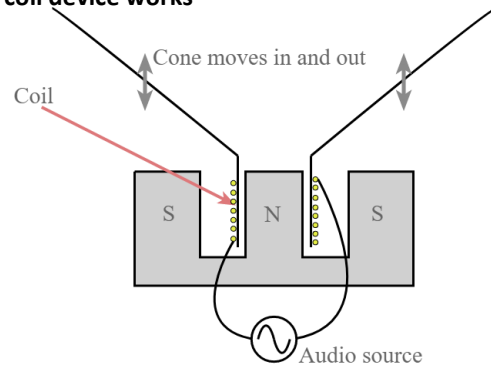
2. How does a direct current generator work?

Science T2 Year 11 Grammar Physics P4.15 Electromagnetism

Moving coil sound devices

- Microphones and speakers are moving coil devices.
- The moving coil is attached to a cone.
- In loudspeakers and headphones an induced current causes the cone to vibrate the air around it causing a sound wave.
- In microphones sound waves move the cone causing a changing current to be induced on the coil.

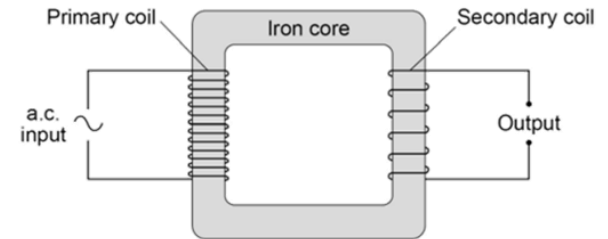
How a moving coil device works



1. A force is produced in the coil of a wire by placing it in a magnetic field and turning on the current.
2. The current alternates in direction, varying the size of the current.
3. The coil moves back and forth.
4. The coil is joined to a cone which moves with it.
5. The cone vibrates the air according to the current.
6. The current transfers the information about the sound.

Transformers

- A transformer is a device used to change an alternating voltage.
- They contain two coils of wire wrapped around an iron core.
- Transformers are used in the National Grid to distribute electricity.



Step Up Transformer

- A step-up transformer increases the voltage and decreases the current of the a.c. input.
- The primary coil has less coils than the secondary coil.
- This increases efficiency by reducing the amount of energy wasted as heat.

Step Down Transformer

- A step-down transformer decreases the voltage and increases the current of the a.c. input.
- The primary coil has more coils than the secondary coil.
- This lowers the voltage so it is safe to use.

Transformer Equation

$$\frac{\text{primary potential difference}}{\text{secondary potential difference}} = \frac{\text{number primary turns}}{\text{number secondary turns}}$$

$$\frac{V_p}{V_s} = \frac{n_p}{n_s}$$

1. What is a moving coil device?

2. How does a speaker work?

1. What is a transformer?

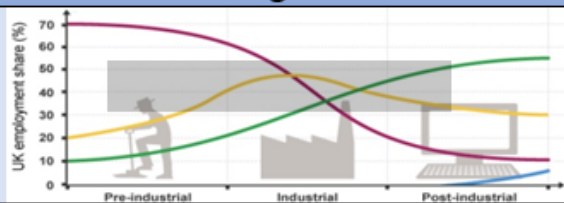
2. What is the difference between a step-up and a step-down transformer.

3. Why are step-up transformers used in the National Grid?

4. What are step-down transformers used in the National Grid?



1. Economic change in the UK



Primary	↘ due to mechanisation.
Secondary	↗ due to industrial revolution then ↘ due to de-industrialisation.
Tertiary	↗ due to wealth (↗ disposable income)
Quaternary	High-tech jobs including research and IT. ↗ due to government policies and the increase in technology.

Why has our economy changed?

De-industrialisation	The decline of a country's traditional manufacturing industry due to exhaustion of raw materials, loss of markets and competition from NEEs.
Government policies	A plan decided by a government to manage issues in a country.
Globalisation	The process which has created a more connected world; with increases in the movement of goods/people worldwide

2. Post industrial economy

Tertiary and quaternary sector employed 81% in 2011.	
IT	Employs over 60,000 people.
Services	Retail is the largest sector. Employs 4.4mill
Finance	London is the world's leading centre. HSBC
Research	Government invested £30bill in 2013.
Science parks	Groups of <u>high tech</u> industries and those doing scientific research. Located near universities (for graduates, share facilities).
Business parks	Purpose built areas of offices and warehouses (on edge of cities as less congestion, cheaper, good transport links).

3. Environmental impact of industry

Air and water pollution. Soil degradation.	
Releases CO ₂ increasing the rate of global warming.	
Transport of materials is by road ↗ air pollution.	
Example of modern industry being environmentally sustainable	
Google	London Landscaper started 2018.
686 bikes spaces	Encourages cycling to work.
4 car spaces	< congestion/CO ₂ emissions.
Solar panels.	Reduces fossil fuel consumption and reduces carbon footprint.
19,800 kWh	
Rooftop gardens	Urban greening. < CO ₂ . Collects rainwater. Encourages wildlife.

4. Changes in the rural landscape

Population decline	Outer Hebrides (away from cities, limited opportunities).
Social changes	<ul style="list-style-type: none"> ↓ Declined by >50% since 1901. ↑ aging population = care issues. ↓ Less children > schools shut.
Economic changes	<ul style="list-style-type: none"> ⊖ Services close ie post offices. ⊖ ↑ tourists but infrastructure not there. ⊖ Government subsidies cost of ferries.
Population growth	South Cambridgeshire (near large cities, people can commute).
Social changes	<ul style="list-style-type: none"> ↓ Migrants from Cambridge, some now from Eastern Europe too. ↓ Proportion of elderly increasing (>65). ↓ 80% car ownership = > congestion. ↓ Young people are costed out.
Economic changes	<ul style="list-style-type: none"> ⊖ ↑ house prices. Less affordable housing ⊖ Petrol prices ↑.

5. Improvements in infrastructure

Road	Upgrading 'Smart motorways' M4. Variable speeds, reducing accidents, extra lanes. 2014 Road investment strategy £15 bill. New construction jobs, boost economy.
Rail	Crossrail in London. Puts extra 1.5 million within 45 mins commute of capital city. HS2 to reduce journey times. London to Manchester in 1 hr 8 minutes.
Port	Liverpool 2. Doubles capacity to over 1.5 million containers a year. 96% of UK imports/exports through ports.
Airports	Heathrow expansion. 3 rd runway £18.6bill

6.. North-South divide

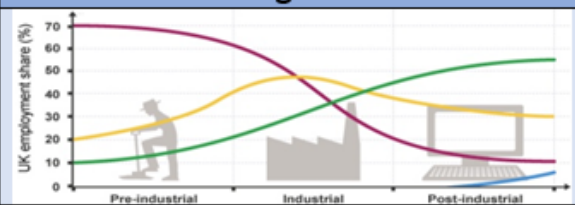
Causes	Decline of heavy industry in North (coal) Investment in finance and service industry in the South Investment in infrastructure in South
Impacts in north	Higher unemployment / lower wages (40%) Poor health, lower life expectancy (10 yrs) Poor education. There are SOME exceptions

Strategies attempting to resolve regional differences

Devolving more powers	Give more power to local councils and Welsh and Scottish governments. Plan best how to use their money.
Northern Powerhouse	A plan to attract investment to north. Improve transport links to northern cities. e.g. HS2, Liverpool2. BUT just a CONCEPT not a plan.
Enterprise Zones	55 EZs to encourage businesses to set up in areas of high unemployment. Reduce taxes, simple planning rules, superfast broadband to the area. Created more than 15,000 jobs.



1. Economic change in the UK



Primary	
Secondary	
Tertiary	
Quaternary	

Why has our economy changed?

De-industrialisation	
Government policies	
Globalisation	

2. Post industrial economy

Tertiary and quaternary sector employed 81% in 2011.	
IT	
Services	
Finance	
Research	
Science parks	
Business parks	

3. Environmental impact of industry

Example of modern industry being environmentally sustainable

Google	
686 bikes spaces	
4 car spaces	
Solar panels.	
19,800 kWh	
Rooftop gardens	

4. Changes in the rural landscape

Population decline	
Social changes	
Economic changes	
Population growth	
Social changes	
Economic changes	

5. Improvements in infrastructure

Road	
Rail	
Port	
Airports	

6.. North-South divide

Causes	
Impacts in north	

Strategies attempting to resolve regional differences

Devolving more powers	
Northern Powerhouse	
Enterprise Zones	

GCSE History : The Medical Renaissance in England c1500-1750

What we are learning this term:

- 2.1 Ideas about the cause of disease and illness
- 2.2 Approaches to treatment and prevention
- 2.3 Key Individuals and dealing with the Great Plague in London (1665)

A.	<i>Can you define these key words?</i>
apothecary	A person who mixes herbal remedies and treated patients as an alternative to a doctor as they were cheaper.
barber surgeon	Barbers and surgeons who also performed minor operations such as the removal of warts
Dissection	Criminals sentenced to death had their bodies cut open (dissected) by physicians and medical students.
iatrochemistry	Chemical cures for a disease.
humanism	A belief that humans could make up their own minds when it came to discovering the truth around them.
transference	The idea that an illness or disease could be transferred to something else.
quack doctor	Somebody who did not have any medical qualifications but sold their services as a doctor or apothecary.

C.	The Great Plague (2.3)
What is the Great Plague?	Bubonic plague – outbreak in 1665 from June to November. One in five people died. Last serious outbreak of the disease in England.
Causes	Sent by God, unusual planet alignments, Miasma (sewage and rubbish in cities, people thought the foul fumes were held in the soil and escaped during warmer weather- seemed logical as the plague was worse in the summer months)
Treatments	Sweating out the disease – sit in thick woollen clothes by the fire. Transference was tried (strap chicken to buboes). Quack doctors mixed herbal remedies.
Prevention	Pray and repent sins, carry a pomander, chew/smoke tobacco, light fires, wear masks (plague doctors), fasting, quarantining, banning of large crowds, searchers appointed, streets cleaned, stray animals killed, plague water (apothecaries),

B. Change and continuity in ideas about disease and illness in the Medical Renaissance. (2.1-2.2)

<u>Causes</u>	<u>Prevention</u>	<u>Treatments</u>
The Theory of the Four Humours – Although many physicians were starting to challenge Galen’s ideas, most people continued to believe that illness was caused by an imbalance of humours.	Lifestyle advice – Physicians still gave advice from the Regimen Sanitatis. People were advised to practice moderation in all things – that meant avoiding too much exhaustion, fatty foods, strong alcohol and laziness. Bathing became less fashionable because people thought syphilis was caught from bathing in public bathhouses.	Transference – a popular new theory that disease could be transferred to something else. E.g. rubbing warts with an onion to ‘transfer’ the warts to the onion. People also tried to transfer illness to live animals, such as sheep or chickens.
Miasma – Most people still believed that miasmata caused disease (spread by bad smells/air) – especially popular during epidemics.	Purifying the air –Miasma was still widely believed so people continues to clean the air. Sewage and rubbish were picked up from streets and bonfires were lit in public to ward off foul smells.	Hospitals – greater emphasis on curing not caring (unlike in medieval). Number of hospitals decreased significantly due to the Dissolution of the Monasteries. Pest houses were a new type of hospital that cared only for plague or pox victims – limits risk of infecting others.
Astrology – although not as popular as in the Medieval period, people still believed that astrology influenced disease. Some blamed the 1665 plague on unusual planet alignments.	Role of the government – Took a more active role in preventing disease. Homeowners were fined for not cleaning the street outside their house, criminals would pick up rubbish as a punishment.	Chemical cures – alchemy led to the new science of medical chemistry. This involved looking for chemical cures rather than relying on herbs or humoral theory. New remedies such as mercury and antimony were used to purge the body and they encouraged sweating and vomiting.
Religion – Most people now realised that God did not send disease. Although, in desperate times (epidemics) they still turned to religion.		Herbal remedies – Continued to be used but were now chosen because of their colour or shape e.g. yellow herbs were used to treat jaundice (yellowing of the skin). New herbs appeared from the New World and were used to treat disease e.g. Ipecac (dysentery) and cinchona bark (malaria).
		Humoural Treatments – Despite new approaches many people still believed in humoral treatments like purging and bloodletting.

GCSE History : The Medical Renaissance in England c1500-1750

D. Key People (2.3)

Sydenham	Vesalius	Harvey
Known as the 'English Hippocrates' he refused to rely on medical books and instead believed that physicians should closely observe and record their patient's symptoms. Using this method, he was able to prove that measles and scarlet fever were separate diseases, even though he couldn't identify the microbes that caused each. This laid the foundations for future individuals to take a more scientific approach to medicine.	His 1543 book <i>On the Fabric of the Human Body</i> included many detailed drawings of the human body. He carried out dissections on executed criminals and found approximately 300 mistakes in Galen's work. Vesalius encouraged other doctors to carry out dissections rather than relying on old books, laying the foundation for others to investigate the human body in more detail.	Discovered the circulation of the blood. Stated that the heart acted as a pump, pumping blood around the body in a one-way system. This disproved Galen's theory that blood was made in the liver and burned up by the body. However, his discovery had a limited impact on medicine at the time as it offered no practical use in the treatment of disease.

E.

Improved Communications (2.1)

Printing Press	In 1440 Johannes Gutenberg created the world's first printing press. By 1500, there were hundreds of presses in Europe. This new printing press enabled information to be spread accurately and quickly. Text no longer had to be copied by hand, meaning there were fewer mistakes and inconsistencies. It also meant that scientists could publish their work and share it across Europe much faster than when the work had to be copied by hand. The printing press also took book copying out of the hands of the Church. This meant that a much wider variety of subjects were written about, whereas before most books were about religious topics. The Church was no longer able to prevent ideas they disapproved of being published. For example, physicians could now publish works criticising Galen.
Royal Society	Scientists wanted to talk to each other about their new discoveries and share new ideas. This led to the founding of the Royal Society. The Royal Society met for the first time at Gresham College in London in 1660. Its aim was to promote the sharing of scientific knowledge and encourage argument over new theories and ideas. In 1662, the society received its royal charter from Charles II, who has a keen interest in science. The support of the king gave the society credibility: if the king approved it and supported them, clearly they were doing something right. It also raised their profile. More people sent their work in to be published or were willing to donate money to support the scientific work of the Royal Society. In 1665 the Society began publishing their scientific journal, <i>Philosophical Transactions</i> . It was the world's first scientific journal, and it continues to be published today. The society also offered funding for translations of European scientific texts. It encouraged its members to write their reports in English instead of Latin to make it more accessible. The Royal Society made it possible for physicians and scientists to access and study each other's research. It was therefore very important in the development of new medical ideas.

F.

Care in the community and in hospitals (2.2)

Hospitals	Hospitals – greater emphasis on curing not caring (unlike in medieval). As a patient in a hospital you could expect a good diet, a visit from a physician and medication (own apothecary usually on site) Number of hospitals decreased significantly due to the Dissolution of the Monasteries. This dramatically changed the availability of hospital care in England as the vast majority of hospitals were connected to the Church and so few were able to stay open following the dissolution. Some smaller hospitals opened up to fill the gaps left by the dissolution of the monasteries, funded by charities, but there was a big change in the amount of medical treatment provided by hospitals. Many hospitals reopened without their religious sponsors. However, it took a long time for the amount of hospitals to return to what it had been before the dissolution of the monasteries.
Pest Houses (plague houses, poxhouses)	Pest houses were a new type of hospital that cared only for plague or pox victims – limits risk of infecting others. These hospitals specialized in one particular disease. Versions of these had existed in the Middle Ages e.g. leprosy houses for people suffering with leprosy. There was a growing understanding that disease could be transmitted from person to person so these new hospitals began to crop up. They provided a much-needed service. Traditional hospitals would not admit patients who were contagious, but people suffering from serious, contagious diseases had to go somewhere or risk infecting their families.
Community Care	In spite of changes to hospitals, most sick people continued to be cared for at home. Local communities were very close-knit which meant that there were plenty of people around to give advice and share remedies. Women continued to play an important role in the care of the sick. We don't know a great deal about these women, but we know that a lot of them were prosecuted by the London College of Physicians for practicing medicine without a licence. They usually mixed and sold simple herbal remedies. Reports suggest they were very popular likely because they were cheaper than going to a licensed physician or apothecary.

