# 100% book - Year 10 Booster

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



# Term 4

Swindon Academy 2023-24		
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."



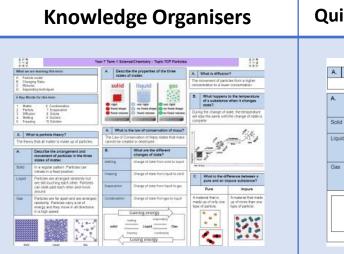








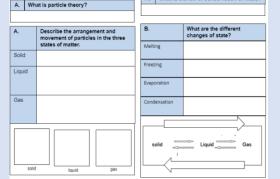
# How to use your 100% book of Knowledge Organisers and Quizzable Organisers



Knowledge Organisers 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.

# A What is particle theory?



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

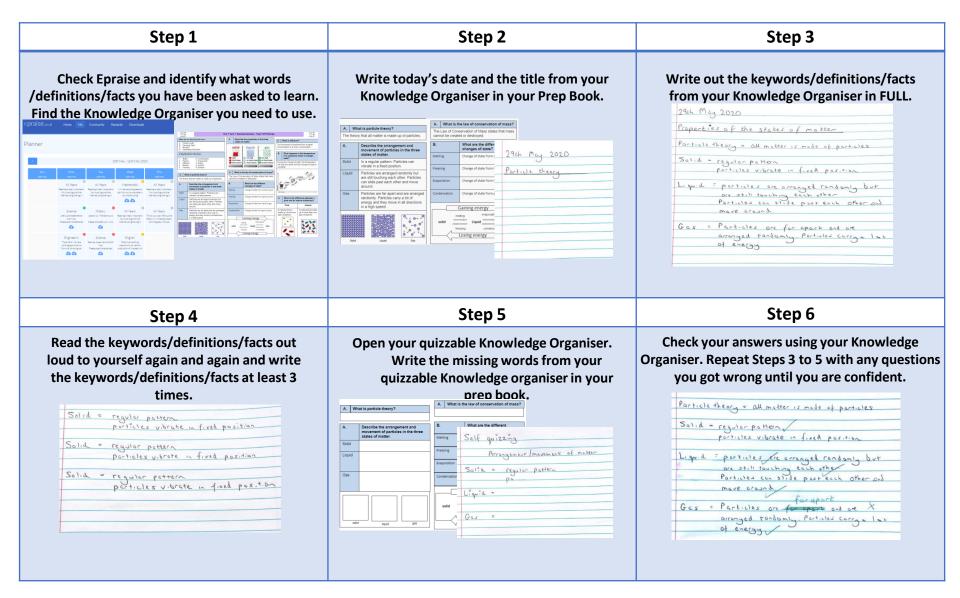
Use them to test yourself or get someone else to test you, until you are confident you can recall the information from memory.

**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?



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

### ENGLISH –Poetry cluster 3: The Problem with Power- Sets 6-7

Key Vocabular	Υ	Poem	Context	Events in the poem	Message	Form/ structure
Patriotism	Being devoted to your country	Kamikaze- Beatrice Garland	<ul> <li>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'.</li> <li>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.</li> </ul>	<ul> <li>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.</li> </ul>	<ul> <li>The poem explores the conflict between personal and national duty and suggests that individual desire and extreme patriotism cannot be achieved together.</li> <li>Through the pilot, Garland may be expressing how it is not honour that gives life meaning, but rather being with loved ones.</li> <li>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.</li> </ul>	Kamikaze is a narrative poem. It begins as a report, summarising another conversation or story told by someone else. 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.
Colonialism	When a powerful country takes control of a less powerful country	Checking Out Me History- John Agard	<ul> <li>Since the early 17<sup>th</sup> 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.</li> <li>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.</li> <li>Born in Guyana in 1949, Agard moved to Britain in 1977 and sosees the culture as both an insider</li> </ul>	<ul> <li>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 Touissaint L'Ouverture, the leader of the Haitian revolution.</li> <li>The poem suggests the curriculum deliberately blinded colonized people to their own histories,</li> </ul>	<ul> <li>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. People should never exclude this from you – especially if it is replaced with less relevant examples.</li> <li>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 for ourselves and question what others choose to teach us. The education system has power to mould our thinking and we should be aware of this.</li> <li>There is a warning that, when people are denied knowledge, they</li> </ul>	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. The sing-song rhyme scheme holds a bitterness and anger that he was
Dominate	To have power and influence over others		from living there and an outsider from moving to Britain	and argues that in order to understand their own identity they must learn their own history.	can become bitter and angry, and this could lead to rebellion, protests and uprisings.	taught trivial things whilst his own history was omitted.
Defiance	Showing that you don't want to obey someone	The Émigrée- Carol Rumens	<ul> <li>Carol Rumens was born in South London in 1944</li> <li>Published her own poems and translations of Russian poems</li> <li>She has a 'fascination with elsewhere'</li> <li>The Émigrée is not autobiographical poem, but is inspired by living in London (a diverse society)</li> <li>The poem sympathises with people who have been exiled</li> </ul>	<ul> <li>A displaced person pictures the country and the city where they were born. The city and country are never named in order to increase the relevancy to as many people who have left their homelands as possible.</li> <li>The speaker's home country appears to be war- torn, or under the control of a dictatorial government that has banned the</li> </ul>	<ul> <li>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.</li> <li>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.</li> <li>Memories are shown to be powerful and to have a strong hold</li> </ul>	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
Isolated	To be far away from other people or places.		<ul> <li>Emigrants are people who have left the country of their birth to settle elsewhere in the world.</li> </ul>	Emigrants are people who have left the country language the speaker once knew.	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.	stanza could suggest she doesn't want to let her memories go, stop writing about her homeland or give up her past.
Dictatorial	Telling people what to do in a forceful and cruel way	Storm on the Island-	For many centuries, there has been conflict in Northern Ireland.	is not always welcoming. There are two interpretations of this poem- literal and metaphorical.	<ul> <li>Heaney portrays nature as a powerful force that humans should fear and not attempt to control.</li> </ul>	Heaney's use of iambic pentameter may appear
Nostalgia	A warm feeling for the past, particularly a very happy time	Seamus Heaney	<ul> <li>The majority of Northern Ireland's population were unionists, who wanted to remain within the United Kingdom. Most of these were Protestant Christians.</li> <li>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 movements in an attempt to overthrow British rule and re-unite Ireland.</li> </ul>	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> <li>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.</li> <li>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.</li> </ul>	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.
Fragility	being easily broken or damaged.	Tissue- Imtiaz Dharker	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Tissue explores the varied uses of paper and how they relate to life.</li> <li>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.</li> <li>The poem remarks how nothing is meant to last.</li> </ul>	<ul> <li>Human power is ephemeral. No matter how much we try to build structures to display our power, nature will always outlast it.</li> <li>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.</li> <li>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.</li> </ul>	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.

### ENGLISH –Poetry cluster 3: The Problem with Power- Sets 6-7

Key Vocabulary	Poem	Context	Events in the poem	Message	Form/ structure
	Kamikaze-	During, the term 'kamikaze' was used	The narrator of this poem is	The poem explores the conflict	Kamikaze is a
	Beatrice Garland	for They were expected to	The poem explores the moment	Through the pilot, Garland may be expressing how	Sections of the poem
Patriotism		Themade the	His neighbours	The poem explores	are presented in
		Kamikaze missions sound like It was claimed that	His children and grandchildren	It also deals with the	
Colonialism	Checking Out Me History- John	Since the early, the country of	The poem focuses on how	Knowledge should not be	His use of italics
Colonialisti	Agard	For centuries, nations would	<ul> <li>Not only does the poem call attention to the how oppressive colonial education was, but it also</li> </ul>	• There is a sense of	The sing-song rhyme scheme
		They did this to	The poem suggests the curriculum	There is a warning that,	
Dominate		• Born in	deliberately		
	The Émigrée- Carol	<ul><li>Carol Rumens was born</li><li>Published her own</li></ul>	<ul> <li>An emigrant</li> <li>The speaker's home country appears to be</li> </ul>	Rumens presents the importance of	The use of enjambment reflects the
Defiance	Rumens	<ul> <li>She has a 'fascination with</li> <li>The Émigrée is not autobiographical poem, but</li> </ul>	<ul> <li>Despite this, the émigrée's childhood memories are</li> </ul>	The poem highlights the importance of	The poem consists of
Isolated		<ul> <li>The poem sympathises with</li> <li>Emigrants are</li> </ul>		Memories are shown to be	
	Storm on the	<ul> <li>For many centuries,</li> <li>The majority of Northern Ireland's population</li> </ul>	There are two interpretations of this poemand	Heaney portrays nature as	Heaney's use of
Dictatorial	Island- Seamus Heaney	were     Seamus Heaney was	: The narrator describes	Heaney presents the idea that life under	may appear
			Heaney uses the storm as a metaphor for	He warns that the enemy can	
Nostalgia					
	Tissue- Imtiaz	Imtiaz Dharker was     Tigung in from:	Tissue explores	Human power     Ous relationship with pages is	
Fragility	Dharker	Tissue is from	• It is written from the point of view of	Our relationship with paper is	
II			The poem remarks how	• Human life is	

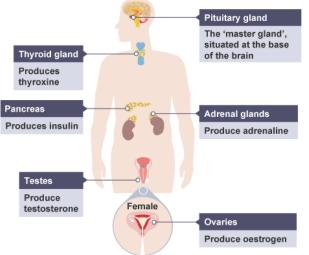
B5 – Homeostasis and Resp	oonse
The nervous system	RP 6 - Investigation into the effect of a factor on human reaction time.
Job is to <b>detect</b> stimuli (changes in environment) and <b>respond</b> if needed. Consists of:	<ol> <li>Person A holds out hand with a gap between thumb and finger.</li> <li>Person B holds ruler with the zero at the top of person A's thumb.</li> <li>The 'factor' could be</li> <li>Caffeine consumption</li> <li>Hours of sleep</li> </ol>
Receptors       Specialised cells that detect stimuli, found in sense organs and internally         Neurones       3 types – sensory, relay and motor Carry impulses joining all	<ul> <li>3. Person B drops ruler without telling Person A and Person A must catch it.</li> <li>4. The distance on the ruler level with the top of person A's thumb is recorded</li> <li>5. Repeat this ten times.</li> <li>6. Repeat steps 1-5 after a factor has been changed</li> <li>7. Use conversion table to convert ruler measurements into reaction time.</li> <li>Control variables : distance above the hand, distance between finger and thumb, hand used (dominant or</li> </ul>
parts of the nervous system Co-ordination Centres Brain, spinal cord,	non-dominant, all other factors listed in the box above except the one being changed.  Reflexes  A reflex is an automatic, rapid response  Reflexes do not involve the conscious part of the conscious part of the  Reflexes do not involve the conscious part of the conscious par
served pancreas. Coordinates the response	brain, so cannot be overridden The response might be brought about by: • muscle - e.g. pupil being constricted with bright light or knee jerk response
Image: Construction of the construc	<ul> <li>gland – e.g. mouth watering or tears being released when something gets in your eye</li> <li>Spinal cord (CNS)</li> </ul>
<b>Reflex Arc</b> stimulus → receptor →	<b>sensory neurone</b> $\rightarrow$ <b>relay neurone</b> $\rightarrow$ <b>motor neurone</b> $\rightarrow$ effector $\rightarrow$ response
<b>Example</b> Hot pan $\rightarrow$ pain receptors $\rightarrow$ s	ensory neurone $\rightarrow$ relay neurone $\rightarrow$ motor neurone $\rightarrow$ hand muscles $\rightarrow$ release pan

<ol> <li>What are the two main jobs of the nervous system?</li> </ol>	1. Where should the ruler be held at the start of the investigation?
2. What are receptors?	<ul><li>2. What could be used instead of a ruler drop test?</li><li>3. If you are testing the hypothesis 'The amount of sleep a person has affects their reaction time' what</li></ul>
3. What are stimuli?	would be the: • independent variable • Dependent variable • 2 control variables
4. Name the 3 types of neurone?	4. How is the distance the ruler travels converted into a reaction time?
5. What are the 3 coordination centres?	
	1. What is a reflex?
6. What is an effector?	2. Which part of the nervous system is NOT involved in a reflex?
	3. Give an example of a reflex reaction
7. What are the 2 types of effector?	
	<ul> <li>4. Label the diagram using the labels below: relay neurone sensory neurone motor neurone effector receptor stimuli</li> </ul>
Reflex Arc	
Complete the gaps to show the ord	der of a reflex reaction:

# **B5** – Homeostasis and Response

## **Hormonal responses**

Hormones are chemicals released by glands They are carried in the bloodstream. Hormonal responses are slower than nervous responses but they last longer.



## Homeostasis

This means keeping internal conditions (of the body or a cell) constant to ensure optimum functioning. In humans, this includes regulating:

- temperature
- water levels
- blood glucose concentration

# Homeostasis can involve nervous or hormonal responses.

Receptors detect changes in the body

**Coordination centres** (brain, pancreas, spinal cord etc) receive and process information

Effectors carry out responses to return to normal

## **Blood glucose concentration**

Blood glucose is monitored by the **pancreas.** 

If glucose levels rise, the pancreas releases **insulin** into the blood.

This is a message to the liver to remove glucose and store it as **glycogen**.

If blood glucose is too low, glucagon is released.

The liver responds by breaking down glycogen into glucose and releasing it into the blood.

## Diabetes

There are two types – Type 1 and Type 2

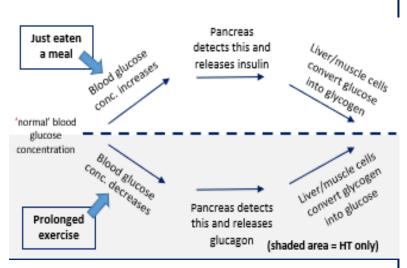
Both result in a lack of control over blood glucose levels

	Туре 1	Туре 2
Cause	No insulin is made by the pancreas	Insulin is made, but the liver and muscle cells do not respond
Treatment	Injections of insulin Pancreatic transplant	Controlling carbohydrate intake Losing weight

## HT only

Negative feedback is when the release of something brings the levels back towards acceptable levels, it maintains a steady state.

E.g. if blood glucose increases, insulin is released to bring blood glucose back towards the normal range.



B5 – Homeostasis and Response	
1. What is a hormone?	Blood glucose concentration
	1. Which organ monitors blood glucose?
2. Where are hormones released from?	2. Which hormone is released when blood glucose increases?
3. Which gland is known as the 'master gland'?	3. What causes blood glucose to increase?
4. How do hormones travel?	4. Which hormone is released when blood glucose falls?
5. How does the speed and duration of a hormonal response compare to a nervous response?	5. Which organ releases the hormones involved in blood glucose control?
6. Which hormone is made by the thyroid gland?	1. What are the two types of diabetes?
7. What is homeostasis?	2. Why are type 1 diabetics unable to control their blood glucose?
	3. What is the treatment for type 1 diabetes?
8. Give two examples of conditions that are controlled within the human body	4. What is the problem in type 2 diabetes?
	5. What is the treatment for type 2 diabetes?