D. Key People (2.3)

Sydenham

Vesalius

Harvey

E.**Improved Communications (2.1)**

Printing Press

Royal Society

F.**Care in the community and in hospitals (2.2)**

Hospitals

Pest Houses (plague houses, poxhouses)

Community Care

What we are learning this term:

- 1.1 Ideas about the cause of disease and illness
- 1.2 Approaches to treatment and prevention
- 1.3 Key Individuals and dealing with the Great Plague in London (1665)

B. Change and continuity in ideas about disease and illness in the Medical Renaissance. (1.1-1.2)

Causes	Prevention	Treatments
<p>The Theory of the Four _____ – Although many physicians were starting to challenge _____ ideas, most people continued to believe that illness was caused by an _____ of humours.</p>	<p>Lifestyle advice – Physicians still gave advice from the _____. People were advised to practice moderation in all things – that meant avoiding too much _____, fatty foods, strong alcohol and laziness. _____ became less fashionable because people thought _____ was caught from bathing in public bathhouses.</p>	<p>_____ – a popular new theory that disease could be transferred to something else. E.g. rubbing warts with an _____ to 'transfer' the warts to the onion. People also tried to transfer illness to live animals, such as sheep or chickens.</p>
<p>Miasma – Most people still believed that miasmata caused disease (spread by bad _____/_____) – especially popular during _____</p>	<p>_____ the air –Miasma was still widely believed so people continues to clan the air. Sewage and _____ were picked up from streets and _____ were lit in public to ward off foul smells.</p>	<p>Hospitals – greater emphasis on _____ not caring (unlike in medieval). Number of hospitals _____ significantly due to the Dissolution of the Monasteries. Pest houses were a new type of hospital that cared only for _____ or pox victims – limits risk of _____ others.</p>
<p>_____ – although not as popular as in the Medieval period, people still believed that astrology influenced disease. Some blamed the _____ plague on unusual _____ alignments.</p>	<p>Role of the _____ – Took a more active role in preventing disease. Homeowners were _____ for not cleaning the street outside their house, _____ would pick up rubbish as a punishment.</p>	<p>_____ cures – alchemy led to the new science of medial _____. This involved looking for chemical cures rather than relying on herbs or humoural theory. New remedies such as _____ and antimony were used to purge the body and they encouraged sweating and vomiting.</p>
<p>Religion – Most people now realised that _____ did not send disease. Although, in _____ times (epidemics) they still turned to religion.</p>		<p>_____ remedies – Continued to be used but were now chosen because of their _____ or shape e.g. yellow herbs were used to treat jaundice (yellowing of the skin). New herbs appeared from the _____ and were used to treat disease e.g. Ipecac (dysentery) and cinchona bark (malaria).</p>
		<p>Humoural Treatments – Despite new approaches many people still believed in humoural treatments like _____ and _____.</p>

A. Can you define these key words?

apothecary	
barber surgeon	
Dissection	
iatrochemistry	
humanism	
transference	
quack doctor	

C. The Great Plague (1.3)

What is the Great Plague?	<p>Bubonic plague – outbreak in 1665 from June to November. One in _____ people died. _____ serious outbreak of the disease in England.</p>
Causes	<p>Sent by God, unusual planet _____, Miasma (sewage and rubbish in cities, people thought the foul fumes were held in the soil and _____ during warmer weather- seemed logical as the plague was worse in the _____ months)</p>
Treatments	<p>_____ out the disease – sit in thick woollen clothes by the fire. _____ was tried (strap _____ to buboes). Quack doctors mixed herbal remedies.</p>
Prevention	<p>Pray and repent sins, carry a _____, chew/ smoke _____, light fires, wear _____ (plague doctors), fasting, _____, banning of large crowds, searchers appointed, streets _____, stray animals killed, plague _____ (apothecaries),</p>

D. Key People (2.3)

Sydenham	Vesalius	Harvey
<p>Known as the 'English _____' he refused to rely on _____ books and instead believed that physicians should closely observe and record their patient's _____. Using this method, he was able to prove that measles and _____ fever were separate diseases, even though he couldn't identify the _____ that caused each. This laid the foundations for future individuals to take a more _____ approach to _____.</p>	<p>His 1543 book <i>On the Fabric of the _____ Body</i> included many detailed _____ of the human body. He carried out _____ on executed _____ and found approximately _____ mistakes in Galen's work. Vesalius encouraged other doctors to carry out dissections rather than relying on old _____, laying the _____ for others to _____ the human body in more detail.</p>	<p>Discovered the _____ of the _____. Stated that the heart acted as a _____, pumping blood around the body in a one-way system. This _____ Galen's theory that blood was made in the _____ and burned up by the body. However, his discovery had a _____ impact on medicine at the time as it offered no _____ use in the treatment of disease.</p>

E.

Improved Communications (2.1)

<p>Printing Press</p>	<p>In _____ Johannes Gutenberg created the world's first _____. By 1500, there were hundreds of presses in _____. This new printing press enabled information to be spread _____ and quickly. Text no longer had to be copied by hand, meaning there were fewer mistakes and _____. It also meant that scientists could publish their work and share it across Europe much _____ than when the work had to be copied by hand. The printing press also took book copying out of the hands of the _____. This meant that a much wider variety of _____ were written about, whereas before most books were about religious topics. The Church was no longer able to _____ ideas they disapproved of being published. For example, physicians could now publish works _____ Galen.</p>
<p>Royal Society</p>	<p>Scientists wanted to talk to each other about their new discoveries and share new ideas. This led to the founding of the Royal Society. The Royal Society met for the first time at Gresham College in London in _____. Its aim was to promote the _____ of scientific knowledge and encourage argument over new theories and ideas. In 1662, the society received its royal _____ from Charles II, who has a keen interest in science. The support of the king gave the society _____: if the king approved if and supported them, clearly they were doing something right. It also _____ their profile. More people sent their work in to be published or were willing to donate money to support the scientific work of the Royal Society. In 1665 the Society began publishing their scientific _____, <i>Philosophical Transactions</i>. It was the world's first scientific journal, and it continues to be published today. The society also offered funding for translations of European scientific texts. It encouraged its member to write their reports in English instead of Latin to make it more _____. The Royal Society made it possible for physicians and scientists to access and study each other's research. It was therefore very important in the _____ of new medical ideas.</p>

F.

Care in the community and in hospitals (2.2)

<p>Hospitals</p>	<p>Hospitals – greater emphasis on curing not _____ (unlike in medieval). As a patient in a hospital you could expect a good diet, a visit from a _____ and medication (own _____ usually on site) Number of hospitals _____ significantly due to the Dissolution of the _____. This dramatically changed the availability of hospital care in England as the vast majority of hospitals were connected to the _____ and so few were able to stay open following the dissolution. Some smaller hospitals opened up to fill the gaps left by the dissolution of the monasteries, funded by _____, but there was a big change in the amount of medical _____ provided by hospitals. Many hospitals reopened without their religious _____. However, it took a long time for the amount of hospitals to return to what it had been before the dissolution of the monasteries.</p>
<p>Pest Houses (plague houses, poxhouses)</p>	<p>Pest houses were a new type of hospital that cared only for plague or pox victims – limits risk of _____ others. These hospitals _____ in one particular disease. Versions of these had existed in the Middle Ages e.g. _____ houses for people suffering with _____. There was a growing understanding that disease could be _____ from person to person so these new hospitals began to crop up. They provided a much-needed service. Traditional hospitals would not admit patients who were _____, but people suffering from serious, contagious diseases had to go somewhere or risk infecting their families.</p>
<p>Community Care</p>	<p>In spite of changes to hospitals, most sick people continued to be cared for at home. Local _____ were very close-knit which meant that there were plenty of people around to give advice and share _____. _____ continued to play an _____ role in the care of the sick. We don't know a great deal about these women, but we know that a lot of them were prosecuted by the London College of Physicians for practicing medicine without a _____. They usually mixed and sold simple _____ remedies. Reports suggest they were very popular likely because they were _____ than going to a licensed physician or apothecary.</p>



A. Can you define these key words?	
Key word	Key definition
Forgiveness	Pardoning someone for wrongdoing
Greed	Going to war to gain land or natural resources such as oil
Holy War	A war that is fought for religious reasons, usually backed by a religious leader
Just War	A Christian theory that asks whether a war is fought justly
Justice	Bringing about what is right and fair, according to the law or God's will
Pacifism	A belief that all forms of violence are wrong, commonly held by Quakers
Conflict	A serious disagreement
Jihad	The struggle to defend against that which threatens Islam/ the internal struggle to defend against temptation that might lead you away from God
Protest	A public expression of disapproval, often in a big group, can be peaceful or violent
Reconciliation	Restoring friendly relationships after a war or conflict
Retaliation	Deliberately harming someone as a response to them harming you
Self-Defence	Protecting yourself or others from harm
Terrorism	Using violence in order to further a political or religious message

What we are exploring this term: Pacifism . Protest. Terrorism. Weapons of mass destruction Just war

C Is violent protest or terrorism acceptable?	
<p>1. A small minority of Christians may say yes if it truly brings an end to suffering- love thy neighbour and 'free the oppressed'</p> <p>2. A small minority of Muslims may agree due to the duty of jihad to defend the faith against true oppression.</p> <p>3. A humanist may agree in a rare occasion if it truly had the best consequences for humanity as a whole</p> <p>4. Hindus may point to their warrior class to justify a god given right to fight if needed</p>	<p>1. Most Christians consider terrorist acts of violence to be wrong, as Jesus did not accept violence. He said 'put your sword pack in its place' when his disciple tried to protest against his arrest.</p> <p>2. Muslims do not agree with terrorism because terrorist acts of violence are considered to be wrong and against the wishes of God, especially as the victims are usually innocent people. There is no justification for terrorist acts in the teachings of Islam- Qur'an says that innocents much not be harmed.</p> <p>3. Humanists might say that it does not help human wellbeing as it created disorder and fear. As such the consequences are rationally seen to be not worth it.</p> <p>4. Hindus might argue that all violence is wrong (Ahimsa) as it causes bad karma and keeps us in the cycle of samsara</p>

E Is pacifism wrong? Yes	No
<p>1. The Muslim duty of Jihad suggests pacifism can be wrong</p> <p>2. Christians are called to 'free the oppressed' and 'protect the weak and needy</p> <p>3. Humanists may argue that pacifism is not reasonable or realistic in a world of violence and may not help humanity protect each other</p>	<p>1. It works- see Ghandi and Martin Luther King</p> <p>2. Christians believe 'blessed are the peacemakers'</p> <p>3. Muslims believe that greater Jihad is the struggle to defend the faith against the internal struggle to fall from the right path</p> <p>4. Innocent people should not be harmed in all religions and pacifism is the only way to truly ensure this</p>

D	What are the rules of the just war theory?	Can just war theory make war fair?
	<p>1. There must be a just cause such as to defend</p> <p>2. Intentions must be to do good and overcome evil</p> <p>3. War must be started by legitimate authority</p> <p>4. Innocents must not be harmed</p> <p>5. Force and damage must be proportionate to the good done by the war</p> <p>6. War must be the last resort</p> <p>7. There must be a reasonable chance of success</p>	<p>1. Yes as it protects innocents</p> <p>2. Yes as it allows us the right to self defence</p> <p>3. Yes as it has to be the last resort so it is really is the only option left</p> <p>4. It will mean the war is for a good/fair reason and not pointless greed</p> <p>5. It means nuclear weapons can't be used</p>
		<p>1. No as innocents will always be harmed in war</p> <p>2. A 'legitimate' authority could still be corrupt</p> <p>3. You never know the harm of war until many years later so you can't calculate whether it is proportionate</p> <p>4. You cannot know whether it will be successful until you have fought it</p> <p>5. For success someone will have to use a greater force so the 'proportionate ' rule will never be followed</p>

B. Religious and non religious beliefs about weapons of mass destruction	
1	It is wrong to damage the environment which is God's perfect creation. It would be a form of blasphemy to destroy God's Sacred work.
2	They hurt many innocent people and this is against all religious teachings. Life is a sacred God given gift and only God has the right to take life.
3	For humanists, if their use means we can end more human suffering than the weapons cause, then there might be a possible circumstance in which they could be deemed acceptable.



A.	Can you define these key words?
Key word	Key definition
Forgiveness	
Greed	
Holy War	
Just War	
Justice	
Pacifism	
Conflict	
Jihad	
Protest	
Reconciliation	
Retaliation	
Self-Defence	
Terrorism	

What we are exploring this term: Pacifism . Protest. Terrorism. Weapons of mass destruction Just war

C	Is violent protest or terrorism acceptable?	
	1.	1.
	2.	2.
	3.	3.
	4.	4.

E	Is pacifism wrong? Yes	No
	1.	1.
	2.	2.
	3.	3.
		4.

D	What are the rules of the just war theory?	Can just war theory make war fair?	
	1. 2. 3. 4. 5. 6. 7.	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.

B.	Religious and non religious beliefs about weapons of mass destruction
1	
2	
3	

GCSE Unit 7 SPANISH Knowledge organiser.
Topic Global Issues

Key Verbs				
Reciclar To recycle	Ir To go	Apagar To turn off	Hacer – to do/make	Encender To turn on
Reciclo I recycle	Voy I go	Apago I turn off	Hago I do	Enciendo I turn on
Reciclas You recycle	Vas You go	Apagas You turn off	Haces You do	Enciendas You turn on
Recicla Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace s/he does	Enciende He/she turns on
Reciclamos We recycle	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos We turn on
Reciclan They recycle	Van They go	Apagan They turn off	Hacen They do	Enciendan They turn on

What we are learning this term:	
A. Talking about reusing things, reducing waste and recycling	
B. Talking about ways of protecting the environment	
C. Talking about poverty	
D. Talking about homelessness	
6 Key Words for this term	
1. la libertad	4. el destrozo
2. pensamientos	5. violento/a
3. asistir a	6. la culpa

7.1F Protegiendo el medio ambiente	
la basura	rubbish
la bombilla (de bajo consumo)(low-energy)	light bulb
el combustible	fuel
combatir	to fight, to combat
la contaminación atmosférica	air pollution
desaparecer	to disappear
el desastre	disaster
desconectar	to disconnect, to unplug,
switch off	
deshacer	to undo
los desperdicios	rubbish, refuse, waste
la especie	species
incluso	even
inquietante	worrying
luchar	to struggle, fight
la medida	measure, means
medioambiental	environmental
el motor	engine
los residuos	refuse, waste, rubbish
salvar	to save

7.1G Reutilizar, reducir, reciclar	
ahorrar	to save
la basura	rubbish
la bolsa de plástico	plastic bag
el cartón	cardboard
cerrar	to shut, to close, to turn off (tap)
el contenedor	container
en vez de	instead of
intentar	to try to
la lata	tin, can
el malgasto	waste
el papel (reciclado)	(recycled) paper
la papelera	wastepaper basket
la pila	battery
el plástico	plastic
ponerse	to put on (clothes)
los productos químicos	chemicals, chemical products
el proyecto	project
recargable	rechargeable
reciclar	to recycle
reutilizar	to reuse
la Tierra	Earth
tirar	to pull, to throw away
tratar de	to try to
el vidrio	glass

7.2G Los necesarios	
a favor (de)	in favour (of)
la alimentación	feeding, nourishment, food
la asistencia médica	medical care
asistir a	to attend
buscar	to look for
contribuir	to contribute
la creencia	belief
la culpa	blame, fault
la enfermedad	illness
en contra	against
estar dispuesto/a a	to be prepared to, to be ready to
faltar	to be lacking, to be missing
fresco	fresh
hace(n) falta	to be necessary, to need
la libertad (de pensamiento)	freedom (of thought)
merecer	to deserve
necesitar	to need
perder	to lose
perezoso/a	lazy
querer	to love

7.2F Los "sin techo"	
el destrozo	damage, destruction
escoger	to choose
la falta	lack
formar parte de	to be part of
el/la gamberro/a	hooligan, lout,
troublemaker	
maltratar	to mistreat, to ill-treat
los niños de la calle	street children
la ONG (organización NGO (non-governmental organisation) no gubernamental)	
la pobreza	poverty
recoger	to pick up
robar	to steal, rob
el vertedero	rubbish dump, tip
la violencia	violence
violento/a	violent

7.2H Es importante ayudar a los demás	
el agua corriente (fem.)	running water
bastar	to be enough
la comisaría	police station
consumir	to consume
la corriente	(electric) current,
electricity supply	
crear	to create
la criminalidad	crime
cualquier(a)	any
el empleo	job
el/la encargado/a	person in charge
el éxito	success

7.1H Problemas ecológicos	
acercarse a	to approach
el agujero	hole
la aldea	(small) village
alejarse	to move (something) further away
alejarse de	to move further away from
amenazar	to threaten
arruinar	to ruin
el atasco	traffic jam, hold-up
el ave (marina) (fem.)	(sea) bird
el calentamiento global	global warming
la capa de ozono	ozone layer
el casco	helmet, hull (of ship)
el centenar	about a hundred
la central eléctrica	power station
la circulación	traffic
constituir	to constitute
cortar	to cut, to cut off
el efecto invernadero	greenhouse effect
extender	to spread, to stretch
frenar	to brake, to put a stop to
el humo	smoke
el huracán	hurricane
el incendio	fire
la lluvia	rain
la mancha	stain
la marea negra	oil slick
la muerte	death
el nivel	level
el petrolero	oil tanker
el/la pescador/a	fisherman/fisherwoman

GCSE Unit 7 SPANISH Knowledge organiser.
Topic Global Issues

Key Verbs				
Reciclar _____	Ir To go	Apagar To turn off	Hacer – _____	_____ To turn on
_____ I recycle	Voy I go	Apago _____	_____ I do	_____ I turn on
Reciclas _____	Vas _____	_____ You turn off	Haces _____	Enciendes _____
_____ Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace _____	_____ He/she turns on
Reciclamos _____	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos _____
Reciclan They recycle	Van They go	Apagan They turn off	_____ They do	_____ They turn on