B5 – Homeostasis and Response				
Adrenaline and thyroxine (HT only) Adrenaline is produced by the adrenal glands.	Name of contraception	Description	+	-
It is produced in times of fear or stress. It <b>increases heart rate</b> to ensure <b>more oxygen and glucose</b> to the cells to prepare for the	Condoms/diaphragm	Barrier	Very effective, condom protects against STIs	Unreliable if not used properly
<ul> <li>'fight or flight' response.</li> <li>Thyroxine is produced by the thyroid gland.</li> <li>It is involved in regulating metabolic rate and growth and development.</li> <li>Puberty</li> </ul>	Oral Contraception (pill)	Hormonal (oestrogen or progesterone, stops FSH so no eggs mature)	Very effective	Must remember to take everyday, can have side effected
Females – <b>Oestrogen</b> is the main female reproductive hormone produced in the ovary. At puberty, eggs begin to mature, and	Injection/implant/skin patch	Slow-releasing hormone	Long lasting	Side effects such as heavy periods
one is released approximately every 28 days. This is called ovulation. Males – <b>Testosterone</b> is the main male reproductive hormone produced by the testes and it stimulates sperm production.	Intrauterine Device (IUD or Coil)	Barrier method. Can also contain hormones	Long lasting (up to 5 years)	Side effects such as heavy periods
	Surgical Sterilisation	Tying or cutting of	Almost 100%	Difficult or impossible
Menstrual Cycle	-	sperm ducts/ oviducts.	effective nfertility (HT onl	toreverse
The menstrual cycle is controlled by several hormones: FSH –from the pituitary. Causes an egg to mature in the ovary	ining of he uterus uilds up Day 14 Day 21 Progesterone LH	Lining breaks down (menstruation) Day 28	ertility drugs LH and crease the number of crease the change of <b>f</b> Woman takes a dos stimulates the mat Eggs are collected a from the male Fertilised eggs deve One or two embryo female's uterus. <b>legatives:</b> very emotionally/ p success rates are n can lead to multipl	FSH can be given to of eggs released and f fertilisation se of FSH and LH - uration of several eggs and fertilised by sperm elop into embryos. os inserted into the physically stressful ot high

B5 – Homeostasis and Response		
Adrenaline and thyroxine (HT only) 1. Where is adrenaline released from?	1. Which hormones are contained in the cor	ntraceptive pill?
2. What effects does adrenaline have?	2. Name a 'barrier' method of contraception	1
3. What does thyroxine do?	3. How does the contraceptive pill prevent p	pregnancy?
<ol> <li>What is the male hormone?</li> <li>What is ovulation?</li> </ol>	4. Give one advantage and one disadvantag	e of taking the contraceptive pill.
3. Which organ produces oestrogen?	5. Give one disadvantage of surgical sterilisa	ation
Menstrual Cycle		<ol> <li>Which drugs are given as fertility drugs?</li> </ol>
1. Which organ releases FSH and LH?		
2. What are the two other menstrual cycle hormones?		2. How do they increase the chances of getting pregnant?
3. Approximately how long is one cycle?		
4. Around which day of the cycle does ovulation occur?		<ol><li>How many embryos are transferred to the womb in IVF?</li></ol>
5. What is the role of oestrogen and progesterone?		4. Give two negatives of IVF treatment

# C5 – Energy Changes

## **Exothermic Reactions**

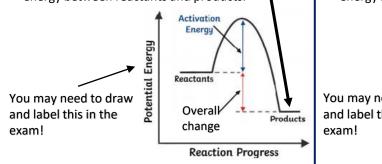
- Energy transferred to the surroundings
- Temperature of the reaction mixture increases
- This energy is transferred **to** the surroundings
- Examples include: - Hand warmers
- Combustion reactions
- Respiration
- Neutralisation reactions
- Self-heating cans.



#### Exothermic

## **Reaction Profiles – Exothermic**

- Energy level diagrams show difference in energy between reactants and products.
- Exothermic = Energy of products is lower than reactants (energy is released)
- Activation Energy = minimum amount of energy needed to start the reaction.
- Energy change = the difference in energy between reactants and products.



## **Endothermic Reactions**

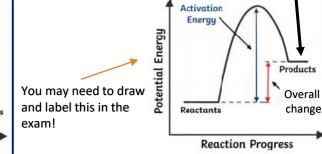
- Energy absorbed from the surroundings
- Temperature of reaction mixture often decreases
- Energy is transferred from the surroundings

Examples include:

- Ice packs (injuries)
- Reaction of citric acid and sodium hydrogen carbonate
- Thermal decomposition of calcium carbonate

## **Reaction Profiles – Endothermic**

- Energy level diagrams show **difference in energy** between reactants and products.
- Endothermic = Energy of products is **higher than** reactants (energy is absorbed)
- Activation Energy = minimum amount of energy needed to start the reaction
- **Energy change** = the difference in energy between reactants and products.



## Energy change of reactions (HT)

During a reaction:

- Energy is **absorbed** in order to **break** bonds in the reactants
- Energy is **released** when bonds are **made** in the products.

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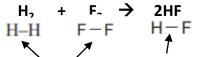
**Bond energy =** the amount of energy that is released when a bond is made or that is needed to break a bond

## **Calculating energy changes (HT)**

Overall energy change = difference between energy needed to break bonds and the energy **released** when bonds formed.

## To calculate energy change :

Energy change = bonds broken – bonds formed



bonds broken		n bonds formed	
	Bond	Bond Energy / kJ mol <sup>-1</sup>	
	F—F	158	
	Н—Н	436	
	H—F	568	
Bonds broken =		Bonds formed	
436 + 158		2 x 568	
593		1136	
Overall energy change = 593 – 1136			
<u>= -543 kJ/mol</u> Exothermic			

More energy is released in bond making than is required for bond breaking.



C5 – Energy Changes		
<ol> <li>Which way is energy transferred in an exothermic reaction?</li> </ol>	<ol> <li>Which way is energy transferred in an endothermic reaction?</li> </ol>	Higher Tier only 1. In terms of energy, what happens for bonds to be
<ol> <li>What happens to the temperature of the reaction mixture in an exothermic reaction?</li> <li>State two examples of exothermic</li> </ol>	<ol> <li>What generally happens to the temperature of the reaction mixture of an endothermic reaction?</li> <li>State two examples of</li> </ol>	broken? 2. In terms of energy, what happens when bonds are formed?
reactions.	<ol> <li>State two examples of endothermic reactions.</li> </ol>	Higher Tier only 1. Define overall energy change.
<ol> <li>Define activation energy.</li> <li>On the graph below, draw and label the :         <ul> <li>overall energy change</li> <li>activation energy</li> </ul> </li> </ol>	<ol> <li>What does an energy level diagram show?</li> </ol>	<ol><li>How do you calculate energy change?</li></ol>
	<ul> <li>2. On the graph below, draw and label the :</li> <li>overall energy change</li> <li>activation energy</li> </ul>	3. Why, in terms of bond breaking and making, is a reaction exothermic?
Freactants products reaction (time)	(P) Gog reactants reaction (time)	4. Why, in terms of bond making and breaking, is a reaction endothermic?

# C5 – Energy Changes – Required Practical – Temperature Changes

## <u>Hypothesis</u>

The energy change in the reaction between acid and alkali depends on the volume of alkali added.

# Equipment

- Polystyrene cup and lid
- Thermometer
- 250cm<sup>3</sup> beaker
- Measuring cylinder
- Liquid reactants



# Method (example for hydrochloric acid and sodium hydroxide)

- 1. Using measuring cylinder to measure 30cm<sup>3</sup> hydrochloric acid and put in polystyrene cup
- 2. Stand cup inside beaker to make stable.
- 3. Use a thermometer to measure the temperature of acid and record.
- Using measuring cylinder 5cm<sup>3</sup> sodium hydroxide → polystyrene cup
- 5. Fit the lid and gently stir with thermometer through hole.
- 6. When reading stops on thermometer, record temperature in table.
- Repeat, each time adding 5cm<sup>3</sup> more sodium hydroxide up to a maximum of 40cm<sup>3</sup>.
- 8. Calculate the temperature change on each attempt.
- 9. Repeat the experiment 3 times and calculate a mean temperature change for each volume of sodium hydroxide.

# <u>Variables</u>

Independent – <u>Volume</u> of sodium hydroxide
 Dependent – Temperature change
 Control – <u>Volume</u> of hydrochloric acid, concentration of acid, concentration of sodium hydroxide

# Common questions

**Q1)** Why do you use a polystyrene cup and lid?

**A1)** Because polystyrene cups are insulators, which reduces heat loss in the experiment, making the results more accurate.