What we are learning this term:

A. Talking about reusing things, reducing waste and recycling
 B. Talking about ways of protecting the environment
 C. Talking about poverty
 D. Talking about homelessness

6 Key Words for this term

1. la libertad	4. el destrozo
2. pensamientos	5. violento/a
3. asistir a	6. la culpa

7.1F Protegiendo el medio ambiente

la basura _____
 la bombilla (de bajo consumo)(low-energy) light bulb
 el _____ fuel
 _____ to fight, to combat
 la contaminación _____
 atmosférica _____
 desaparecer to _____
 el desastre _____
 _____ to disconnect, to unplug,
 switch off
 deshacer _____
 los _____ rubbish, refuse, waste
 la especie _____
 _____ even
 inquietante _____
 _____ to struggle, fight
 la _____ measure, means
 medioambiental _____
 _____ engine
 _____ refuse, waste, rubbish
 salvar _____

7.1G Reutilizar, reducir, reciclar

ahorrar _____
 la basura _____
 la bolsa de plástico _____
 el cartón _____
 _____ to shut, to close, to turn off (tap)
 el contenedor _____
 _____ instead of
 intentar _____
 la lata _____
 _____ waste
 el papel (reciclado) _____
 la _____ wastepaper basket
 la _____ battery
 el _____ plastic
 ponerse to _____
 los _____ chemicals, chemical products
 el proyecto _____
 _____ rechargeable
 _____ to recycle
 reutilizar to _____
 la _____ Earth
 _____ to pull, to throw away
 tratar de _____
 el _____ glass

7.2G Los necesitados

a favor (de) _____
 la alimentación feeding, _____
 nourishment, food
 la asistencia médica _____
 _____ to attend
 _____ to look for
 contribuir to _____
 la _____ belief
 la culpa _____
 la enfermedad _____
 en contra _____
 estar dispuesto/a to be prepared to, to be ready to
 _____ to be lacking, to be missing
 fresco _____
 _____ to be necessary, to need
 la libertad (de pensamiento) _____
 _____ to deserve
 necesitar to _____
 _____ to lose
 perezoso/a _____
 _____ to love

7.2F Los “sin techo”

el _____ damage, destruction
 escoger to _____
 la falta _____
 formar parte de _____
 _____ hooligan, lout,
 troublemaker _____
 _____ to mistreat, to ill-treat
 los niños de la calle _____
 la ONG (organización NGO (non-governmental organisation) no gubernamental)
 _____ poverty
 _____ to pick up
 _____ to steal, rob
 _____ rubbish dump, tip
 la violencia _____
 violento/a v _____

7.2H Es importante ayudar a los demás

el agua corriente _____
 _____ to be enough
 la _____ police station
 consumir to _____
 la _____ (electric) current,
 electricity supply _____
 _____ to create
 la criminalidad _____
 cualquier(a) _____
 _____ job
 el/la encargado/a _____
 _____ success

7.1H Problemas ecológicos

acercarse a to _____
 el agujero _____
 la aldea _____
 _____ to move (something) further away
 _____ to move further away from
 _____ to threaten
 arruinar to _____
 el _____ traffic jam, hold-up
 el ave (marina) (fem.) _____
 el calentamiento global _____
 la _____ ozone layer
 el _____ helmet, hull (of ship)
 el _____ about a hundred
 la central eléctrica _____
 la circulación _____
 c _____ to constitute
 _____ to cut, to cut off
 el efecto invernadero _____
 _____ to spread, to stretch
 _____ to brake, to put a stop to
 el humo smoke _____
 el huracán _____
 el _____ fire
 la lluvia _____
 la mancha _____
 la marea negra _____
 la _____ death
 el nivel _____
 el petrolero _____
 el/la pescador/a _____

GCSE Unit 7 SPANISH Knowledge organiser.
Topic Global Issues

Key Verbs				
Reciclar To recycle	Ir To go	Apagar To turn off	Hacer – to do/make	Encender To turn on
Reciclo I recycle	Voy I go	Apago I turn off	Hago I do	Enciendo I turn on
Reciclas You recycle	Vas You go	Apagas You turn off	Haces You do	Enciendas You turn on
Recicla Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace s/he does	Enciende He/she turns on
Reciclamos We recycle	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos We turn on
Reciclan They recycle	Van They go	Apagan They turn off	Hacen They do	Enciendan They turn on

What we are learning this term:	
A. Talking about reusing things, reducing waste and recycling	
B. Talking about ways of protecting the environment	
C. Talking about poverty	
D. Talking about homelessness	
6 Key Words for this term	
1. la libertad	4. el destrozo
2. pensamientos	5. violento/a
3. asistir a	6. la culpa

7.1F Protegiendo el medio ambiente	
la basura	rubbish
la bombilla (de bajo consumo)(low-energy)	light bulb
el combustible	fuel
combatir	to fight, to combat
la contaminación atmosférica	air pollution
desaparecer	to disappear
el desastre	disaster
desconectar	to disconnect, to unplug,
switch off	
deshacer	to undo
los desperdicios	rubbish, refuse, waste
la especie	species
incluso	even
inquietante	worrying
luchar	to struggle, fight
la medida	measure, means
medioambiental	environmental
el motor	engine
los residuos	refuse, waste, rubbish
salvar	to save

7.1G Reutilizar, reducir, reciclar	
ahorrar	to save
la basura	rubbish
la bolsa de plástico	plastic bag
el cartón	cardboard
cerrar	to shut, to close, to turn off (tap)
el contenedor	container
en vez de	instead of
intentar	to try to
la lata	tin, can
el malgasto	waste
el papel (reciclado)	(recycled) paper
la papelera	wastepaper basket
la pila	battery
el plástico	plastic
ponerse	to put on (clothes)
los productos químicos	chemicals, chemical products
el proyecto	project
recargable	rechargeable
reciclar	to recycle
reutilizar	to reuse
la Tierra	Earth
tirar	to pull, to throw away
tratar de	to try to
el vidrio	glass

7.2G Los necesitados	
a favor (de)	in favour (of)
la alimentación	feeding, nourishment, food
la asistencia médica	medical care
asistir a	to attend
buscar	to look for
contribuir	to contribute
la creencia	belief
la culpa	blame, fault
la enfermedad	illness
en contra	against
estar dispuesto/a a	to be prepared to, to be ready to
faltar	to be lacking, to be missing
fresco	fresh
hace(n) falta	to be necessary, to need
la libertad (de pensamiento)	freedom (of thought)
merecer	to deserve
necesitar	to need
perder	to lose
perezoso/a	lazy
querer	to love

7.2F Los "sin techo"	
el destrozo	damage, destruction
escoger	to choose
la falta	lack
formar parte de	to be part of
el/la gamberro/a	hooligan, lout,
troublemaker	
maltratar	to mistreat, to ill-treat
los niños de la calle	street children
la ONG (organización NGO (non-governmental organisation) no gubernamental)	
la pobreza	poverty
recoger	to pick up
robar	to steal, rob
el vertedero	rubbish dump, tip
la violencia	violence
violento/a	violent

7.2H Es importante ayudar a los demás	
el agua corriente (fem.)	running water
bastar	to be enough
la comisaría	police station
consumir	to consume
la corriente	(electric) current,
electricity supply	
crear	to create
la criminalidad	crime
cualquier(a)	any
el empleo	job
el/la encargado/a	person in charge
el éxito	success

7.1H Problemas ecológicos	
acercarse a	to approach
el agujero	hole
la aldea	(small) village
alejarse	to move (something) further away
alejarse de	to move further away from
amenazar	to threaten
arruinar	to ruin
el atasco	traffic jam, hold-up
el ave (marina) (fem.)	(sea) bird
el calentamiento global	global warming
la capa de ozono	ozone layer
el casco	helmet, hull (of ship)
el centenar	about a hundred
la central eléctrica	power station
la circulación	traffic
constituir	to constitute
cortar	to cut, to cut off
el efecto invernadero	greenhouse effect
extender	to spread, to stretch
frenar	to brake, to put a stop to
el humo	smoke
el huracán	hurricane
el incendio	fire
la lluvia	rain
la mancha	stain
la marea negra	oil slick
la muerte	death
el nivel	level
el petrolero	oil tanker
el/la pescador/a	fisherman/fisherwoman

GCSE Unit 7 SPANISH Global organiser.
Topic Global Issues

Key Verbs				
Reciclar _____	Ir To go	Apagar To turn off	Hacer – _____	_____ To turn on
_____ I recycle	Voy I go	Apago _____	_____ I do	_____ I turn on
Reciclas _____	Vas _____	_____ You turn off	Haces _____	Enciendes _____
_____ Sh/e recycles	Va s/he goes	Apaga He/she turns off	Hace _____	_____ He/she turns on
Reciclamos _____	Vamos They go	Apagamos We turn off	Hacemos We do	Encendemos _____
Reciclan They recycle	Van They go	Apagan They turn off	_____ They do	_____ They turn on

What we are learning this term:

A. Talking about reusing things, reducing waste and recycling
 B. Talking about ways of protecting the environment
 C. Talking about poverty
 D. Talking about homelessness

6 Key Words for this term

1. la libertad	4. el destrozo
2. pensamientos	5. violento/a
3. asistir a	6. la culpa

7.1F Protegiendo el medio ambiente

la basura _____
 la bombilla (de bajo consumo)(low-energy) light bulb
 el _____ fuel
 _____ to fight, to combat
 la contaminación _____
 atmosférica _____
 desaparecer to _____
 el desastre _____
 _____ to disconnect, to unplug,
 switch off
 deshacer _____
 los _____ rubbish, refuse, waste
 la especie _____
 _____ even
 inquietante _____
 _____ to struggle, fight
 la _____ measure, means
 medioambiental _____
 _____ engine
 _____ refuse, waste, rubbish
 salvar _____

7.1G Reutilizar, reducir, reciclar

ahorrar _____
 la basura _____
 la bolsa de plástico _____
 el cartón _____
 _____ to shut, to close, to turn off (tap)
 el contenedor _____
 _____ instead of
 intentar _____
 la lata _____
 _____ waste
 el papel (reciclado) _____
 la _____ wastepaper basket
 la _____ battery
 el _____ plastic
 ponerse to _____
 los _____ chemicals, chemical products
 el proyecto _____
 _____ rechargeable
 _____ to recycle
 reutilizar to _____
 la _____ Earth
 _____ to pull, to throw away
 tratar de _____
 el _____ glass

7.2G Los necesitados

a favor (de) _____
 la alimentación feeding, _____
 nourishment, food
 la asistencia médica _____
 _____ to attend
 _____ to look for
 contribuir to _____
 la _____ belief
 la culpa _____
 la enfermedad _____
 en contra _____
 estar dispuesto/a to be prepared to, to be ready to
 _____ to be lacking, to be missing
 fresco _____
 _____ to be necessary, to need
 la libertad (de pensamiento) _____
 _____ to deserve
 necesitar to _____
 _____ to lose
 perezoso/a _____
 _____ to love

7.2F Los "sin techo"

el _____ damage, destruction
 escoger to _____
 la falta _____
 formar parte de _____
 _____ hooligan, lout,
 troublemaker
 _____ to mistreat, to ill-treat
 los niños de la calle _____
 la ONG (organización NGO (non-governmental organisation) no gubernamental)
 _____ poverty
 _____ to pick up
 _____ to steal, rob
 _____ rubbish dump, tip
 la violencia _____
 violento/a v _____

7.2H Es importante ayudar a los demás

el agua corriente _____
 _____ to be enough
 la _____ police station
 consumir to _____
 la _____ (electric) current,
 electricity supply
 _____ to create
 la criminalidad _____
 cualquier(a) _____
 _____ job
 el/la encargado/a _____
 _____ success

7.1H Problemas ecológicos

acercarse a to _____
 el agujero _____
 la aldea _____
 _____ to move (something) further away
 _____ to move further away from
 _____ to threaten
 arruinar to _____
 el _____ traffic jam, hold-up
 el ave (marina) (fem.) _____
 el calentamiento global _____
 la _____ ozone layer
 el _____ helmet, hull (of ship)
 el _____ about a hundred
 la central eléctrica _____
 la circulación _____
 c _____ to constitute
 _____ to cut, to cut off
 el efecto invernadero _____
 _____ to spread, to stretch
 _____ to brake, to put a stop to
 el humo smoke _____
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 el _____ fire
 la lluvia _____
 la mancha _____
 la marea negra _____
 la _____ death
 el nivel _____
 el petrolero _____
 el/la pescador/a _____

1. Types of Production

There are three main types of production:

Type of Production	Explanation
Job Production	Job production is one-off production for a one-off order. It is tailored-made to the specific requirements of a single customer. This can be a very costly method production however this means that the business has increased flexibility in terms of the product produced.
Batch Production	Batch production involves producing a limited number of the same item. This method of production is cheaper than job production however this method of production is not as flexible.
Flow Production	Flow production is continuous output of identical products. This is the cheapest method of production as production becomes fully automated. However this affords the business no flexibility in terms of product differentiation.

2. Types of Production (Advantages and Disadvantages)

There are three main types of production:

Type of Production	Advantages and Disadvantages
Job Production	Advantages: Highly flexible; gives the customer exactly what they want. Disadvantages: High production costs. Skills may be in short supply, making it hard for the business to grow
Batch Production	Advantages: Gain some cost advantages from producing several items at once...yet still able to offer customers the colour/size they want Disadvantages: May be limited scope for automation, making production costs far higher than with flow production. Not as flexible as job production.
Flow Production	Advantages: Can automate production fully, making it highly cost effective (which should be good for customers as well as suppliers). Many customers value consistency, and flow will provide an identical product each time. Disadvantages: Likely to be expensive to set up and inflexible to use; could be a disaster if a product life cycle proves much shorter than expected. Lacks flexibility in terms of meeting individual customer needs.

3. Managing Stock – Key Definitions

Term	Explanations
Bar Gate Stock Graph	A diagram used to manage stock.
Buffer (stock)	The minimum stock level always held to avoid running out.
Just in Time (JIT)	When new supplies must arrive 'just in time' moments before they are required.
Stock	Items held by a firm for use or sale, for example components for manufacturing or sellable products for a retailer

Managing Stock well is vital to the success of a business. Successful stock management requires the right balance between reliability and cost. **Too little stock and customers will feel let down. Too much stock and high costs will force high prices. Without stock, sales cannot happen. Manufacturers and retailers need to make sure they supply the right amount of goods to keep the shelves full.**

4. Procurement – Working with Suppliers

There are five main factors at the heart of a relationship between a company and its suppliers:

Quality	Suppliers must supply high quality products to businesses, suppliers will struggle to maintain a good relationship with a company if they are not supplying good durable products. First and foremost suppliers must supply high quality materials to businesses.
Delivery	Suppliers must deliver on time to clients, there is little point supplying at the right price and with the right product, if the product doesn't arrive on time. Failing to deliver supplies on time can bring manufacturing to a halt or leave shops with empty shelves.
Availability	Suppliers must be available and able to cope with varying orders in a timely fashion and sometimes within a short timeframe. Suppliers must be flexible and aware of the needs of their customers.
Cost	Cheaper supplies mean lower variable costs and higher profit margins. Therefore, the price charged by a supplier will be a key factor in the relationship between a firm and its suppliers. Price to highly and firms may look to alternative suppliers, price to low and firms may question the quality of merchandise. Pricing is key to the relationship between supplier and firm.
Trust	Trust is key for the relationship between firm and supplier. Most business transactions are on credit and not cash – therefore suppliers <u>have to be</u> able to trust that a firm will make a profit and be able to pay them back in cash.

5. Placing Strategy – Managing Quality within a Business

Type of Quality Control	Explanation:
Quality Control	Quality control is a system of inspection to try to make sure that customers don't experience a poor-quality product or service. Such controls may include Factory Inspectors at the end of a production line checking the quality of a product
Quality Assurance	Quality Assurance describes the system put into place by a company to assure quality within the production system. Every member of staff will have responsibilities to quality assure products. Over time this should lead to quality products as people become better at their roles.
Quality Culture	Quality culture means the general attitudes and behaviours among staff within a workplace is focussed on high quality production. Quality culture describes motivated, punctual, diligent and invested employees who care about the business and strive to improve it.

6. The Sales Process

Term	Definition
Customer Engagement	The attempt to make a customer feel part of something rather than an outsider.
Customer Feedback	Comments, praise or criticisms given to the company by its customers
Post-Sales Service	Service received after the purchase is completed because something has gone wrong or as a way of promoting customer engagement
Product Knowledge	How well staff know all the features of the products and service issues surrounding the products.

7. Customer Service

Great Customer Service is pivotal to any successful business, but there is far more than that to the sales process. To succeed in sales, a business must make sure it provides:

Component of Customer Service	Term
Product Knowledge	<p>Customers expect that staff will be sufficiently well trained and well-motivated to have good knowledge of the products and services being offered. In order to ensure staff, have good product knowledge, certain things are essential:</p> <p>Good Training – if businesses provide good training to staff, then staff will be knowledgeable about products and therefore will be able to improve the customer experience</p> <p>Loyal Staff – The longer staff stay working in a job the better they become. If staff only stay three to six months, they will never develop a rich understanding of the products and services that the business provides. Well managed businesses pay fairly and treat staff with respect.</p> <p>Committed Staff – Committed and enthusiastic staff are crucial to the smooth running of any business. This is affected by the quality of recruitment, the standard of training and the overall culture that exists within the company’s workforce.</p>
Speedy and Efficient Service	<p>Good customer service is designed for the customer not the company.</p> <p>Efficient service:</p> <p>Gets products to customers exactly when you want them</p> <p>Gets products to customers in good condition</p> <p>If there is anything <u>wrong</u> - it will be sorted out as soon as possible and considerately</p>
Customer Engagement	<p>In the world of social media, it becomes possible to try to keep customers engaged with the business on a regular basis.</p> <p>Companies engage customers in a variety of ways:</p> <p>E-Mail</p> <p>Social Media (Facebook and Instagram)</p> <p>Post</p> <p>Text</p> <p>Television/Web advertisements.</p> <p>It is vital that customers feel up to date and informed about any product innovations</p>
Responses to Customer Feedback	<p>How companies respond to customer feedback is vital, providing great customers service where people feel listened too ensures customers continue to come back and buy products from the business.</p> <p>It can cost a lot of money to persuade new customers to come advertising is expensive and it’s affects are hard to judge. Building up a reputation for responding to customer feedback can travel by word of mouth and this is much cheaper.</p>

1. Types of Production

There are three main types of production:

Type of Production	Explanation
Job Production	
Batch Production	
Flow Production	

2. Types of Production (Advantages and Disadvantages)

There are three main types of production:

Type of Production	Advantages and Disadvantages
Job Production	<p>Advantages:</p> <p>Disadvantages:</p>
Batch Production	<p>Advantages:</p> <p>Disadvantages:</p>
Flow Production	<p>Advantages:</p> <p>Disadvantages:</p>

3. Managing Stock – Key Definitions

Term	Explanations
Bar Gate Stock Graph	
Buffer (stock)	
Just in Time (JIT)	
Stock	

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There are five main factors at the heart of a relationship between a company and its suppliers:

Quality	
Delivery	
Availability	
Cost	
Trust	

5. Placing Strategy – Managing Quality within a Business

Type of Quality Control	Explanation:
Quality Control	
Quality Assurance	
Quality Culture	

6. The Sales Process

Term	Definition
Customer Engagement	
Customer Feedback	
Post-Sales Service	
Product Knowledge	

7. Customer Service

Great Customer Service is pivotal to any successful business, but there is far more than that to the sales process. To succeed in sales, a business must make sure it provides:

Component of Customer Service	Term
Product Knowledge	
Speedy and Efficient Service	
Customer Engagement	
Responses to Customer Feedback	
Excellent Post Sales Service	



Term	Definition
Arithmetic Operator	A mathematical character to perform a calculation. Example: +
Array	A set of values, of the same data type, stored in sequence. A list.
Casting	Setting or changing the data type of a variable.
Concatenation	Connecting strings of characters together.
Condition	A statement which is either true or false. A computation depends on whether a condition is true or false.
Constant	A value which does not change whilst the program is running.
Element	An individual item in an array. A value in a list.
File	Anything you can save. Document, piece of music, data etc.
Identifier	A name, usually for part of the program such as a constant, variable, array etc.
IF Statement - Selection	A statement that lets a program select an action depending on whether it is true or false.
Loops - Iteration	Repeating an action, activity or section within a program.
Operator	A character which determines what action is to be considered or determined. Example: =
Relational Operator	An operator which compares two values. Example: <
Subroutine	A section of code written outside of the main program. Covers procedures and functions.
Variable	A memory location within a computer where values are stored.

Term	Definition
Fibre-Optic Cable	A cable that carries data transmitted as light.
File Sharing	Sharing access to files via a network.
Hub / Switch	A piece of hardware used in Computer Networks to connect multiple devices.
LAN - Local Area Network	A network that covers a small area, e.g. a school or office.
Modem	Meaning modulator/demodulator allowing computers to connect to a network via a telephone line.
Network	A group of two or more computers connected together and communicating with each other.
NIC – Network Interface Card	A circuit board installed in a computer allowing it to connect to a network.
PAN - Personal Area Network	A network of personal devices, such as Bluetooth etc.
Router	A device for connecting multiple networks together.
WAN - Wide Area Network	A network which spans across a large geographical area. Multiple buildings, national, internet. Etc.
Wired	A connection which requires wires/ cables to transmit data.
Wireless	A connection which does not require wires and transmits data using radio signals.
WAP - Wireless Access Point	A device which connects computers to a network with a wireless connection.

Cybersecurity Terms	Definition
Adware	Software which causes advertising popups.
Anti-virus	Software which scans storage devices for malware and attempts to remove them.
Biometrics	Authentication technique which relies on physical characteristics like fingerprints.
Hacking	Gaining unauthorised access to a system.
Keylogger	Software which records all keystrokes on a computer keyboard.
Malware	Software which is designed to cause damage or harm to a computer system or its user's interests.
Patch	An update to a piece of software. Usually to fix bugs or improve it.
Pharming	Cyberattack which redirects a user from a genuine website to a fake one.
Phishing	An email which pretends to be from a legitimate source such as a bank to gain personal information.
Ransomware	Malware which encrypts a user's files then demands a ransom to decrypt them.
Social Engineering	Tricking people into giving away sensitive information.
Spyware	Malware which collects information about the user and their activities.
Trojan	Malware which appears legitimate but performs malicious activity when running.
Virus	Malware which replicates itself and damages computer systems and files.

Variable	A memory location
	within a computer
	where values are stored.

Input/Output and Calculation

```

userInputName = input("Enter your name: ")
userNum = int(input("Enter an integer: "))
userDec = float(input("Enter a decimal number: "))

calculation = userNum + userDec

print("Hello", userInputName, "the result is", calculation)

Enter your name: Mr. Weston Enter an integer: 3 Enter a decimal number: 15.2 Hello Mr. Weston the result is 18.2
    
```

IF Statements

```

print("Press 1 for a greeting. Press 2 for a farewell.")
userChoice = int(input("Awaiting Input: "))

if userChoice == 1:
    print("Hello User!")
elif userChoice == 2:
    print("Goodbye User!")
else:
    print("Error - 1 or '2' not detected.")
    
```

```

Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 1
Hello User!
>>>
Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 2
Goodbye User!
>>>
Press 1 for a greeting. Press 2 for a farewell
Awaiting Input: 3
Error - '1' or '2' not detected.
    
```

LOOPS

```

(userChoice = "Yes"

while userChoice == "Yes":
    userChoice = input("Do you want to repeat this? ")
    
```

```

userCount = int(input("How many times do you want to use this loop? "))

for x in range(1, userCount+1):
    print("You asked for this many.")
    
```

```

Do you want to repeat this? Yes Do you want to repeat this? Yes
Do you want to repeat this? No thank you.
How many times do you want to use this loop? 3 You asked for this many.
You asked for this many.
You asked for this many.
    
```



Term	Definition
	A mathematical character to perform a calculation. Example: +
	A set of values, of the same data type, stored in sequence. A list.
	Setting or changing the data type of a variable.
	Connecting strings of characters together.
	A statement which is either true or false. A computation depends on whether a condition is true or false.
	A value which does not change whilst the program is running.
	An individual item in an array. A value in a list.
	Anything you can save. Document, piece of music, data etc.
	A name, usually for part of the program such as a constant, variable, array etc.
	A statement that lets a program select an action depending on whether it is true or false.
	Repeating an action, activity or section within a program.
	A character which determines what action is to be considered or determined. Example: =
	An operator which compares two values. Example: <
	A section of code written outside of the main program. Covers procedures and functions.
	A memory location within a computer where values are stored.

Term	Definition
	A cable that carries data transmitted as light.
	Sharing access to files via a network.
	A piece of hardware used in Computer Networks to connect multiple devices.
	A network that covers a small area, e.g. a school or office.
	Meaning modulator/demodulator allowing computers to connect to a network via a telephone line.
	A group of two or more computers connected together and communicating with each other.
	A circuit board installed in a computer allowing it to connect to a network.
	A network of personal devices, such as Bluetooth etc.
	A device for connecting multiple networks together.
	A network which spans across a large geographical area. Multiple buildings, national, internet. Etc.
	A connection which requires wires/ cables to transmit data.
	A connection which does not require wires and transmits data using radio signals.
	A device which connects computers to a network with a wireless connection.

Cybersecurity Terms	Definition
	Software which causes advertising popups.
	Software which scans storage devices for malware and attempts to remove them.
	Authentication technique which relies on physical characteristics like fingerprints.
	Gaining unauthorised access to a system.
	Software which records all keystrokes on a computer keyboard.
	Software which is designed to cause damage or harm to a computer system or its user's interests.
	An update to a piece of software. Usually to fix bugs or improve it.
	Cyberattack which redirects a user from a genuine website to a fake one.
	An email which pretends to be from a legitimate source such as a bank to gain personal information.
	Malware which encrypts a user's files then demands a ransom to decrypt them.
	Tricking people into giving away sensitive information.
	Malware which collects information about the user and their activities.
	Malware which appears legitimate but performs malicious activity when running.
	Malware which replicates itself and damages computer systems and files.

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Input/Output and Calculation

```

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```

Enter your name: Mr. Weston Enter an integer: 3 Enter a decimal number: 15.2 Hello Mr. Weston the result is 18.2

IF Statements

```

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```

Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 1
Hello User!

>>> Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 2
Goodbye User!

>>> Press 1 for a greeting. Press 2 for a farewell Awaiting Input: 3
Error - '1' or '2' not detected.

LOOPS

```

userChoice = "Yes"

while userChoice == "Yes":
    userChoice = input("Do you want to repeat this? ")

userCount = int(input("How many times do you want to use this loop? "))

for x in range(1, userCount+1):
    print("You asked for this many.")
    
```

Do you want to repeat this? Yes Do you want to repeat this? Yes
Do you want to repeat this? No thank you.
How many times do you want to use this loop? 3 You asked for this many.
You asked for this many.
You asked for this many.



What we are learning this term:

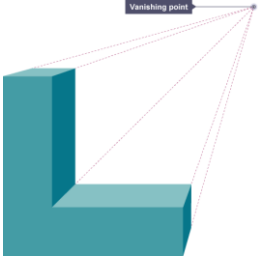
- A. One-Point Perspective
- B. Two-point Perspective
- C. Isometric Drawing
- D. Exploded Drawing
- E. Oblique Drawing
- F. CAD
- G. Orthographic Drawing

Design Strategies Introduction.

Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

A. One-point Perspective Drawing

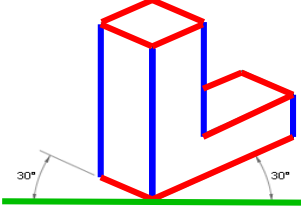
Single-point perspective shows an object from the front in a realistic way. The front view goes back towards a vanishing point on the horizon.



Commonly used by interior designers to show a view into a room.

C. Isometric Technical Drawing

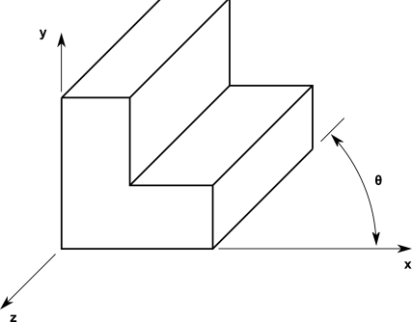
Made up of a series of parallel **vertical lines** and parallel **30-degree lines**. But no **horizontal lines**.



Used by architects and engineers to communicate their ideas to the client and manufacturer.

E. Oblique Technical Drawing

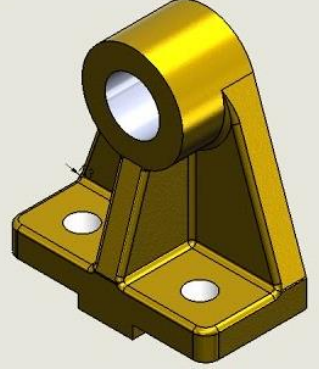
Consists of an object where the front view is drawn flat with height and width of the object drawn to the correct lengths. Diagonal lines are drawn at 45-degrees.



Commonly used by engineers for drafting ideas.

F. CAD (Computer Aided Design)

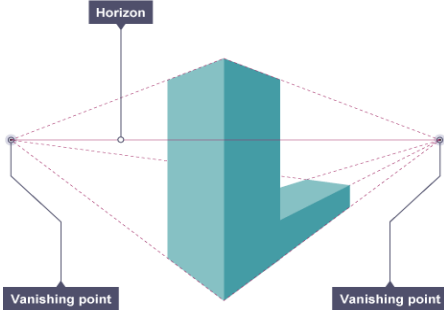
This is designing using a computer using a software such as 2D Design or Solidworks.



Commonly used to model, test and develop an idea before manufacture.

B. Two-point Perspective Drawing

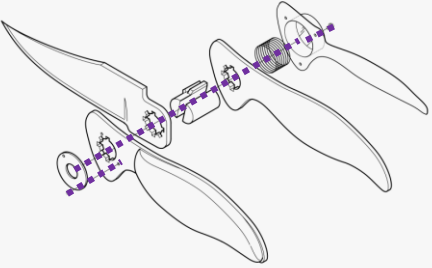
Two-point perspective shows an object from the side with two vanishing points. It gives the most realistic view of a product as it shows the item edge on, as we would see it. It is often used to produce realistic drawings of an object.



Commonly used by architects to show realistic building ideas.

D. Exploded Technical Drawing

Exploded technical drawing is an Isometric drawing of all the parts and components of an object.



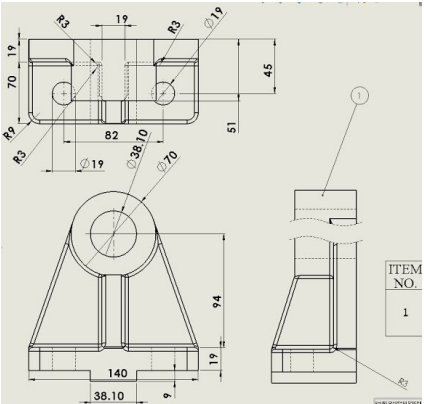
All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

This shows 2D views of a 3D object from different angles – front, plan and end. Lines are dimensions have specific meaning to avoid confusion.

- Object Line
- - - Hidden Line
- · - Center Line
- Dimension Line
- Construction Line

Commonly used in industry to help the manufacturer understand the design.





What we are learning this term:

- A. One-Point Perspective
- B. Two-point Perspective
- C. Isometric Drawing
- D. Exploded Drawing
- E. Oblique Drawing
- F. CAD
- G. Orthographic Drawing

Design Strategies Introduction.

Design strategies are used to create technical drawings, to show an object in 3D on a 2D page. Perspective drawings show an object getting smaller in the distance. The rest are done to scale.

A. One-point Perspective Drawing

Commonly used by interior designers to show a view into a room.

C. Isometric Technical Drawing

Used by architects and engineers to communicate their ideas to the client and manufacturer.

E. Oblique Technical Drawing

Commonly used by engineers for drafting ideas.

F. CAD (Computer Aided Design)

Commonly used to model, test and develop an idea before manufacture.

B. Two-point Perspective Drawing

Commonly used by architects to show realistic building ideas.

D. Exploded Technical Drawing

All parts are shown separately so you can see all aspects. **Dashed lines** indicate where everything goes and in what order.

G. Orthographic Projection – 2D NOT 3D Drawing Strategy!

Commonly used in industry to help the manufacturer understand the design.

Name: _____

Date: _____

Macronutrients, fibre and water

Macronutrients

Macronutrients provide energy. The macronutrients are:

- carbohydrate;
- protein;
- fat.

Macronutrients are measured in grams (g).

Alcohol

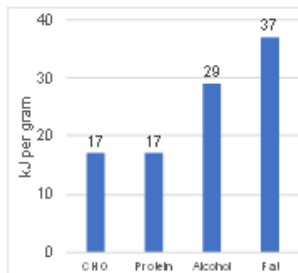
Alcohol is not considered a nutrient, but is a source of energy in the diet.

The government recommends no more than 14 units of alcohol per week for both men and women.

Energy from food

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

	Energy per gram
Carbohydrate	16kJ (3.75 kcals)
Protein	17kJ (4 kcals)
Alcohol	29kJ (7kcals)
Fat	37kJ (9 kcals)



Protein

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

The essential amino acids are isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine.

In young children, additional amino acids, e.g. histidine and tyrosine, are sometimes considered to be essential (or 'conditionally essential') because they may be unable to make enough to meet their needs.

Recommendations

- 0.75g/kg bodyweight/day in adults.

Sources:

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

Plant sources: soya; nuts; seeds; pulses, e.g. beans, lentils; mycoprotein.

Protein complementation

Different food contains different amounts and combinations of amino acids.

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

Examples are:

- rice and peas;
- beans on toast;
- hummus and pitta bread;
- bean chilli served with rice.

Carbohydrate

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

These three types are:

- monosaccharides (e.g. glucose);
- disaccharides (e.g. lactose);
- polysaccharide (e.g. sucrose).