**Q2)** Why should you calculate the temperature change, instead of just using the final temperature?

**A2)** Because the initial (starting) temperature of the acid may have been different.

Q3) Why is it important to stir the mixture?

**A3)** To make sure all of the reactants have reacted and to get a uniform temperature.

Q4) Why is the experiment conducted 3 times?A4) So that anomalies can be seen and removed and a mean calculated

# Energy changes could also be investigated using:

- 1. Changing the **mass of metal** added to acid and measuring the **temperature increase**
- 2. Changing the **type of metal** added to acid and measuring the **temperature increase**
- 3. Dissolving different masses of potassium nitrate into water and observing the temperature decrease.

C5 – Energy Changes Required Practical -	- Temperature Changes
<b>1.</b> Write a method to investigate how the volume of sodium hydroxide affects the change in temperature when reacting with hydrochloric acid (6 marks)	3. Why do you use a polystyrene cup and lid instead of a beaker?
	4. Why should you calculate the temperature change, instead of just using the final temperature?
	5. Why is it important to stir the mixture?
<ul> <li>2. For the investigation above, name the :</li> <li>Independent variable :</li> <li>Dependent variable :</li> <li>2 control variables :</li> </ul>	6. Why do we do repeat readings?

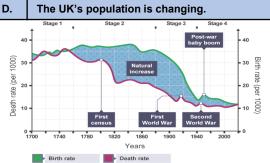


## Year 10 OCR - Unit 2 GEOGRAPHY - Knowledge organiser: People of the UK



What we	are learnin	С.	There are diff				
	JK is conne	North-	south divide				
place B. The L	s. JK is a dive	Deindu	strialisation				
	raphical pat		ses and consequences of	Geogra	aphical location		
devel D. The L	opment with JK's popula	hin the	UK. changing.	Econo	mic change		
	are causes s in the UK		nd consequences of urban	Infrasti	ucture		
F. Cities	have distin	ict chal	lenges and ways of life, , culture and geography.	Goverr	nment policy		
6 Key Wo	rds for this	s term					
1. Trade			4. Suburbanisation	How ha	as <b>Swindon</b> exp		
2. Deindu	strialisation		5. Counter-urbanisation		at Western Raily		
3. Infrastru	ucture		6. Re-urbanisation	Londo	n and Bristol. <b>da</b> was built in <b>1</b>		
Α.	The UK is and place		cted to many other countries	other of 3. The	other car companies su 3. The old train sheds v		
1. Trade			novement of goods and services is the world.		which attracts to		
2. Imports		Produ	ucts brought into a country	D. The UK's popul			
3. Exports		Produ	ucts taken out of a country.	40 -			
4. Trade de	eficit		n a country imports more than export.	Death rate (per 1000)	First		
6. Tariffs		Tax tl expor	hat must be paid on imports or ts.	Death rate			
	e UK is a div ographical p		nd unequal society which has	0 ¶ 17	00 1740 1780 1820		
1. Tertiary	sector	oyment in the services industry as education or healthcare.	1 Dem	ographic transition			
2. Quaterna	ary sector		oyment is research, technology nedia.	model (			
3. Disposal	3. Disposable income The money people have to live on once their taxes, pensions and rent have been paid.				ng population		
4. Diversity		rences within society. For apple, race, levels of education	3. Econ	omically active			
			vealth.	4. Immi	gration		

С.	There are diffe	erent causes and consequence	es of development within the UK.			
North-sc	outh divide	The difference in wealth in the	UK between North and South.			
Deindus	trialisation	The closing down of factories	and industry in an area.			
Geograp	phical location	The south of England is close	r to London so there are more job opportunities.			
Econom	iic change	Deindustrialisation in the North widespread unemployment.	n led to mines and factories closing down. This led to			
Infrastru	icture	Transport, services and comm travel to Europe.	munications are better in the South meaning it is easier to			
Governn	nent policy	The government invest more i to improved infrastructure, edu	in the south because it is closer to London. This can lead ucation and healthcare.			
How has	s <b>Swindon</b> expe	rienced economic growth?	How has Swindon experienced economic decline?			
<ol> <li>Great Western Railway was opened in 1843 providing many jobs and connecting Swindon to London and Bristol.</li> <li>Honda was built in 1985 and has attracted many other car companies such as BMW and Jaguar.</li> <li>The old train sheds were converted into the Outlet centre which attracts tourists.</li> </ol>		connecting Swindon to 85 and has attracted many th as BMW and Jaguar. ere converted into the <b>Outlet</b>	<ol> <li>GWR yard was closed in 1986 meaning that 40% of Swindon lost their jobs.</li> <li>Honda closed in 2019 because it was cheaper to produce cars abroad. Over 3,000 jobs lost.</li> <li>Low levels of employment mean that people have less disposable income to spend in local businesses.</li> </ol>			



1. Demographic transition model (DTM).	Shows the changes in population over time by measuring birth rate and death rate.
2. Ageing population	Growing proportion of people above the age of 60.
3. Economically active	Proportion of the population who are employed and pay taxes.
4. Immigration	Inward movement of people to the UK.

D.	The UK's	s population is changing				
agein	es of an g ation (2)	<ol> <li>Improved healthcare.</li> <li>People living more active lifestyles.</li> </ol>				
Positive effects of an ageing population <i>(2)</i>		<ol> <li>Skilled workforce</li> <li>More money spent in leisure facilities or resorts.</li> </ol>				
agein	s of an	<ol> <li>Cost of healthcare is high.</li> <li>Elderly people do not work so do not pay taxes.</li> </ol>				
respo an ag	rnment nses to eing ation (2)	<ol> <li>Pension age raised to encourage people to continue working.</li> <li>Increased investment in care homes and healthcare.</li> </ol>				



# Year 10 OCR - Unit 2 GEOGRAPHY - Knowledge organiser: People of the UK



What we are learning this term:	C. There are different causes and consequences of development within the UK.				
<ul><li>A. The UK is connected to many other countries and places.</li><li>B. The UK is a diverse and unequal society which has geographical patterns.</li><li>C. There are different causes and consequences of</li></ul>	North-south divide       Deindustrialisation       Geographical location				
<ul> <li>development within the UK.</li> <li>D. The UK's population is changing.</li> <li>E. There are causes for and consequences of urban trends in the UK.</li> <li>F. Cities have distrinct challenges and ways of life, influenced by its people, culture and geography.</li> </ul>	Economic change Infrastructure Government policy				
6 Key Words for this term					
1. 4.	How has <b>Swindon</b> experienced economic growth?	How has <b>Swindon</b> experienced economic decline?			
2. 5.	1.	1.			
3. 6.	2.	2.			
A. The UK is connected to many other countries and places.	3.	3.			
1. Trade					
2. Imports	D. The UK's population is changing.	D. The UK's population is changing			
3. Exports	Stage 1 Stage 2 Stage 3 Stage 4 40 Postwar baby boom 40	Causes of an 1.			
4. Trade deficit	(0001 - Jack Participant Parti	ageing population (2) 2.			
6. Tariffs	20 pp 10 - First First Second	Positive 1. effects of an			
B. The UK is a diverse and unequal society which has geographical patterns.	0 1700 1740 1780 1820 1860 1900 1940 2000 Years	ageing 2. population (2)			
1. Tertiary sector	Birth rate     Death rate	Negative 1. effects of an ageing 2.			
2. Quaternary sector	model (DTM).	population (2)			
3. Disposable income	2. Ageing population     3. Economically active	Government 1. responses to an ageing 2. population (2)			
4. Diversity	4. Immigration				