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

Starchy carbohydrate is an important source of energy.

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

Recommendations

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

Fibre

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

Dietary fibre helps to:

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

Fat

Sources of fat include:

- saturated fat;
- monounsaturated fat;
- polyunsaturated fat.

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

Recommendations

- <35% energy, Saturated fat <11% energy.

A high saturated fat intake is linked with high blood cholesterol levels.

Sources:

Saturated fat: fatty cuts of meat; skin of poultry; butter; hard cheese; biscuits, cakes and pastries; chocolate.

Monounsaturated fat: edible oils especially olive oil; avocados; nuts.

Polyunsaturated fatty acids: edible oils especially sunflower oil; seeds; margarine; spreadable fats made from vegetable oils and oily fish.

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

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

Key terms

Dietary reference values: Estimated dietary requirements for particular groups of the population.

Essential amino acids: 8 of the different amino acids found in proteins from plants and animals that have to be provided by the diet.

Macronutrients: Nutrients needed to provide energy and as the building blocks for growth and maintenance of the body.

Protein complementation: combining different protein types at the same meal to ensure all EAAs are ingested.

Reference Intakes: Guidelines for the maximum amount of nutrients consumed.

Hydration

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

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

The other 80% is provided by drinks such as water, milk and juice.

Drinking too much water can lead to 'water intoxication' with potentially life-threatening hyponatraemia.

This is caused when the concentration of sodium in the blood gets too low.



KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T1



Micronutrients

Micronutrients are needed in the body in tiny amounts. They do not provide energy, but are required for a number of important processes in the body.

There are two main groups of micronutrients:

- vitamins;
- minerals and trace elements.

Micronutrients are measured in milligrams (mg) and micrograms (μg) with $1\text{mg} = 0.001\text{g}$ and $1\mu\text{g} = 0.001\text{mg}$.

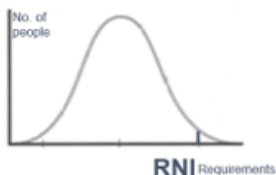
Micronutrient recommendations
People have different requirements for each micronutrient, according to their:

- age;
- gender;
- physiological state (e.g. pregnancy).

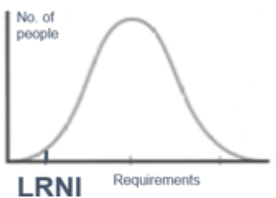


Micronutrient recommendations

The recommendations for vitamins and minerals are based on the **Reference Nutrient Intake (RNI)**.



When looking at low intakes of micronutrients, the **Lower Reference Nutrient Intake (LRNI)** is used.



For more information, go to: <https://bit.ly/36KUn1j>

Vitamins

Vitamins are nutrients required by the body in small amounts, for a variety of essential processes.

Most vitamins cannot be made by the body, so need to be provided in the diet.

Vitamins are grouped into:

- fat-soluble vitamins (vitamins A, D, E and K);
- water-soluble vitamins (B vitamins and vitamin C).

Minerals

Minerals are inorganic substances required by the body in small amounts for a variety of different functions.

The body requires different amounts for each mineral.

Some minerals are required in larger amounts, while others are needed in very small amounts and are called 'trace elements'.

Vitamins

Nutrient	Function	Sources
Vitamin A	Helps the immune system to work as it should and with vision.	Liver, cheese, eggs, dark green leafy vegetables and orange-coloured fruits and vegetables.
B vitamins	Thiamin , riboflavin, niacin, folate, and vitamin B12 have a range of functions within the body.	Different for each B Vitamin.
Vitamin C	Helps to protect cells from damage and with the formation of collagen.	Fruit (especially citrus fruits), green vegetables, peppers and tomatoes.
Vitamin D	Helps the body to absorb calcium & helps to keep bones strong.	Oily fish, eggs, fortified breakfast cereals and fat spreads.
Vitamin E	Helps to protect the cells in our bodies against damage.	Vegetable and seed oils, nuts and seeds, avocados and olives.
Vitamin K	Needed for the normal clotting of blood and is required for normal bone structure.	Green vegetables and some oils (rapeseed, olive and soya oil).

Minerals

Nutrient	Function	Sources
Calcium	Helps to build and maintain strong bones and teeth.	Dairy, calcium-fortified dairy-alternatives, canned fish (where soft bones are eaten) and bread.
Iron	Helps to make red blood cells, which carry oxygen around the body.	Offal, red meat, beans, pulses, nuts and seeds, fish, quinoa, wholemeal bread and dried fruit.
Phosphorus	Helps to build strong bones and teeth and helps to release energy from food.	Red meat, poultry, fish, milk, cheese, yogurt, eggs, bread and wholegrains.
Sodium	Helps regulate the water content in the body.	Very small amounts found in foods. Often added as salt.
Fluoride	Helps with the formation of strong teeth and reduce the risk of tooth decay.	Tap water, tea (and toothpaste).
Potassium	Helps regulate the water content in the body and maintain a normal blood pressure.	Some fruit and vegetables, dried fruit, poultry, red meat, fish, milk and wholegrain breakfast cereals.
Iodine	Helps to make thyroid hormones. It also helps the brain to function normally.	Milk, yogurt, cheese, fish, shellfish and eggs.

Key terms

Micronutrients: Nutrients needed in the diet in very small amounts.

Lower Reference Nutrient Intake (LRNI): is the amount of a nutrient that is enough for only the small number of people who have low requirements (2.5%). The majority of people need more.

Reference Nutrient Intake (RNI): the amount of a nutrient that is enough to ensure that the needs of nearly all the group (97.5%) are being met. The RNI is used for recommendations on protein, vitamins and minerals.

Vitamin D

Vitamin D is a pro-hormone in the body. It can be obtained in two forms:

- ergocalciferol (vitamin D₂);
- cholecalciferol (vitamin D₃).

Vitamin D₃ is also formed by the action of sunlight. Different to most vitamins, the main source of vitamin D is synthesis in the skin following exposure to sunlight. The wavelength of UVB during the winter months in the UK does not support vitamin D synthesis.



Frayer Model Key Words

Protein	A macronutrient that is essential to building muscle mass.
Fat	A macronutrient which supplies the body with energy.
Carbohydrates	A macronutrient that is required by all animals. It is made in plants by the process of photosynthesis.
Vitamin	Vitamins are split into two categories, water soluble and fat soluble. Fat soluble vitamins (A, D E, and K) dissolve in fat. Water soluble vitamins (the B group and vitamin C) dissolve in water.
Nutritional	Providing or obtaining the food necessary for health and growth.
Energy	The strength and vitality required for sustained physical or mental activity.



What we are learning this term:	
A.	The values that can be promoted through sport
B.	The Olympic and Paralympic values
C.	Initiatives that promote values through sport
D.	The important of etiquette and sporting behaviour
E.	The use of performance enhancing drugs

A.	Key question from Assessment objectives?	
Key word	Key definition	
Etiquette	A code of polite behaviour	
Enhancing	To improve something	
Initiatives	A scheme to try and improve something	
Reputation	The opinions about something	
Creed	A belief in something	
Inclusion	Making sure everyone has an equal opportunity	
Sportsmanship	Fair and generous behaviour	
Gamesmanship	Winning by bending the rules	

A.	What is the Olympic creed?
<p>"The most important thing is not to win but to take part, just as the most important thing in life is not to triumph but the struggle. The essential thing is not to have conquered, but to have fought well."</p> <p>Pierre De Coubertin- Founder of the modern Olympic games</p>	

Main assessment objectives	
Learning outcome: Know about the role of sport in promoting values	
C.	What is the difference between sportsmanship and gamesmanship?
Sportsmanship is the unwritten rules that players play by, whereas gamesmanship is bending the rules to gain an advantage	
What is spectator etiquette?	
<ol style="list-style-type: none"> 1. Quiet at Wimbledon during rallies 2. Quiet during snooker 3. Quiet during national anthems 4. Clapping for a new batsman in cricket 	



A.	What are the values that can be promoted through sport?
<ol style="list-style-type: none"> 1. Team spirit 2. Fair play 3. Citizenship 4. Tolerance 5. Inclusion 6. National pride 7. Excellence 	



A.	What are the Olympic and Paralympic values?
<ol style="list-style-type: none"> 1. Respect 2. Excellence 3. Friendship 4. Courage 5. Determination 6. Inspiration 7. Equality 	

G.	Performance enhancing drugs
<p><u>Why do athletes use them?</u></p> <p>Pressure to succeed as an individual Pressure to succeed as a nation Pressure from sponsors</p> <p><u>Why they shouldn't be used?</u></p> <p>Long term health issues Consequences when found guilty Unfair advantage</p> <p><u>What is WADA?</u></p> <p>World Anti Doping Agency The organisation is charge of drug testing across the world</p> <p><u>How do they carry out drug testing?</u></p> <p>Blood sample Hair sample Nail sample</p>	

Sporting values	
Team spirit	Learning how to work together and support others
Fair play	Learning the importance of playing by the rules
Citizenship	Involved in your local community through sport
Tolerance and respect	Developing understanding of different countries and culture through sport
Inclusion	Initiatives to get under-represented social groups involved in sport
National pride	Supporters and performers unite behind a country in international events
Excellence	Striving to be the best you can be in your favourite sport

Values that can be promoted through sport



What we are learning this term:	
A.	<i>The values that can be promoted through sport</i>
B.	<i>The Olympic and Paralympic values</i>
C.	<i>Initiatives that promote values through sport</i>
D.	<i>The important of etiquette and sporting behaviour</i>
E.	<i>The use of performance enhancing drugs</i>

A.	Key question from Assessment objectives?	
Key word	Key definition	
		A code of polite behaviour
		To improve something
		A scheme to try and improve something
		The opinions about something
		A belief in something
		Making sure everyone has an equal opportunity
		Fair and generous behaviour
		Winning by bending the rules

A.	<i>What is the Olympic creed?</i>
<p>"The most important thing is not to win but to take part, just as the most important thing in life is not to triumph but the struggle. The essential thing is not to have conquered, but to have fought well."</p> <p>Pierre De Coubertin- Founder of the modern Olympic games</p>	

Main assessment objectives	
Learning outcome: Know about the role of sport in promoting values	
C.	<i>What is the difference between sportsmanship and gamesmanship?</i>
<p>Sportsmanship is the unwritten rules that players play by, whereas gamesmanship is bending the rules to gain an advantage</p>	
What is spectator etiquette?	
1	
2	
3	
4	

A.	What are the values that can be promoted through sport?
1	
2	
3	
4	
5	
6	
7	

A.	What are the Olympic and Paralympic values?
1	
2	
3	
4	
5	
6	
7	

G.	Performance enhancing drugs
<p><u>Why do athletes use them?</u></p> <p>1</p> <p>2</p> <p>3</p> <p><u>Why they shouldn't be used?</u></p> <p>1</p> <p>2</p> <p>3</p> <p><u>What is WADA?</u></p> <p>1</p> <p>2</p> <p><u>How do they carry out drug testing?</u></p> <p>1</p> <p>2</p> <p>3</p>	

Sporting values	
	Learning how to work together and support others
	Learning the importance of playing by the rules
	Involved in your local community through sport
	Developing understanding of different countries and culture through sport
	Initiatives to get under-represented social groups involved in sport
	Supporters and performers unite behind a country in international events
	Striving to be the best you can be in your favourite sport

Values that can be promoted through sport



What we are learning during this unit:	
A. Job Roles in the Music Industry	
B. Employment Patterns	
C. Record Labels (Pros and Cons)	
D. Venues / Health and Safety / Security	
E. Unions/Agencies/Trade Bodies	
F. Publishing (Pros and Cons)	
6 Key Words for this term	
1 Employment	4 Responsibility
2 Major	5 Union
3 Independent	6 Publishing

B. Employment Patterns	
Fulltime	5 days a week, Contract (holidays/sick pay and pension)
Part time	1-4 days a week, Contract like full time.
Freelance	Self-employed, no long-term contracts! No work = no pay
Permanent Vs Casual	Permanent = guaranteed work / security whereas casual is not secure, varies but does give more flexibility
C. Record Labels (pros and cons)	

E. Unions/Agencies/Trade Bodies	
<p>Agencies</p> <p>MCPS / PRS Mechanical-Copyright Protection Society and the Performing Right Society. <i>Collects royalties for musicians for physical formats like CD (MCPS) and live music (PRS)</i></p> <p>PPL = Phonographic Performance Limited. <i>Licenses the right to perform recorded music</i></p>	
<p>Unions</p> <p><i>Unions provide support for lots of people, they provide things like advice for freelancers on NI/TAX, handling disputes, and support in negotiating contracts</i></p> <p>MU = Musicians Union Equity BECTU = Broadcasting Entertainment Cinematograph Theatre Union</p>	
<p>Trade bodies</p> <p>MPG = Music Producers Guild <i>Represents people involved in producing recorded music</i></p> <p>PLASA = Professional Lighting and Sound Association <i>Represents those who work/supply technologies</i></p> <p>APRS = Association of Professional Recording Services <i>Represents those who work in the audio industry, e.g. recording studios/producers</i></p>	

A. Job Roles in the Music Industry	
Key word	Key definition
✓ Musician	<i>Plays an instrument or voice</i>
✓ Composer	<i>Writes music e.g. films</i>
✓ Songwriter	<i>Writes songs</i>
✓ Record producer	<i>Directs recording sessions</i>
✓ Conductor	<i>Directs an orchestra / ensemble</i>
✓ Live Sound	<i>Monitors sound at live events</i>
✓ Technician	<i>Moves equipment /sets up</i>
✓ Roadie	<i>Fixes stuff like guitars/drums</i>
✓ Instrument Technician	<i>The boss of the artist/band! Responsible for health/safety</i>
✓ Artistic Manager	<i>Book recordings/H&S</i>
✓ Venue Manager	<i>Sells tickets to live events!</i>
✓ Studio Manager	<i>Finds new talent to sign to labels</i>
✓ Promoter / Marketer	
✓ A&R	<i>Records the music in studio</i>
✓ Sound Engineer	<i>Plays in recordings or live shows</i>
✓ Session Musician	<i>Perfects finished recording</i>
✓ Mastering Engineer	<i>Makes the CD's to sell</i>
✓ Manufacturer	<i>Writes about music / reviews</i>
✓ Music Journalist	<i>Blogs about music / reviews</i>
✓ Blogger/Vlogger	<i>E.g. Radio Presenters</i>
✓ Broadcaster	<i>Codes musical software</i>
✓ Software Programmer	<i>Mixes/plays live music</i>
✓ DJ	<i>Sells merchandise!</i>
✓ Retailer	<i>Gets finished CD's to shops to sell (now also done online!)</i>
✓ Distributer	
✓ Stylist	<i>Works on the band/artist image</i>
✓ Accompanist	<i>Attends auditions, plays for a solo musician e.g. piano</i>

Major	Independent
<i>e.g. Warner, Sony, Universal</i>	<i>Smaller labels</i>
<p>Pros = lots of money, links with companies to promote and publish, lots of contacts, get the best deals for manufacturing, good links with advertising and media to promote and market artist/band</p> <p>Cons = difficult to stand out, less control over your music, contracts can be unfair</p>	<p>Pros = individual style of artist is important, more control over music, closer relationships, contracts more artist friendly</p> <p>Cons = not as much money, less publicity and promotion, not as organised/connected, less media contacts</p>

D. Venues/Health and Safety/Security

Large Venue = Arena
Small Venue = school hall/pub



Health and Safety

Risk Assessment = to identify and minimise risks
HSE = health and safety executive

Security

ID/Bags/Crowd Control



F. Publishing (pros and cons)

Major	Self-Publishing
Remember: Publishing Company = Composition OWNERSHIP	
<p>Pros = good distribution, payment often upfront (in advance), marketing and promotion is good</p> <p>Cons = signed through an agent (which means they take a cut!), harder to get published when the company is huge, more editing done on your work so less control</p>	<p>Pros = no need for an agent, send work directly, done on social media, more in control of editing, stepping stone to a larger company</p> <p>Cons = less money, less marketing and promotion</p>



What we are learning during this unit:	
A. Job Roles in the Music Industry	
B. Employment Patterns	
C. Record Labels (Pros and Cons)	
D. Venues / Health and Safety / Security	
E. Unions/Agencies/Trade Bodies	
F. Publishing (Pros and Cons)	
6 Key Words for this term	
1 E _____	4 R _____
2 M _____	5 U _____
3 I _____	6 P _____

B. Employment Patterns	
	___ days a week, Contract (holidays/sick pay and pension)
	___ days a week, Contract like full time.
	Self-employed, no long-term c____! No work = no p____
	P_____ = guaranteed work / security whereas casual is not secure, varies but does give more flexibility

C. Record Labels (pros and cons)

M _____	I _____
<i>e.g.</i>	<i>Smaller labels</i>
<p>Pros = lots of money, links with companies to promote and publish, lots of contacts, get the best deals for manufacturing, good links with advertising and media to promote and market artist/band</p> <p>Cons = difficult to stand out, less control over your music, contracts can be unfair</p>	<p>Pros = individual style of artist is important, more control over music, closer relationships, contracts more artist friendly</p> <p>Cons = not as much money, less publicity and promotion, not as organised/connected, less media contacts</p>

A. Job Roles in the Music Industry	
Key word	Key definition
✓ M _____	<i>Plays an instrument or voice</i>
✓ C _____	<i>Writes music e.g. films</i>
✓ S _____	<i>Writes songs</i>
✓ Record p _____	<i>Directs recording sessions</i>
✓ C _____	<i>Directs an orchestra / ensemble</i>
✓ L _____	<i>Monitors sound at live events</i>
Technician	<i>Moves equipment /sets up</i>
✓ R _____	<i>Fixes stuff like guitars/drums</i>
✓ I _____	<i>The boss of the artist/band!</i>
Technician	<i>Responsible for health/safety</i>
✓ Artistic M _____	<i>Book recordings/H&S</i>
✓ V _____ Manager	<i>Sells tickets to live events!</i>
✓ S _____ Manager	<i>Finds new talent to sign to labels</i>
✓ P _____ / Marketer	
✓ A& _____	<i>Records the music in studio</i>
✓ Sound E _____	<i>Plays in recordings or live shows</i>
✓ Session M _____	
✓ M _____ Engineer	<i>Perfects finished recording</i>
✓ M _____	<i>Makes the CD's to sell</i>
✓ Music J _____	<i>Writes about music / reviews</i>
✓ B _____ /Vlogger	<i>Blogs about music / reviews</i>
✓ B _____	<i>E.g. Radio Presenters</i>
✓ S _____	<i>Codes musical software</i>
Programmer	<i>Mixes/plays live music</i>
✓ D _____	<i>Sells merchandise!</i>
✓ R _____	<i>Gets finished CD's to shops to sell (now also done online!)</i>
✓ D _____	
✓ S _____	<i>Works on the band/artist image</i>
✓ A _____	<i>Attends auditions, plays for a solo musician e.g. piano</i>

D. Venues/Health and Safety/Security

L _____ Venue = _____
 S _____ Venue = _____

Health and Safety
 _____ = to identify and minimise risks
 HSE = health and safety _____

Security

E. Unions/Agencies/Trade Bodies

Agencies

MCPS / PRS

_____ and the Performing Right S_____. *Collects royalties for musicians for physical formats like CD (MCPS) and live music (PRS)*

PPL = Phonographic Performance Limited.
Licenses the right to perform recorded music

Unions

Unions provide support for lots of people, they provide things like advice for freelancers on _____, handling disputes, and support in _____

MU = Musicians Union
Equity
BECTU = Broadcasting Entertainment Cinematograph Theatre Union

Trade bodies

_____ = Music Producers Guild
Represents people involved in producing recorded music

_____ = Professional Lighting and Sound Association
Represents those who work/supply technologies

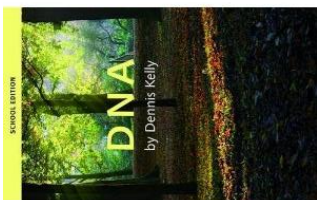
_____ = Association of Professional Recording Services
Represents those who work in the audio industry, e.g. recording studios/producers

F. Publishing (pros and cons)

M _____	S _____
Remember: Publishing Company = Composition O _____	
<p>Pros = good distribution, payment often upfront (in advance), marketing and promotion is good</p> <p>Cons = signed through an agent (which means they take a cut!), harder to get published when the company is huge, more editing done on your work so less control</p>	<p>Pros = no need for an agent, send work directly, done on social media, more in control of editing, stepping stone to a larger company</p> <p>Cons = less money, less marketing and promotion</p>



What we are learning this term:	
A.	How to develop our understanding of set design.
B.	How to apply the Stanislavski system to character development.
C.	How to interpret the director's creative intention in DNA.
D.	How to reflect, analyse and evaluate our development.



Who is Dennis Kelly?	Other Plays by Dennis Kelly
Dennis Kelly is renowned in the theatre for writing gritty and sometimes controversial plays, and has been writing consistently for theatre, film and television throughout the past 20 years. Kelly has written over 20 plays to date and continues to create gripping work. He received great acclaim for co-writing the book for Matilda the Musical with Tim Minchin, which won several awards, transferred to the West End in 2011 and toured the globe.	<ol style="list-style-type: none"> 1. Matilda 2. Love and Money 3. Orphans 4. Debris 5. Osama the Hero

Key Words:

Synchronisation – movement or speech that happens at the same time.

Physical & Visual Theatre - a form of theatre that puts emphasis on movement rather than dialogue

Chorus - those who perform vocally in a group as opposed to those who perform singly.

Soundscape – layered voices and sounds to create a location or atmosphere **Abstract** – representational and symbolic, not life-like or naturalistic

Sequence – an order of events/movements **Pattern** – a repeated phrase/sequence of movements

Naturalism - 'A slice of life' on stage. Naturalistic performances should aim to look like real life and do not acknowledge the audience.

Motivation - the reason a character does anything **Revelations** – when information is disclosed

Thought-tracking - Actors speak the thoughts of the characters they are representing. This is a useful way of finding out more about a character's reactions to other characters of the events they are experiencing. Other characters cannot hear the thought tracking, only the audience.

Climax – is a play or a specific scene's point of highest tension and drama

Narrative – the storyline and character's trajectory

The story Motif – A symbolic movement that captures the essence of a character or moment **Symbol** – is something which stands for, or represents something else.

Symbols -are often used in drama to deepen its meaning and remind the audience of the themes or issues it is discussing.

Essence Machine – A group performance that combines symbolic movement and sound to capture the essence of a something – this could be anything, for example, a character, a place, a feeling.

Key learning aims from Component 2

<i>Learning aim A: Develop skills and techniques for performance</i>	A1: Development of physical, vocal and interpretative skills. Introduction to developing skills and techniques; participation in naturalism workshops as well as exploring symbolic and abstract performance.
<i>Learning aim B: Apply skills and techniques in rehearsal and performance</i>	B1: Interpretation of two sections of DNA through a mixture of naturalism techniques inspired by Stanislavski to enter the minds of the teenagers. Minimalism, fantasy and symbolism to explore different ideas for production. Development of skills, techniques and interpretive skills leading to final performance in front of a live audience.
<i>Learning aim C: Review own development and performance</i>	C1: Review own development of skills and techniques for performance Evaluation of development of skills, responding to teacher/peer feedback and observations, identifying strengths and areas for development, setting actions and targets for improvement, referring to professional working practices.

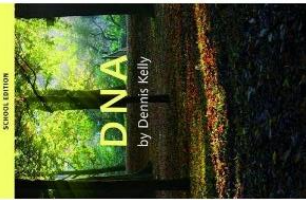
	Keywords linked to Assignment Brief
Physical skills	The physical attributes you need to be able to practically move with technical accuracy. Rehearsal – Practising to improve your performance.
Performance skills	The performance attributes you need to be able to practically perform applying confidence, a character, a narrative etc.
Reflect	Look over your current work and the work of others and be able to reflect and comment on your own and others practice. How does reflection lead to improvement?
Analyse	Watch and then analyse your own, and the group, performance by seeing where your strengths and weaknesses are and how these can be improved.
Apply	How you can then physically apply the physical and performance skills to a live performance to make a successful practical performance.

Component 2 – Key focus

This component is designed to give students a practical overview of the skills, techniques and practices required for the discipline of drama. You will explore the technique naturalism and apply them to the play: DNA. You will apply Stanislavski's naturalism to a section of the DNA script and perform to an audience. Through a series of workshops and rehearsals you will explore the different scenes of DNA as well as the direction's creative intention. Using symbolism, naturalism, minimalism and fantasy you will explore the motivations behind these characters and their heinous crime.



What we are learning this term:
<p>A. How to develop our physical and visual story telling techniques.</p> <p>B. The Frantic Assembly devising process through rehearsals.</p> <p>C. How to interpret the director's creative intention in A Curious Incident of a Dog in the Night-time.</p> <p>D. How to reflect, analyse and evaluate our development.</p>



Who is Dennis Kelley?	Other Shows by Dennis Kelley

Key Words:
<p>Synchronisation – _____</p> <p>Physical & Visual Theatre - a form of _____</p> <p>Chorus - those who perform _____</p> <p>Soundscape – layered _____</p> <p>Abstract – _____</p> <p>Sequence – an order of _____</p> <p>Naturalism - 'A slice of life' on stage. Naturalistic</p> <p>Motivation - the _____</p> <p>Thought-tracking - Actors _____</p> <p>. This is a useful way of finding out _____</p> <p>to other characters of the events they are experiencing. Other characters cannot hear the thought tracking, only the audience.</p> <p>Climax – is a play or a specific scene's point of _____</p> <p>and drama</p> <p>Narrative – the s _____</p> <p>e and _____</p> <p>The story Motif – A _____</p> <p>that captures the essence of a character or moment Symbol – is something which stands for, or represents something else.</p> <p>Symbols -are often used in drama to _____</p> <p>and remind the audience of the themes or issues it is discussing.</p> <p>Essence Machine – A _____</p> <p>that combines symbolic movement and sound to capture the essence of a something – this could be anything, for example, a character, a place, a feeling.</p>

Key learning aims from Component 2
<p><i>Learning aim A: Develop skills and techniques for performance</i></p>
<p><i>Learning aim B: Apply skills and techniques in rehearsal and performance</i></p>
<p><i>Learning aim C: Review own development and performance</i></p>

Keywords linked to Assignment Brief
Physical skills
Performance skills
Reflect
Analyse
Apply

Component 2 – Key focus
<p>This component is designed to give students a practical overview of the skills, techniques and practices required for the discipline of drama. You will explore the technique naturalism and apply them to the play: DNA. You will apply Stanislavski's naturalism to a section of the DNA script and perform to an audience. Through a series of workshops and rehearsals you will explore the different scenes of DNA as well as the direction's creative intention. Using symbolism, naturalism, minimalism and fantasy you will explore the motivations behind these characters and their heinous crime.</p>



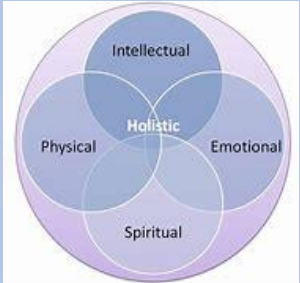
Expand your knowledge and understanding!

<https://www.bbc.co.uk/teach/class-clips-video/plot-overview-dna-by-dennis-kelly/zf6kjhv>

Quirky Bird Theatre Company
The National Theatre Performance 2008

What we are learning in LAA:	
A.	Key words
B.	Definitions of health and wellbeing
C.	Genetic inheritance

A.	Key words for this Unit
Genetic inheritance	The genes a person inherits from their parents
Predisposition	Someone is more likely to suffer from a particular condition
Chronic	Gradual illness that is long term (longer than 3 months) and generally can be treated but not cured
Acute	A short-term illness that can be cured
Monitor	To check progress over a period of time.
Person-Centred	Planning care around the wants and needs of a service user
Bereavement	The process of coming to terms with the death of someone close.
Circumstances	Events that change your life, over which you have no control
Physiological	Relates to how a person and their bodily parts function normally.
Interpret	understand an action, mood, or way of behaving as having a particular meaning
Collaboratively	Working well together with other people or services
Obstacles	Difficulties a person might face when they implement a plan.
Goal	What you want to achieve in the long term
Norm	Something that is usual, typical or standard
Targets	Challenges to help you reach your goal



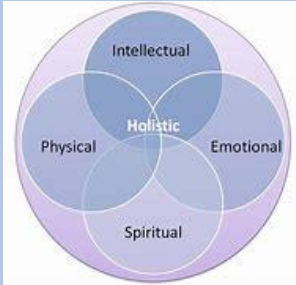
B	Definitions of health and well-being	
Positive Definition		Looks at how physically fit and mentally stable a person is. You have a positive attitude towards health and wellbeing if you realise that there is something you can do to improve your health and wellbeing and do it.
Negative definition		Looks at the absence of physical illness, disease, and mental distress. You have a negative attitude towards your health and wellbeing if you: <ul style="list-style-type: none"> • Base your attitude on not having anything wrong with you. • Continues as you are- Inc. keeping bad habits like smoking. • Assume that because you currently feel fine you will stay healthy in the future.
Holistic definition		It is a combination of physical health and social and emotional wellbeing. It is not just the absence of disease or illness; it looks at all aspects of a person's health and wellbeing. You have a holistic attitude towards health and wellbeing if you look after your: <ul style="list-style-type: none"> • Physical Health: Be meeting the needs we have to keep our bodies working as well as they can, e.g. Food, water, shelter, warmth, clothing, rest, exercise and good personal hygiene. • Intellectual health: By meeting the needs we have to develop and keep our brains working as well as possible; these include mental stimulation to keep us motivated and interested. • Emotional aspects of wellbeing: By meeting the needs we have that make us feel happy and relaxed, e.g. being loved, respected and secure. Knowing how to deal with negative emotions, having positive self-concept and being respected by others. • Social aspects of wellbeing: By meeting the needs we have to help us develop and enjoy good relationships with others, including mixing with others in appropriate environments and having access to leisure facilities/ activities.

C.	Genetic inheritance		
	Inherited physical Characteristics		Genes and environment
	<ul style="list-style-type: none"> • Children inherit their physical; characteristics from their parents e.g. height, skin and eye colour and hair type and colour. • These characteristics can affect social and emotional wellbeing because they influence a person's self-concept (self-image and esteem). 		<ul style="list-style-type: none"> • Chromosomes carry genes that determine aspects of persons physical makeup. • Gene is a section of DNA that carries a code. Different versions of a gene are called alleles (they can be faulty). • Environmental factors such as diet, also influence physical appearance. For example, a person may not grow to their full, genetically determined height if they do not have enough food.
Allele type	<p>Dominant: If a gene is dominant a child inheriting it from only one birth parent will have the condition, e.g Huntington's disease.</p> <p>Recessive: If the gene is recessive a child would only develop the condition if it was inherited from both birth parents, e.g. Cystic fibrosis.</p>	Effects of inherited disorders	<ul style="list-style-type: none"> • Physical health: Body systems, growth and mobility • Intellectual wellbeing: learning, thinking, problem solving and decision making. • Emotional wellbeing: how people feel about themselves. • Social wellbeing: the ability to build relationships and maintaining them.

What we are learning in LAA:
A. Key words
B. Definitions of health and wellbeing
C. Genetic inheritance

A.	Define the key words for this Unit
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Genetic inheritance	
Predisposition	
Chronic	
Acute	
Monitor	
Person-Centred	
Bereavement	
Circumstances	
Physiological	
Interpret	
Collaboratively	
Obstacles	
Goal	
Norm	
Targets	

B	Definitions of health and well-being	
Positive Definition		
Negative definition		
Holistic definition		Definition: <ul style="list-style-type: none"> • Physical Health: • Intellectual health: • Emotional aspects of wellbeing: • Social aspects of wellbeing:

C.	Genetic inheritance		
	Inherited physical Characteristics		Genes and environment
	<ul style="list-style-type: none"> • • 		<ul style="list-style-type: none"> • • •
Allele type	Dominant:	Effects of inherited disorders	<ul style="list-style-type: none"> • • • •
	Recessive:		



What we are learning in LAA:

- D. Balanced diet
- E. Chronic and acute illness
- F. What are the effect of exercise?
- G. What are the effect of excessive substance use?

E	Chronic or Acute Illness	
<p>Chronic illness- Illness comes on gradually, is long term (more than 3 months) and generally can be treated but not cured. E.g Asthma, Diabetes, epilepsy, bipolar disease, Alzheimer’s disease</p>		<p>Acute illness- Illness comes on quickly, is short term and can be cured. E.g. Cold, flue, broken bones, heartburn, appendicitis or Diarrhoea.</p>

Some chronic conditions are acute but may develop because of chronic conditions. For example: osteoporosis (a chronic condition that weakness bones) masking their bones fragile and more likely to break. Broken bones are then an acute condition.

Possible negative effects of chronic illness	
<p>Physical:</p> <ul style="list-style-type: none"> • poor rate of growth • Unusual physiological change during puberty • Restricted movement 	<p>Emotional:</p> <ul style="list-style-type: none"> • Negative self-concept • Stress • Decision making
<p>Intellectual:</p> <ul style="list-style-type: none"> • Disturbed learning because of missing school • Difficulties in thinking and problem solving • Memory problems. 	<p>Social</p> <ul style="list-style-type: none"> • Isolation • Loss of independence • Difficulties developing relationships

D.	Balanced diet
What is a balanced diet?	<ul style="list-style-type: none"> • Diet that contains the correct nutrients in the right proportions to keep out bodies and minds healthy. • It is also a lifestyle choice • Choosing to eat too much or too little might make us less able to take all the opportunities that life offers.
Overweight or underweight may:	<p>A person over weight or under weight may:</p> <ul style="list-style-type: none"> • Be prone to illness and conditions • Have their life expectancy reduced • Be less able to exercise effectively • Miss out on learning experiences • Miss out on some sporting activities • Be less successful in job interviews • Feel embarrassed and self-conscious about their appearance in social situations.
Essential parts of a healthy diet:	<ul style="list-style-type: none"> • Fats (saturated and unsaturated) • Carbohydrates (sugars and starches) • Minerals • Vitamins • Proteins
Est well guide says you should eat:	<ul style="list-style-type: none"> • Eat at least 5 portions of a variety of fruit and vegetables every day. • Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing wholegrain versions where possible. • Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options. • Eat some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily). • Choose unsaturated oils and spreads and eat in small amounts. • Drink 6-8 cups/glasses of fluid a day.
If you eat more than you need:	<ul style="list-style-type: none"> • The body will store food as fat and this can lead to: • Obesity, heart disease, high blood pressure, Strokes, Tooth decay or cancer
If you eat less than you need	<ul style="list-style-type: none"> • The body does not get enough nutrients to grow and develop properly and this can lead to: • Eating disorders, stunted growth, anaemia, heart failure, depression, tiredness, cancer or rickets.