D.	The UK	s population is changing							D.		ave distinctive challenges and ways of lenced by its people, culture and		
Immigrat the 21 <sup>st</sup> c		1. International mi quality education a			n the 21 <sup>st</sup> o	century due	e to increase ir	i job opportunities, high		geograp	hy. (CASE STUDY OF BRISTOL)		
		2. Immigrants com		r the world					Location		South-west England. Near the Bristol Channel		
Positive i		migration on the UK			Negativ	ve impacts	of migration or	n the UK			1.5 hours from London		
Social (2)		1.Different cultures ir and fashion. 2.They bring skills tha supply in the UK.	-		Social	(2)	local jobs a	y feel that they are taking ind houses. o cultural conflict	impor within and w world	the UK /ider	1.Two universities 2.UKs 8 <sup>th</sup> largest tourist destination 3.Home of Airbus and Rolls Royce 4.Home of Aardman Animations		
Economi		1.Workers pay taxes invested into the co 2.Immigrants are ofte well educated (e.g.	ommunity. en highly skille	d and	Econor	mic (2)	<ol> <li>Extra costs for healthcare and education.</li> <li>Money may be sent home and not spend in the local community,</li> </ol>		Migration		<ol> <li>Population has doubled between 1851 and 1891.</li> <li>Countries are represented in Bristol</li> <li>St Paul's carnival brings music from African and Caribbean communities.</li> </ol>		
		causes for and con nds in the UK	sequences of	f	E.		re causes for ends in the U	and consequences of K		enges:	1.Average house price is £350,000 2.Highest homeless population in the UK		
Urban		Towns and cities			Causes			vding in cities.	Housing availability Challenges: Transport provision		2. Anglest nomeless population in the UK     1. UK's most congested city.     2. Poor public transport links		
Rural		Countryside and	villages		(3)	anisation	city areas						
Urbanisa	tion	The growing prop moving to cities	ortion of peopl	le			3.Land ma city.	y be cheaper outside of the					
Suburbar	nisation	The outward spre surrounding green		0	Causes counter urbanis		<ol> <li>Overcrowding in cities.</li> <li>People want a more peaceful lifestyle.</li> </ol>		Waste	<b>enges</b> : e gement	<ol> <li>High amount of food waste.</li> <li>Half a million tonnes of waste per year.</li> </ol>		
Counter- urbanisat	ion	The movement of to rural areas.	people from u	ırban		3. Poor air quality in cities.			Susta	ainable	Brabazon housing estate with provide over 2,500 new affordable homes.		
Re-urbar	isation	Improving inner c people and busin		ract	Causes of re- urbanisation (3)1.Government investment.2.Counter-urbanisation.3.Inner city decline.			Housi	•	<ul> <li>Successful because it uses brownfield sites.</li> <li>Unsuccessful because the homes are</li> </ul>			
E.	There ar	re causes for and co	onsequences	of urban	trends ir	n the UK					still expensive		
Consequ	iences of	suburbanisation	Consequen	nces of co	ounter-ur	banisatior	n Consequ	ences of re-urbanisation		ainable egies:	Voi electric scooters. Park and ride to connect the suburbs to		
Social (2)	co	creased traffic ongestion. onger commutes.	Social (2)	count	ing prices ryside inc ded public			Trans	port	<ul> <li>the inner city.</li> <li>Successful because it reduces CO2 emissions.</li> <li>Unsuccessful because the park and</li> </ul>			
Economi (2)		ommute is more kpensive.	Economic (2)		e prices ir ryside.	rices increase in Econo 1.Housing prices		Econo 1.Housing prices increase.					ride is unreliable.
(_)	2.S	hops in city entres close.	(~)		-city decli	ne		2.Office space is expensive.		ainable egies:	<ul> <li>'Slim my waste, feed my face' initiative to cut down on food waste.</li> <li>Successful because it has led to food</li> </ul>		
Environm ntal (2)	2.G	oor air quality. reen areas estroyed	Environm ental (2)		traffic cor sure on loo y		. Enviro 1.Increased traffic in				<ul> <li>Successful because it has led to food being recycled</li> <li>Unsuccessful because it is not well monitored.</li> </ul>		





		's population is changing								life, infl	ave distinctive challenges and ways of uenced by its people, culture and
Immigration the 21 <sup>st</sup> cer	on in entury.	<i>.</i> 1. 2.									bhy. (CASE STUDY OF BRISTOL) 1.
Positive im	npacts of	migration on the UK			Negativ	e impacts	of migration or	the UK			2. 3.
Social (2)	1				Social (2) 1. 2.			importance within the UK and wider world		1. 2. 3. 4.	
Economic (	2				Econom		1. 2.		Migration		1. 2. 3.
		causes for and con Ids in the UK	sequences o	f	E. Causes	urban t	re causes for rends in the U	and consequences of K	Chall Hous availa	•	1. 2.
Rural Urbanisatio	ion					anisation				lenges:	1. 2.
Suburbani	isation				Causes of counter- urbanisation (3)		2.			l <b>enges</b> : e agement	1. 2.
Counter- urbanisatio Re-urbanis	-				Causes		3. 1. 2. 3.			ainable egies: ing	Successful because     Unsuccessful because
		e causes for and co suburbanisation	onsequences Consequer				n Consequ	ences of re-urbanisation		ainable egies:	
Social (2)	1. 2.		Social (2)	1. 2.		Social (2)		1. 2.	Trans	•	Successful because     Unsuccessful because
Economic (2)	; 1. 2.		Economic (2)	1. 2.			Econo mic (2)			stainable ategies: ste • Successful because	
Environme ntal (2)	e 1. 2.		Environm ental (2)	1. 2.			Enviro nment al (2)	1. 2.			Unsuccessful because