F.	What are the effect of exercise?
<p>Positive effects of exercise</p>	<p>Physical: maintain a healthy weight, reduce BMI, boosting energy levels. Improved flexibility, stamina, endurance and stronger bones and muscles. Reduce risk of heart disease and diabetes.</p> <p>Intellectual: improved brain function like mentor and thinking skills.</p> <p>Emotional: improves confidence and mood and reduces stress. Aid relaxation and sleep and lead to better self concept.</p> <p>Social: encourages social interaction, reducing isolation and improving social skills.</p>
<p>Negative effects of exercise</p>	<p>Physical: Obesity and associated health problems.</p> <p>Intellectual: Reduced pain performance, hard to concentrate and retain information.</p> <p>Emotional: poor self-concept and reduced ability to cope with stress.</p> <p>Social: Fewer opportunities for social interactions.</p>

G.	What are the effect of excessive substance use?
<p>Negative effects of excessive alcohol consumption</p>	<p>Physical: Alcohol dependence, damage to major organs: liver, heart, kidneys, pancreas. Cancers: mouth, throat, oesophagus, liver, breast. Infertility and impotence, weight gain.</p> <p>Intellectual: difficulty in making decisions, depression and anxiety, chance of stroke and brain damage, impaired brain development of unborn baby.</p> <p>Emotional: poor self-concept, poor judgement leading to a risk of accidents and unsafe sex, can have an impact on relationships, depression.</p> <p>Social: breakdown of relationships, domestic violence, social isolation</p>



What we are learning in LAA:

- D. Balanced diet
- E. Chronic and acute illness
- F. What are the effect of exercise?
- G. What are the effect of excessive substance use?

D. Balanced diet

What is a balanced diet?

Overweight or underweight may:

Essential parts of a healthy diet:

Est well guide says you should eat:

If you eat more than you need:

If you eat less than you need

E Chronic or Acute Illness

Chronic illness-

Acute illness-

Explanation:

Possible negative effects of chronic illness

Physical:

Emotional:

Intellectual:

Social

F. What are the effect of exercise?

Positive effects of exercise



Physical:
Intellectual:
Emotional:
Social:

Negative effects of exercise

Physical:
Intellectual:
Emotional:
Social:

G. What are the effect of excessive substance use?

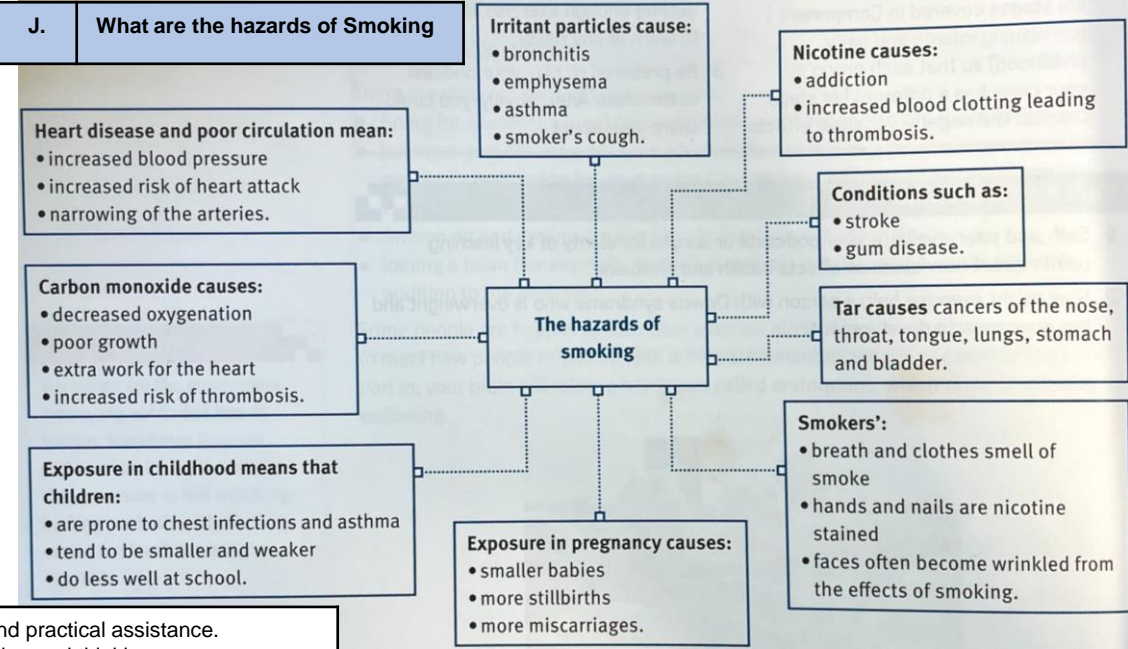
Negative effects of excessive alcohol consumption




Physical:
Intellectual:
Emotional:
Social:

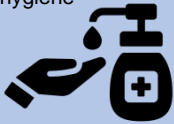
What we are learning in LAA:	
H.	The effects of social interactions on wellbeing
I.	What are the effects of stress on health and wellbeing
J.	What are the hazards of smoking
K.	What are the effects of personal hygiene

H. The effects of social interactions on wellbeing	
Social integration	When people feel they belong to a group and can interact with others. Social interactions can happen between family members and friends, work colleagues, school learners, members of a community or interest groups.
Social isolation	Occurs when people do not have regular contact with others. This may be because they don't go out much because of physical illness, reduced mobility or unemployment. They might have a difficulty in communicating if they have a mental illness, depression or learning difficulties. Lastly, a person might be discriminated against because of culture, religion or disability.



	Positive effects of relationships Physical: physical support and day to day care and practical assistance. Intellectual: shared experiences, supported learning and thinking Emotional: unconditional love, security and encouragement, positive self-concept, feeling content, ability to build relationships with people outside the family, independence and confidence. Social: Companionship, social circle increases.
	Negative effects of social isolation Physical: poor lifestyle choices like smoking and drinking, poor diet that can cause eating disorders. Intellectual: reduced ability to use thinking skills, missing school/work Emotional: feelings insecure, depression, anxiety, negative self-concept, feeling of hurt, loneliness and distrust, lack of independence, difficulty in controlling emotions. Social: difficulties in building relationships as lack skills.



I. What are the effects of stress on health and wellbeing			
Physical effects	Intellectual effects	Emotional effects	Social effects
Increased heartbeat Increased breathing rate Tense muscles Sweaty palms Dry mouth High blood pressure Loss of appetite Sleeplessness Digestive problems	Forgetfulness Poor concentration Difficulty in making decisions	Difficulty in controlling emotions Feeling insecure Negative self-concept Feeling anxious and frightened Loss of confidence	Difficulty in making friends and building relationships Breakdown of close relationships Social isolation


K. What are the effects of Personal Hygiene?	
Positive effects of good personal hygiene  <ul style="list-style-type: none"> Helps prevent the spread of infection Improves self-concept Reduces number of bacteria that lives on us. You must: <ul style="list-style-type: none"> Brush your teeth Shower daily or bath Wash your hair regularly Keep fingernails and toenails clean and trimmed 	Negative effects of poor personal hygiene Physical: catching and spreading disease like food poisoning, sore throat, meningitis and athlete's foot. Bad body odour, bad breath and tooth decay. Emotional: loss of friendships and social isolation. Might be bullied and poor self-concept. Social: low social interactions as people don't want to be friends with someone that neglects their hygiene. Social isolation.
When caring for others:	<ul style="list-style-type: none"> Bad hygiene can stop effective communication. Negative effect on the person being cared for and their health and wellbeing- pass on infection Discomfort for the person being cared for because of the odour or visible dirt under fingernails.

What we are learning in LAA:
H. The effects of social interactions on wellbeing
I. What are the effects of stress on health and wellbeing
J. What are the hazards of smoking
K. What are the effects of personal hygiene

J.	What are the hazards of Smoking- draw out the mind map in the space below:
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H.	The effects of social interactions on wellbeing
Social integration	
Social isolation	

Positive effects of relationships 	<u>Physical:</u> <u>Intellectual:.</u> <u>Emotional:</u> <u>Social:</u>
Negative effects of social isolation 	<u>Physical:</u> <u>Intellectual:.</u> <u>Emotional:</u> <u>Social:</u>

K.	What are the effects of Personal Hygiene?
Positive effects of good personal hygiene 	<ul style="list-style-type: none"> • • • You must: • • • •
Negative effects of poor personal hygiene	<u>Physical:</u> <u>Emotional:</u> <u>Social:</u>
When caring for others:	<ul style="list-style-type: none"> • • •

I.	What are the effects of stress on health and wellbeing			
	Physical effects	Intellectual effects	Emotional effects	Social effects

What we are learning in LAA:	
L.	What are the barriers to seeking help.
M.	What are the effects of unexpected life events on health and wellbeing
N.	What are the effects of economic factors (e.g, income) on health and wellbeing
O.	What are the effects of expected life events on health and wellbeing
L.	What are the barriers to seeking help.
Culture	Accessing HSC services can be influenced by values, traditions, way of life and beliefs of the society or group. <ul style="list-style-type: none"> Some may have received discrimination when accessing other services. Some may not speak English well enough. Values and traditions not understood e.g. eye contact means respect in some cultures but not others. Some cultures a woman must be treated only by a female professional. Alternative therapies are used in some cultures
Gender	Research shows that men are less likely to talk about their health and wellbeing than woman. This is because men are: <ul style="list-style-type: none"> Often less open about their feelings Sometimes reluctant to appear vulnerable by asking for help Not aware of poor health signs as health campaigns target women's health more Unhappy to be examined by a female health worker.
Education	Research shows that people who are better educated are more likely to seek help. This is because: <ul style="list-style-type: none"> They like to research symptoms and know when help is needed Understand the importance of early diagnosis and treatment Know how and where to access services.
Stigma	In some cultural groups there is a stigma attached to certain condition like depression. Stigma is a word used to describe something that people feel embarrassed about. Therefore, they wouldn't seek help.

N.	What are the effects of economic factors (e.g, income) on health and wellbeing	
	Positive Effects:	Negative Effects:
Physical	<ul style="list-style-type: none"> Better financial resources can result in good housing conditions and healthy diet Manual jobs may improve muscle tone and stamina. 	<ul style="list-style-type: none"> Low wages can affect diet and housing, leading to poor health. Manual jobs can cause muscular and skeletal problems Desk jobs lead to less activity and weight gain.
Intellectual	<ul style="list-style-type: none"> Better financial resources can result in more leisure time for intellectual activities Work, education or training helps to develop problem solving and thinking skills 	<ul style="list-style-type: none"> Some people work very long hours to improve their financial position, leading to less leisure time and reduced learning opportunities. Being unemployed can result in poor mental health.
Emotional	<ul style="list-style-type: none"> A well-paid job gives a feeling of security. Being financially secure promotes positive self-concept 	<ul style="list-style-type: none"> Financially worried can result in stress and breakdown of relationships. Unemployment or low-status work can lead to low self-concept
Social	<ul style="list-style-type: none"> Better financial resources provide opportunities for socialising. Work gives opportunities for socialising with colleagues. 	<ul style="list-style-type: none"> Lack of financial resources reduces opportunities for socialising. Unemployment reduces opportunities for relationships, leading to social isolation.

O.	What are the effects of expected life events on health and wellbeing	
Life event	Positive Effects:	Negative Effects:
Starting school, college or uni	<ul style="list-style-type: none"> Build new relationships Extend knowledge and learning Develop new skills Improve confidence 	<ul style="list-style-type: none"> Anxiety about new routines and meeting new people Insecurity about leaving parents and other families
Start a new job or career	<ul style="list-style-type: none"> Develop independence Improve thought processes Improve self-concept 	<ul style="list-style-type: none"> Stress about learning new skills and routines Anxiety about meeting new people
Moving to a new house or area	<ul style="list-style-type: none"> Excitement Develop new friendships and relationships 	<ul style="list-style-type: none"> Unhappiness at loss of old life Stress of moving Social isolation
Retirement	<ul style="list-style-type: none"> Reduced stress Time to socialise with family and friends Opportunities for leisure of physical activities 	<ul style="list-style-type: none"> Loss of relationships with colleagues Possible loss of fitness and mobility Loss of intellectual stimulation and status

M.	What are the effects of unexpected life events on health and wellbeing	
Life event	Positive Effects:	Negative Effects:
Imprisonment	<ul style="list-style-type: none"> Depression Loss of contact with family and friends Social isolation Restrictions on physical activity 	<ul style="list-style-type: none"> Opportunity to study Improvement in health through balanced diet, lack of alcohol, reduced use of nicotine
Redundancy	<ul style="list-style-type: none"> Poor self-concept Anxiety about finances Fewer opportunities 	<ul style="list-style-type: none"> Opportunities to study or train for a new job More time to spend with family and friends
Exclusion or dropping out of education	<ul style="list-style-type: none"> Loss of contact with friends Social isolation Poor self-concept Lack of learning opportunities 	<ul style="list-style-type: none"> Catalyst for change of behaviour Opportunities for more suitable study or work situation

What we are learning in LAA:

L. What are the barriers to seeking help.
 M. What are the effects of unexpected life events on health and wellbeing
 N. What are the effects of economic factors (e.g, income) on health and wellbeing
 O. What are the effects of expected life events on health and wellbeing

L.	What are the barriers to seeking help.
Culture	
Gender	
Education	
Stigma	

M.	What are the effects of unexpected life events on health and wellbeing	
Life event	Positive Effects:	Negative Effects:
Imprisonment		
Redundancy		
Exclusion or dropping out of education		




N.	What are the effects of economic factors (e.g, income) on health and wellbeing	
	Positive Effects:	Negative Effects:
Physical		
Intellectual		
Emotional		
Social		

O.	What are the effects of expected life events on health and wellbeing	
Life event	Positive Effects:	Negative Effects:
Starting school, college or uni		
Start a new job or career		
Moving to a new house or area		
Retirement		

What we are learning in LAB:
A. Physiological health indicators
B. What are health indicators?
C. Interpreting lifestyle data

A.	Physiological health indicators
Pulse	Resting pulse rate is measured when a person has been still for about 5 minutes. Health reading for an adult is 60-100 bpm. Pulse rate during exercise: 220bpm minus the person's age.
Blood pressure	<ul style="list-style-type: none"> This is the pressure exerted by blood against the artery walls. It is measured in millimetres of mercury (mm Hg) and is shown in two numbers: <ul style="list-style-type: none"> Systolic pressure: (the top number) is the maximum pressure in the blood vessels as the heart pushes out blood. Diastolic pressure: (the bottom number) as the minimum pressure in the vessels when the heart relaxes between the beats.
Peak flow	<ul style="list-style-type: none"> Measured how quickly you can blow air out of your lungs. it is measured in liters per min (L/min).
BMI	<ul style="list-style-type: none"> Measures the amount of fat on your body in relation to your height to tell you if your weight is healthy.




B.	<ul style="list-style-type: none"> What are health indicators?
Importance of understanding indicators	<ul style="list-style-type: none"> Detect health problems at an early stage Track improvements or deterioration in health Make recommendations about health and treatments Give advice about future health risks Support individuals to make different lifestyle choices.
What are lifestyle indicators?	<ul style="list-style-type: none"> These indicators can be used to assess risks to an individual's health and wellbeing now and in the future. Professionals collect information about lifestyle choices by asking about a person's: <ul style="list-style-type: none"> Weekly alcohol consumption Smoking habits Levels of physical activity and exercise.
What are physiological indicators?	<ul style="list-style-type: none"> They show how well the body's systems are functioning. Health professionals check a person's health by taking measurements. They compare the results with published guidance.