Spain c1490: exploration	n. religion and ambition	1		Wh	y did Spair	agree to sponsor Columbus?		Columbus' Firs	t Voyage 1492		
<ul> <li>Most people knew</li> <li>Most of Europe wa</li> </ul>	t people knew the world was round to f Europe was mapped Spice Trade with the East Indies was					a was keen to continue spreading anity to the East Indies.		Finding ships and crew	Martin and Vicente Pinzon h 2 caravels – the Nina and th I carrack – the Santa Maria (		
well established • Portugal and Spain		Case -	JAKE D	Priest	Juan P	erez, a priest and friend to Isabella,		Rivalry at sea	Columbus had to change rou	ites to avoid Portuguese caravels.	
wanted to find a se Indies		63				d Columbus while he made his case.		Sailors' fears	Columbus kept 2 different lo -1 was accurate and he kept -The other log recorded sho		
<ul> <li>2<sup>nd</sup> half of the 15<sup>th</sup></li> <li>Defend Christendor</li> <li>Spread Christianity</li> </ul>	m			Status	before	g the sea route to the East Indies Portugal would give Spain ational status.		Possible Mutiny	As the sailors had not spotte They allowed Columbus 2 m	d land for so long, they came close to mutiny. ore weeks.	
Problems in the Bahar	nas and La Navidad	<b>_</b>						Quarrels	Columbus and Martin Pinzor	n disagreed on the route.	
Disappearance	M/recking of	a too small		Wealth		essful voyage would bring riches to anish treasure and wealth to Spanish		Land	On the 10 <sup>th</sup> October, after 6	weeks at sea, the crew spotted land.	
of Pinta	Santa Maria	o take all w to Spain			merch				Effects of Span	ish Settlements	
	Decision to						Γ	1	Gold mines set up in Haiti –	most of the work done by natives.	
*	leave men behind			Colur	nbus' retu	rn to Spain 1493	T	2 Tain	os and Carib societies destroye	d in order to provide work for the Spanish.	
Taking goods and		pping Santa		John. Columbus i	s sent	The role of the pope The Pope gives Isabella and Ferdinand his support for the new 'Spanish Indies'. He is		3 Columbus		slaves – Isabella not pleased and sent slaves back :o Haiti.	
equipment from the Santa	crowds in					excited by Columbus' discoveries and wanted Christianity to spread to these lands.		4 Encomienda system set up. Nicolas de Ovando set this up in 1502.			
Maria	La Navidad				constantly to spread to these funds.			5 Diseases like smallpox killed many natives. 1492 around 500,000 natives. By 1507 onl 60,000.			
	built King John believe				Rivalry with Portugal         Columbus' Rewards           King John believed he had claim to the lands         Isabella and Ferdinand encouraged Columbus           Columbus had discovered. This led to talks         to carry out another voyage. Columbus was			Imperial Policy towards the Caribbean			
			with Spain to determine who had rights what lands as Spain were getting ready send Columbus back to govern.		eady to	given new titles, a new coat of arms and issued a pension for life. He was also given		Importance of Sa It became the cer		Establishment of a monopoly In 1503, the Casa de Contractacion (House of	
Impact o	of contact with the Na	tives			back to govern. powers to govern lands in the New World.			-Wide roads and a impressive stone	tion in the Caribbean. Is and squares surrounded	Trade) was established in Seville, Spain. The aim was to control all trade from the Caribbean. Powers included:	
Gold, cotton and tobacco	Tainos and Caribs	Incident at Samana		The Treaty of Tordesillas 1494 On 7 <sup>th</sup> June an agreement was reached between Spain and Portugal. from the North to the South pole. All lands to the west were for Spa				-The building housed administration offices were rules were issued and taxes collected. -Courts were established to control the laws -Control who travels to the Indies.			
Natives wore gold but would not tell	Tainos – considered friendly and	On way back to Spain – Samana,	Portugal.							However, there was smuggling and people worked out ways to avoid paying the taxes.	
the Spaniards where it came from.	peaceful, allowed Columbus to build	Haiti. Men went ashore and found	Columbus as governor				IL				
Kapock was used by the natives – it could be spin into thread	La Navidad, found at San Salvador. Caribs – mainly	dried human heads and large canoes. An	La Navidad and Isabela Santo Domingo						aries d and Isabella issued a out educating the Indians:	Regulation of Exploration Ferdinand and Isabella needed to establish Spanish control over exploration and	
and woven into cloth. Spaniards sailing with Columbus quickly picked up the habit of smoking tobacco.	found east of the Bahamas, raided the Tainos taking women, rumours that they were cannibals.	d east of the mas, raided     exchange went wrong and     La Navidad found burned to the ground on 28 <sup>th</sup> Nov     Bartholomew left in charge when Columbus returned to Sp He built Santo Domingo.       ainos taking en, rumours     erupted in violence. They learnt that the ibals.     La Navidad found burned to the ground on 28 <sup>th</sup> Nov     Bartholomew left in charge when Columbus returned to Sp He built Santo Domingo.       Oclumbus returned in 1498 to problems – Tainos and Span named Isabela. It failed as Spaniard's wanted adventure and gold.     Order restored by giving Spanish rebels land and providing native labourers to work the land.       Rebellions kept breaking out so Columbus went exploring     Columbus went exploring     executions on both natives and Spaniards.		the ground on 28 <sup>th</sup> Nov       He built Santo Domingo.         1493.       Columbus returned in 1498 to problems – Tainos and Spaniards         A new settlement was       not cooperating.         named Isabela. It failed as       Order restored by giving Spanish rebels land and providing         spaniards wanted       native labourers to work the land.         adventure and gold.       Rebellions kept breaking out so Columbus carried out         columbus went exploring       september 1500 – Bobadilla sent to take over from Columbus,         returned to Haiti in       Columbus arested and sent back to Spain in chains.			-Taught about Ch live as Christians. -Taught how to re Reports reached S Indians. Dominica	ead, write and dress. Spain about the abuses of Ins were sent to stop the aniards shocked at the	discovery in the New World. -Every ship sailing to the Caribbean had to leave from Cadiz, Spain and had to register with the Spanish. -Anyone could live in the Indies freely. If the discovered gold, 2/3 had to go to the Spanish government, 1/3 could be kept by the discoverer. 1/10 of all other products had to be sent to Spain. -1/10 if all cargo carried by ship sailing to the New World had to be Spanish.		



#### Year 10 History : 1. Spain reaches the New World, c1490-1512



#### Why did Spain agree to sponsor Columbus? Columbus' First Voyage 1492 Spain c1490: exploration, religion and ambition Christianity Most people knew the world was round **Finding ships** and crew Most of Europe was mapped The Spice Trade with the East Indies was well established Rivalry at sea Priest • Portugal and Spain were rivals – both wanted to find a sea route to the East Indies Sailors' fears The Catholic Church had 2 concerns in the Status 2<sup>nd</sup> half of the 15<sup>th</sup> Century: Possible **Defend Christendom** Mutiny Spread Christianity to new lands Quarrels Problems in the Bahamas and La Navidad Wealth Nina too small Land Wrecking of Disappearance to take all of Pinta Santa Maria Effects of Spanish Settlements crew to Spain 1 Decision to leave men 2 Columbus' return to Spain 1493 behind 3 Taking goods 4<sup>th</sup> March 1493 Columbus lands in Portugal The role of the pope and meets King John. Columbus is sent The Pope gives Isabella and Ferdinand his Stripping Santa and support for Maria of equipment 4 from the Santa timbers 5 Maria La Navidad **Rivalry with Portugal** Columbus' Rewards built Imperial Policy towards the Caribbean King John believed he had Isabella and Ferdinand encouraged . This led to Columbus was given Importance of Santo Domingo Establishment of a monopoly \_of Spanish In 1503, the Casa de Contractacion (House of It became administration in the C Trade) was established in Seville, Spain. The n. Impact of contact with the Natives -Wide roads and squares surrounded aim was to control all trade from the impressive stone buildings Caribbean. Powers included: -The building housed -Approve all voyages to the Caribbean. Gold, cotton and Tainos and Caribs Incident at The Treaty of Tordesillas 1494 where rules were issued -Collect up to date trade routes. tobacco Samana On 7<sup>th</sup> June an agreement was reached between . An and taxes collected. Collect taxes. imaginary line was drawn from the -Courts were established to -Control who travels to the Indies. to the . All lands to the west were for Spain. Lands to the east were for However, there was smuggling and people Natives wore Tainos – considered On way back to worked out ways to avoid paying the taxes. Portugal. but Spain - Samana, would not tell the . allowed Columbus Haiti. Men went Columbus as governor to build La Navidad, ashore and found where it found at San Catholic Missionaries **Regulation of Exploration** La Navidad and Isabela In 1503, F\_\_\_\_\_ and I\_\_\_ Salvador. heads and a issued a Ferdinand and Isabella needed to was used series of by the natives - it Caribs – mainly -Every ship sailing to the Caribbean had to -Indians were to La Navidad found burned to Bartholomew left in charge when Columbus returned to Spain. could be spun into found east of the . An exchange leave from Cadiz, Spain and had to register to live as the ground on 28<sup>th</sup> Nov He built Bahamas, went wrong and Christians. with the Spanish. to problems – Tainos and 1493. Columbus returned in Spaniards sailing r\_\_\_\_\_the -Taught how to \_\_\_ -Anyone could live in the A new settlement was Spaniards not cooperating. Reports reached Spain about the with Columbus \_. They learnt . If the Tainos Order restored by giving Spanish named Isabela. It failed as \_\_and s. Dominicans discovered gold, 2/3 had to go to the Spanish a\_\_ quickly picked up the that the natives Spaniards wanted providing native labourers land. were sent to stop the \_\_\_\_\_. Spaniards government, 1/3 could be kept by the habit of adventure and gold. Rebellions kept breaking out so Columbus carried out shocked at the mistreatment of natives. discoverer. 1/10 of all other products had to Columbus went exploring \_ns on both nat\_\_\_\_\_s and \_\_\_\_\_s. be sent to Spain. and found Jamaica. He September 1500 - Bobadilla sent to take over from Columbus, -1/10 if all cargo carried by ship sailing to the returned to Haiti in Columbus arrested and sent back to Spain in chains. New World had to be Spanish. September 1494.