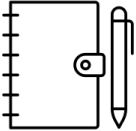
C.	Interpreting lifestyle data
Interpreting data on smoking 	<ul style="list-style-type: none"> Smoking causes around 96,000 deaths in the UK annually. Smoker under the age of 40 are 5 times more likely to have a heart attack than non-smoker. Smoking causes 80% of deaths from lung cancer, 80% of bronchitis and 14% of deaths from heart disease. More than 25% of all cancer deaths are caused by smoking. On average a smoker will die 10 years earlier than a non-smoker. Smokers are more likely to develop facial wrinkles. Smoking is a cause of impotence and can lead to sperm abnormalities.
Interpreting data on alcohol 	<ul style="list-style-type: none"> Strongly linked to at least 7 types of cancer Alcohol-related liver disease accounts for 37% of liver disease and deaths. 2/3s of cases of chronic pancreatitis are caused by heavy drinking You are between 2 and 5 times more likely to have an accident or injury Each drink per day increases the risk of breast cancer in woman between 7-13% Men and woman should not drink more than 14 units a week and not all in one go.
Interpreting data on inactivity 	<ul style="list-style-type: none"> Increased risk of breast cancer by 17.8% and colon cancer by 18.7% Increased risk of type 2 diabetes by 13%. Increased risk of coronary heart disease by 10.5% Leads to obesity and joint pain 16.9% of all premature deaths are caused by inactive lifestyle. Active people have a lower risk of premature death. People who are inactive visit their GP more often and they spend 38% more time in hospital.

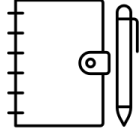
What we are learning in LAB:
A. Physiological health indicators
B. What are health indicators?
C. Interpreting lifestyle data

A.	Physiological health indicators
Pulse	Resting pulse rate : Pulse rate during exercise:
Blood pressure	• • • •
Peak flow	• •
BMI	•

B.	• What are health indicators?
Importance of understanding indicators	
What are lifestyle indicators?	
What are physiological indicators?	

C.	Interpreting lifestyle data
Interpreting data on smoking	
	
Interpreting data on alcohol	
	
Interpreting data on inactivity	
	


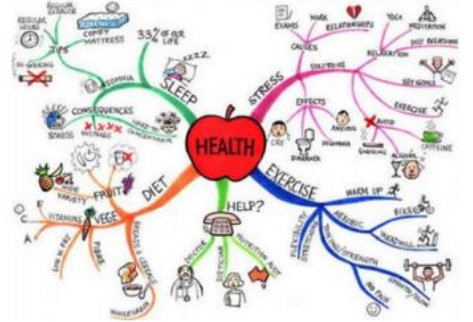

What we are learning in LAC:		C.	Recommended action to meet health and wellbeing improvement goals	
A. What is a person-centred approach B. Health improvement plan C. Recommended action to meet health and wellbeing improvement goals D. SMART targets for health improvement plan E. Sources of support		To lower blood pressure: <ul style="list-style-type: none"> • Eat five or more portions of fruit and veg a day • Cut out salt • Use relaxation techniques to reduce stress • Join a gym • Drink water alongside alcohol to reduce consumption 	To reduce BMI: <ul style="list-style-type: none"> • Reduce fat and sugar intake • Do not exceed the recommended daily calories intake • Get off the bus a stop early and walk the rest of the way • Drink water instead of sugary drinks. 	
A.	What is a person-centred approach.		To increase peak flow reading: <ul style="list-style-type: none"> • Half the number of cigarettes smoked each day • Use nicotine replacement therapies • Join an exercise or dance class. 	To reduce pulse rate and improve recovery time after exercise: <ul style="list-style-type: none"> • Walk for half an hour at lunchtime • Drink decaffeinated drinks • Take up a physically active hobby • Join a yoga group.
Person-centred approach	A holistic approach that puts the individual at the heart of health care planning, so that the whole range of physical, intellectual, emotional and social health needs are met.			
When planning for health improvements include:	<ul style="list-style-type: none"> • The needs: physical, intellectual, emotional and social. • The wishes: likes, dislikes, choices and desired health goals. • Circumstances: illness or disability, access to facilities, previous experiences, family and relationships, responsibilities. 			
Benefits of person-centred approach:	<ul style="list-style-type: none"> • Will feel involved • Is more likely to trust a health professional who listen to them • Will feel more secure • Is more likely to follow the plan and achieve the targets • Will take responsibility for their own health. 			
B.	Health improvement plan	D. SMART targets for health improvement plan		
What is it?	Health and wellbeing improvement plans are often based on an individual's physiological and lifestyle indicators. Plans should be person-centred and include goals, actions and targets and possible sources of support.	Specific	The target must be clearly stated. It should say exactly what you mean, such as to 'lose 2 kg in weight in a week'. The target should be clear and not open to any misunderstanding.	
The plan will identify:	<ul style="list-style-type: none"> • The health issues and goal • The recommended actions to take • A set of targets for health improvement • The supports that are needed • Possible obstacles to progress and way to overcome them. 	Measurable	A target of to 'lose weight' is too vague. A specific amount must be stated so you can prove you have met your target.	
Positive effects of a health improvement plan	<ul style="list-style-type: none"> • Be fitter • Loose weight • Have improved self-concept • Lower blood pressure, healthier heart • Reduced risk of cancer • Taking control of their health outcomes and reaching health goals 	Achievable/attainable	If you are following a health and wellbeing improvement plan you must feel it is possible to achieve it. If you do not, you will probably give up before you have even started. An achievable target is to 'lose 1kg this week'. An unachievable target would be to 'lose 20kg this week'.	
		Realistic	The target set must be realistic in that you must be able to physically do it. It is not realistic to expect a person who is older and not very fit to run for 30 minutes a day to help weight loss, but it is realistic to ask the same of a fitter, younger person.	
		Time-related	The target must have a deadline, so that you know when you need to achieve the target by, and progress can be assessed.	
		E.	Sources of support	
		Informal support	Informal support is the support an individual receives from partners, family and friends. It is usually the first form of support an individual experiences after and expected or unexpected life event. Informal support can provide reassurance, encouragement, advice, a sense of security, someone to talk through options with and practical help.	
		Professions (formal) support	Formal support may be provided by statutory care services (the state), private care services and charitable organizations. Professional support may include counsellors, teachers, careers advisers, occupational therapists, social workers and health specialists. Professional support may be needed to help people with a health condition, regain mobility, deal with life changes and emotions, get advice and information or change their lifestyle.	
		Voluntary support	Organizations offering voluntary support are charities, community groups and religious groups. At voluntary support services, many staff are volunteers (they work for free), but they also employ qualified people who are paid by donations. Community groups work at a local level to meet the needs of people living in a specific neighbourhood i.e. foodbanks. Religious groups are formed by people who share the same religious or spiritual beliefs but they help all people in need regardless of their beliefs and background i.e. a church run soup kitchen for the homeless.	

What we are learning in LAC:		C.	Recommended action to meet health and wellbeing improvement goals	
A. What is a person-centred approach B. Health improvement plan C. Recommended action to meet health and wellbeing improvement goals D. SMART targets for health improvement plan E. Sources of support		<u>To lower blood pressure:</u>		<u>To reduce BMI:</u>
A.	What is a person-centred approach.			
Person-centred approach			<u>To increase peak flow reading:</u>	<u>To reduce pulse rate and improve recovery time after exercise:</u>
When planning for health improvements include:		D. SMART targets for health improvement plan		
Benefits of person-centred approach:		<u>Specific</u>		
		<u>Measurable</u>		
		<u>Achievable/attainable</u>		
		<u>Realistic</u>		
		<u>Time-related</u>		
B.	Health improvement plan	E. Sources of support		
What is it?		Informal support		
The plan will identify:		Professions (formal) support		
Positive effects of a health improvement plan		Voluntary support		

F.		G.		
What are the potential obstacle to implementing plans?		What are the possible obstacles to accessing services?		
		Type of obstacle	Possible obstacles	Suggestions to overcome obstacles
Emotional/psychological-Lack of motivation	<ul style="list-style-type: none"> A conflict between choices such as worrying that giving up smoking could result in weight gain Other priorities in a person's life- such as getting married or bereavement. Having negative attitude- believing change will be too difficult Lack of progress for example losing eight quickly in the first weeks but then slowing down. Having a blip- thinking there is no point in continuing the plan after briefly returning to an old lifestyle. 	Geographical	<ul style="list-style-type: none"> Service is difficult to get to because of poor bus or train services. 	<ul style="list-style-type: none"> Arrange hospital transport Suggest telephone helplines or internet support groups.
Emotional/psychological-Low Self-concept	<ul style="list-style-type: none"> People with low self-concept don't value themselves, Feel powerless to change their lifestyle or that there's no point in starting because the task seems too big. Some thin that because they were unsuccessful in other aspects of their life, they won't achieve their health goals. They may not feel they have support and approval from family and friends even if they really do. 	Financial	<ul style="list-style-type: none"> Charges to use the services Time off from work would mean loss of pay 	<ul style="list-style-type: none"> Check for entitlements, such as medicines and treatments Direct the person to advice on benefits and employee rights.
Emotional/psychological-Acceptance of the current state	<ul style="list-style-type: none"> People may accept their present health problems or lifestyle choices, as it is easier to stay the same than to make changes. Have no incentive to make a change because they do not understand the health risks. Have no desire to change, for example, if they are happy with their weight or don't want to give up smoking. 	Psychological	<ul style="list-style-type: none"> Fear of being judged because there is stigma around a health problem (mental health, obesity) 	<ul style="list-style-type: none"> Talk about concerns and reassure Direct the person to a charity that supports people with a particular health problem.
Time constraints	<p>People find that they do not have the time to achieve their health improvements targets because of:</p> <ul style="list-style-type: none"> Care of young children, family members that are not well. Regular and additional work and study commitments Domestic chores Medical appointments 	Physical	<ul style="list-style-type: none"> Difficulty getting into the buildings where the service is provided (no wheelchair access). No where to park near the service 	<ul style="list-style-type: none"> Be aware of services that are adapted for easy access Ask a friend or family member to drop the person off at the service
Availability of resources	<p>Financial obstacles:</p> <ul style="list-style-type: none"> Gym memberships, entry fee for a swimming pool Cost of attending exercise classes Cost of travel to the gym. pool or to attend health appointments Higher costs of some healthy foods. Lack of and the cost of exercise equipment 	Personal needs	<ul style="list-style-type: none"> Communication difficulties because of poor language skills, sensory or learning disability . Concern that cultural needs are not understood 	<ul style="list-style-type: none"> Provide support services that meet the person's needs, such as a BSL signer, interpreter, advocate Use anti-discriminatory practice and encourage others to do so
Unachievable targets	<ul style="list-style-type: none"> Expectations too high Targets are not clear There are too many targets Timing is wrong/poor Targets are not suitable for the individual Fear of not being able to meet targets Not being in the right frame of mind to commit to the plan, e.g. due to depression. 	Resources	<ul style="list-style-type: none"> Limits on services, such as support aids and equipment Staff shortages, leading to long waits for appointments and support. 	<ul style="list-style-type: none"> Suggest sources of second-hand equipment Look for alternative strategies, for example an exercise DVD if there are no places at an exercise class.
Lack of support	<ul style="list-style-type: none"> Diet- find it difficult if a person on a healthy eating plan is surrounded by others that eat junk food or tempted by the chocolate and biscuits in the cupboard, Family and friends go out for meals instead of doing other activities. Smoking- friends and family smoking and offering them cigarettes. Lacking will power to quit. Alcohol consumption- someone that is used to drinking with family and friends will find it difficult to stop without their support. It would be hard to quit if the family and friends drink wine with their meals, friends centre a night out around heavy drinking at pubs and clubs. 			
Ability, disability and addiction	<ul style="list-style-type: none"> Understand what they need to do Learn how to make the required changes in their lives. Any places the person uses are wheelchair accessible Any exercise advised is wheelchair friendly. If stop smoking, then can put on weight- put people off. Like the way alcohol makes them feel but cant admit that they have a problem 			

F.	What are the potential obstacle to implementing plans?	G.	What are the possible obstacles to accessing services?			
Emotional/ psychological- Lack of motivation		Type of obstacle	Possible obstacles	Suggestions to overcome obstacles		
Emotional/ psychological- Low Self- concept		Geographical				
Emotional/ psychological- Acceptance of the current state		Financial				
Time constraints		Psychological				
Availibility of resources		Physical				
Unachievable targets		Personal needs				
Lack of support		Resources				
Ability, disability and addiction						

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

Planning Item	Purpose	Contents	Example
Mood board	<p>Central focus of ideas, in one place.</p> <p>Generate ideas for a client to meet their approval.</p> <p>Used to share ideas and concepts.</p>	<p>Images</p> <p>Colours</p> <p>Text – Fonts, colours, styles, keywords</p> <p>Textures – Fabrics and other materials</p> <p>Digital – Sound and video clips</p>	
Mind Map / Spider Diagram	<p>Generate and outline ideas quickly.</p> <p>Develop and show links between thoughts, aspects and processes.</p> <p>Show a range of ideas and connections between them.</p>	<p>Central node with main theme.</p> <p>Sub-nodes with interconnecting lines/branches.</p> <p>Text.</p> <p>Images can also be used.</p>	
Visualisation Diagram	<p>Plan the layout of a still image in a visual manner.</p> <p>Shows how the finished item may look so that changes can be made if needed.</p> <p>Provides the graphic designer with information needed to create.</p> <p>To show a client what the product will look like.</p>	<p>Multiple images and graphics showing size and position.</p> <p>Colours and colour scheme.</p> <p>Position and style of text.</p> <p>Fonts to be used.</p> <p>Annotations providing more detail.</p>	


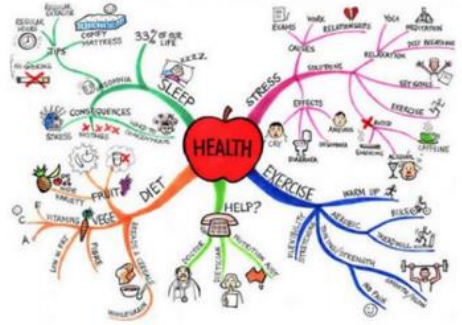

<p>Storyboard</p>	<p>Provide a visual representation of a how a media project will look. Provide a graphical illustration of a sequence of movements. Provide guidance on what scenes to film or create. Help visualise the characters and the scenes.</p>	<p>Images. Locations. Camera shot types and angles. Camera movement. Shot length and timings. Lighting. Sound.</p>	
<p>Script</p>	<p>Identify the location where the action takes place. Identify who will be in the scene. Provide stage directions for actors and production crew. Provide dialogue for actors.</p>	<p>Set locations. Scene descriptions. Scene/stage directions. Camera shot types. Camera movement. Sounds and sound effects. Names of actors/ characters. Dialogue.</p>	

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

Requirements	Purpose	Content
Client	Clear statement of what is to be created / produced. Provides the developer / creators with an outline of expectations and constraints (timescale).	Statement of product. Purpose of the product. Target Audience Content Timescale Restrictions House Style (Colours/ themes)
Target Audience	Identifies who the final product is intended for. Provides the developer/ creators with the necessary information for them to design the product to appeal to the Target Audience.	Age Gender Location – Local, National, International Ethnicity – Background, Culture, Race, Religion, Language

Research	Definition	Examples
Primary Sources	Information is obtained <u>firsthand</u> from an original source.	Autobiography First hand account Diary Interview Video Footage Photo Official Records
Secondary Sources	Information is obtained second hand where somebody else has created the data.	Biography Second hand account History textbook Magazine Article Report Other people's products News Broadcast

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

Planning Item	Purpose	Contents	Example
Mood board			
Mind Map / Spider Diagram			
Visualisation Diagram			

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

<p>Storyboard</p>			<p style="text-align: right;">"Beach Days" Page 3</p> <p>DARYL BARBERO DUCKS THE WATER</p> <p>DARYL BARBERO LIES AND DUCKS <small>VO: A Discovery Channel Original Movie. Based on actual events.</small></p> <p>ALAN JUMPS OFF BOAT AND OTHERS FOLLOW</p> <p>SHARK ATTACKS LOSTER IN CHINA <small>MOTHER: Shuck to the water!</small></p> <p><small>Discovery Channel Movie "13 Days of Terror"; Storyboard by Clay Butler - www.discovery.com - clay@claybutler.com</small></p>
<p>Script</p>			<p style="text-align: right;">102</p> <p>INT. BOB'S OFFICE - DAY</p> <p>Bob is alone in the office. He is drinking the last cup of the second of coffee and preparing his servings. This is Bob's routine.</p> <p>The door opens and in a cloud with alligators, Bob Barbero jumps through the door. He looks directly at the camera, calmly and with a smile. His face is clean and he looks calm despite a war.</p> <p>BOB BARBERO How do I like it, Bob?</p> <p>Bob looks at the camera and gives a glare for the old man.</p> <p>BOB BARBERO My wife was sleeping before she died. I'm sorry, but she's not in the hospital. In the hospital, she'll be waiting for the ambulance to come. I think you should tell her the what everyone says.</p> <p>BOB I didn't tell you anything. I was about to come up and tell you but you're not here.</p> <p>BOB BARBERO Did you read a little closer?</p> <p>BOB No.</p> <p>BOB BARBERO How can you not read that?</p> <p>BOB I'm not. I'm not on the computer. It's not.</p> <p>Bob (Barbero) looks at the camera that just for a second he looks all emotional. He looks like he's about to cry. He looks like he's about to cry. He looks like he's about to cry.</p>

CREATIVE IMEDIA – TERM 1 & 2 PLANNING AND REQUIREMENTS

Requirements	Purpose	Content
Client		
Target Audience		

Research	Definition	Examples
Primary Sources		
Secondary Sources		