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Keywords		What we a	re learning in this unit	В.	The 5 Pillars - Salah	
Tawalla	Showing love for God and for those who follow Him	A. The 5 I B. Salah C. Sawm	Pillars and 10 Obligatory Acts			
Tabarra				What is it?	<ul> <li>"Salah is a prescribed duty that has to be performed at the given time by the Qur'an"</li> <li>Muslims pray 5 times per day and this allows them to communicate with Allah.</li> </ul>	
Khums	The obligation to pay one- fifth of acquired wealth	F. Jihad G. Id-ul-A H. Id-ul-Fi			<ul> <li>The prayers are done at dawn (fajr), afternoon</li> <li>(zuhr), late afternoon (asr), dusk (maghrib) and night (isha)</li> <li>Muslims face the holy city of Makkah when</li> </ul>	
Lesser jihad	The physical struggle or holy war in defence of	А.	5 Pillars of Islam and 10 obligatory acts		paying.	
	Islam	What are the 5	<ul> <li>5 key practices or duties for Muslims</li> <li>Both Sunni and Shi'a keep these (Shi'a have them</li> </ul>	Wuzu	<ul> <li>The washing process to purify the mind and body for prayer</li> <li>Muhammed soid the key to Salah is cleanliness</li> </ul>	
Greater jihad	The <b>daily</b> struggle and inner spiritual striving to live as a Muslim	pillars	<ul> <li>as part of the 10 obligations)</li> <li>They are seen as pillars "holding up the religion" and are all of equal importance</li> </ul>		<ul> <li>Muhammad said the key to Salah is cleanliness</li> <li>Hands, arms, nose, mouth, head, neck and ears are cleaned as well as both feet up to the ankle.</li> </ul>	
Sunni	Muslims who believe in the successorship of Abu Bakr, Umar, Uthman and Ali as leaders after the Prophet Muhammad	What are the 10 obligatory acts	<ul> <li>There are 10 obligations for a Muslim according to the Shi'a branch of Islam.</li> <li>These include prayer, fasting, almsgiving, pilgrimage, jihad, khums, directing others towards good, forbidding evil, tawalla and taken to service the service of the</li></ul>	Rak'ahs and recitations	<ul> <li>These are the movements that Muslims make during prayer</li> <li>Takbir – raise hands to ears and say 'Allahu Akbar'</li> <li>Qiyam – Standing, Muslims recite Surah</li> <li>Then bow to the waist saying "Glory be to my Great Lord and praise be to Him"</li> </ul>	
Shi'a	Muslims who believe in the Imamah, leadership of Ali	Shahadah	tabarra <ul> <li>Shahadah is the first of the 5 pillars</li> </ul>		Then sink to their knees saying "Glory be to my Lord, The Most Supreme".	
Niyyah	and his descendants Intention during prayer - having the right intention to worship God		<ul> <li>It is the Muslim declaration of faith</li> <li><i>"there is no God but Allah, and Muhammad is</i> <i>His messenger"</i></li> <li>This is a statement that Muslims reject anything but Allah as their focus of belief</li> </ul>	Salah at home	<ul> <li>Salah is a big part of family life</li> <li>Meals and other activities are usually scheduled to fit around prayer times</li> <li>Families pray all together and might have a room set aside for prayer</li> </ul>	
Du'a	A personal prayer that is done in addition to Salah e.g. asking Allah for help		<ul> <li>It also recognises that Muhammad has an important role and his life is an example to follow</li> </ul>	Salah in the mosque	<ul> <li>All mosques have a qiblah wall which is to show where to face Makkah</li> <li>Men and women pray in separate rooms at the Menander of the separate rooms at the separat</li></ul>	
	Jihad			lummah	Mosque	
oppressed by the Meccans and had no c			e who fight against you but do not transgress"	Jummah	<ul> <li>Jummah is congregational prayer held on a Friday at the mosque where the imam leads the prayer</li> <li>Praying together as a community develops the feeling of unity amongst Muslims</li> <li>Men are obliged to attend unless they are sick or too old</li> <li>Women do not have to go – they may pray at home instead</li> </ul>	
Greater Jihad	A struggle with     e.g. perform	hin oneself to fol the Five Pillars, fo	low the teachings of Islam and be a better person llow Sunnah and avoid temptation forbid what is wrong"	Differences between Sunni and Shi'a	<ul> <li>Shi;a Muslims combine some prayers so they may only pray 3x a day</li> <li>Shi'a use natural elements e.g. clay where their head rests</li> </ul>	

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Keywords		What we ar	re learning in this unit	В.	The 5 Pillars - Salah
Tawalla		B. Salah C. Sawm	Pillars and 10 Obligatory Acts	What is it?	
Tabarra		– D. Zakah E. Hajj F. Jihad			
Khums		G. Id-ul-Ad H. Id-ul-Fi	dha itr		
Lesser jihad		А.	5 Pillars of Islam and 10 obligatory acts		
Greater jihad		What are the 5 pillars		Wuzu	
Sunni		What are the 10 obligatory acts		Rak'ahs and recitations	
Shi'a		Shahadah			
Niyyah				Salah at home	
Du'a				Salah in the mosque	
	Jihad				
Lesser Jihad				Jummah	
Greater Jihad				Differences between Sunni and Shi'a	





	The 5 Pillars - Zakah		The 5 Pillars - Sawm
The role of giving alms	<ul> <li>Muslims believe it is their duty to ensure Allah's wealth has been distributed equally as everyone is the same</li> <li>The Qur'an commands to give to those in need</li> </ul>	The role of fasting	<ul> <li>Fasting during Ramadan (9<sup>th</sup> month in Muslim calendar)</li> <li>Muslims give up food, drink, smoking and sexual activity in daylight hours</li> <li>Pregnant people, children under 12, travellers and elderly people are exempt from fasting.</li> </ul>
The significance of giving alms	<ul> <li>Giving 2.5% of savings/wealth to charity</li> <li>Wealth can cause greed which is evil, so Zakah purifies wealth – wealth is given by God and must be shared</li> <li>The Prophet Muhammad practiced Zakah as a practice in</li> </ul>	The significance of fasting	<ul> <li>Ramadan is believed to be the month that Prophet Muhammad began to receive revelations of the Qur'an</li> <li>Helps Muslims to become spiritually stronger</li> </ul>
	<ul> <li>Medina</li> <li>Given to the poor, needy and travellers</li> <li>Sadaqah is giving from the heart out of generosity and compassion</li> </ul>	Reasons for fasting	<ul> <li>Obeying God and exercising self-discipline</li> <li>Develops empathy for the poor</li> <li>Appreciation of God's gifts</li> <li>Giving thanks for the Qur'an</li> </ul>
Khums	<ul> <li>Shi'a Islam – one of the 10 obligatory acts</li> <li>20% of any profit earned by Shi'a Muslims paid as a tax</li> <li>Split between charities that support Islamic education and anyone who is in need</li> <li><i>"know that whatever of a thing you acquire, a fifth of it is for Allah, for the Messenger, for the near relative, and the orphans, the needy, and the wayfarer"</i></li> </ul>	Night of power	<ul> <li>Sharing fellowship and community with other Muslims</li> <li>The night when the Angel Jibril first appeared to Muhammad and began revealing the Qur'an.</li> <li>The most important event in history – <i>"better than a thousand months" (Surah 97:3)</i></li> <li>Laylat Al-Qadr is the holiest night of the year. Muslims try to stay awake for the whole night to pray and study for the Qur'an</li> </ul>
	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
The role of pilgrimage The significance of	<ul> <li>A pilgrimage to Makkah which is compulsory for Muslims to take at least once as long as they can afford it and are healthy</li> <li>God told Ibrahim to take his wife and son on a journey and</li> </ul>	ld-ul-Adha Not an official holiday in UK	<ul> <li>Festival of sacrifice</li> <li>Marks the end of Hajj and is a chance for whole Ummah to celebrate</li> <li>Origins – Ibrahim's commitment to God in being willing to sacrifice his son, Ishmael. God was testing Ibrahim</li> <li>Key events – new clothes, sacrificing an animal, visiting the Mosque.</li> </ul>
pilgrimage	<ul> <li>leave them without food or water</li> <li>Hajira ran up and down two hills in search of water, could not find any and prayed to God. Then water sprung from the ground. This is the Zamzam well</li> <li>When Ibrahim returned he was commanded to build the Ka'ba as a shrine dedicated to Allah</li> <li>Hajj is performed in the month of Dhu'l-Hijja</li> </ul>	Id-ul-Fitr Public holiday in Muslim majority countries, not UK	<ul> <li>People ask a butcher to slaughter a sheep for them and share the meat with the community</li> <li>Festival of fast-breaking</li> <li>Marks the end of Ramadan</li> <li>Key events – Decorate homes with colourful light and banners, dress in new clothes, gather in Mosques, give gifts and money, give to the poor</li> <li>Zakah ul-Fitr – donation to the poor so that everyone can eat a generous</li> </ul>
Actions	<ul> <li>Ihram – dressing in two pieces of white cloth</li> <li>Circling the Ka'aba 7 times (tawaf)</li> <li>Drinking water from the Zamzam well like Hajar</li> <li>walking between Al-Safa and Al-Marwa hills seven times</li> <li>Throwing stones at 3 pillars (jamarat) to represent casting out the devil and remembering Ibrahim throwing stones at the devil to drive him away</li> <li>Asking Allah for forgiveness at Mt Arafat</li> <li>Collecting pebbles at Muzdalifah</li> </ul>	Ashura	<ul> <li>Sunni celebration – many fast on this day which was established by Prophet Muhammad</li> <li>Shi'a mourning – Husayn was murdered and beheaded. Muslims remember his death and betrayal</li> <li><i>Key events</i> – public displays of grief, day of sorrow, wear black, re- enactments of martyrdom, not a public holiday in Britain but Muslims may have day off school</li> </ul>



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	The 5 Pillars - Zakah		The 5 Pillars - Sawm
The role of giving		The role of fasting	
alms			
The significance of			
giving alms		The significance of	
		fasting	
		Reasons for fasting	
Khums			
Knums			
		Night of power	
	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
The role of	The 5 Pillars - Hajj	Id-ul-Adha	Id-ul-Adha, Id-ul-Fitr, Ashura
The role of pilgrimage	The 5 Pillars - Hajj		Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage	The 5 Pillars - Hajj	Id-ul-Adha Not an official holiday in UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage	The 5 Pillars - Hajj	Not an official holiday in	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr Public holiday in Muslim majority countries, not UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr Public holiday in Muslim majority countries, not UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr Public holiday in Muslim majority countries, not UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr Public holiday in Muslim majority countries, not UK	Id-ul-Adha, Id-ul-Fitr, Ashura
pilgrimage The significance of pilgrimage	The 5 Pillars - Hajj	Not an official holiday in UK Id-ul-Fitr Public holiday in Muslim majority countries, not UK	Id-ul-Adha, Id-ul-Fitr, Ashura

# GCSE Business. Paper 1. Making the Business Effective

27. A private limited company (Limited Liability)	29.	Key Words: Making your business effective
When a business fails, a company that has limited liability restricts the losses suffered by the	Term	Definition
business owners (shareholders) to the sum of money that they invested in the business.	Bankrupt	When an individual is unable to pay their debts, even after all personal assets have
Benefits of Limited companies.	·	been sold for cash
A company can have share capital, which makes it easier to divide up the ownership between	Private Limited	
different investors.	Company	
If the business needs to raise more capital, it is quite easy to issue more shares for sale to other	Sole Trader	A business run by one person; that person has unlimited liability for any business
investors		debts.
The business continues to exist even if the founder dies. The company develops a life of its own	30. Franchising	
Due to limited liability, the owners/shareholders can be bold about investing in the future of the	Paying a franch	ise owner for the right to use an established business name, branding and business methods
business. If a bold move goes wrong, the business may suffer but individual shareholders are not	Why do Busines	sses expand by selling franchises?
liable for debts		ind its sales quickly; this helps fill gaps that other businesses will fill if they don't
28. Sole Trader (Unlimited Liability)		
Treating the business and the individual owner as the same entity, therefore making the business		ers not only sell a franchise but will receive a share of all future sales. Subway receives 8% of
owner responsible for all the debts in a business.		ue of all 45,000 stores.
Why ignore Limited Liability?		owner can concentrate on developing new products and services, and on high quality
The only logical reason for ignoring limited liability is if there is no realistic possibility of debts	advertising.	
building up. For example, if the business is a market stall, where goods are bought for cash. In this		e benefits of Franchising for a entrepreneur?
scenario debts would be hard to build up and firms will be reluctant to pay the related costs and fill	· · ·	chise you buy the companies images, products and methods. Starting a business requires a
out the required paperwork.		kills, by franchising you are giving your business a stronger starting point.
33. Business Locations		utlet/business could never afford image building TV advertising, franchising enables business
Location is key to the success of any business		major marketing campaigns.
Factors influencing business location:	32. What are Ro	
Proximity to Market: For many businesses this is the most important factor. For a physical service	The percentage	of sales revenue to be paid to the overall franchise owners
such as a shop, restaurant or hotel, customer convenience will be critical revenue. Shops must be	36. Marketing N	Mix
located in areas of high footfall.	The four factors	s that make up the marketing mix, usually referred to as the marketing mix. Usually referred
	to as the four p	S.
Proximity to Materials: For manufacturing businesses, nearness to materials may be more important	Product	Targeting customers with a product that has the right blend of functional aesthetic
than nearness to customers. Being close to materials can cut costs for firms in manufacturing.		benefits without being too expensive to produce
	Price	Setting the price that retailers must pay which in turn affects the consumers price
Proximity to Labour: Labour is key to any business; therefore businesses must be located in areas	Promotion	Includes all the methods that a business uses to persuade customers to buy, for example
where the labour force is equipped with the necessary skills to allow the business to thrive.		branding, packaging, advertising to boost long term image of the product and short-term
Proximity to Competitors: Many businesses want at location far away from competitors – effectively		offers
being the only supplier to customers in a local area. However, some businesses will want to be closer	Place	How and where the supplier is going to get the product or service to the consumer; it
to their competitors as location is key to their business. For example; location is key for restaurants		includes selling products to retailers and getting the products displayed in prominent
and more important than proximity to competitors.		positions.
34. How has the internet impacted business location:	37. What is a bu	
Due to the impact of e-commerce, business location matters less. Firms can locate their head office		ment setting out the marketing and financial thinking behind a proposed new business.
anywhere they choose provided the local labour force are equipped with the skills to run the		d a good business plan contain?
administration effectively. Internet based firms will have a more extensive stock range in all sizes and		siness idea; Why, who & how?
can cater more extensively for consumers needs than retail outlets.		ss Aims & Objectives; What is business setting out to do?
		Market; Who will you be your target consumer?
35. Business Location: Key terms:	4. Market	ing Plan; How will you market your product to consumers?
Fixed Premises:	5. Foreca:	st revenue, costs and profits; Working out the break-even point
Real life buildings such as shops, offices and warehouses.	6. Cash Fl	ow Forecast; Cash is key to any business
Proximity:	7. Source	s of Finance; How will the business fund itself?
Nearness: Whether or not a business wants to be closer to a factor such as its customers.	8. Locatio	n; Where should the business be based?
	9. Market	ing Mix: How will the company market their product?

# GCSE Business. Paper 1. Making the Business Effective

27. A private limited company (Limited Liability)	29.	Key Words: Making your business effective
	Term	Definition
	Bankrupt	
Benefits of Limited companies.	Private Limited	
	Company	
	Sole Trader	
	30. Franchising	
28. Sole Trader (Unlimited Liability)		
Why ignore Limited Liability?		
	31. What are th	ne benefits of Franchising for a entrepreneur?
33. Business Locations		
	36. Marketing I	Mix
	The four factor to as the four p	s that make up the marketing mix, usually referred to as the marketing mix. Usually referred
		15. 1
	Product	
	Price	
	Promotion	
	Place	
34. How has the internet impacted business location:	37. What is a bu	usiness plan? ument setting out the marketing and financial thinking behind a proposed new business.
	38. What shoul	d a good business plan contain?
	30. What should	
	L	

Food Spoilage, Contamination and Food Poisoning

food

#### This can occur in a variety of ways at Food spoilage different stages of food processing and As soon as food is harvested, slaughtered production. Some examples are: or processed it starts to change. This •soil from the ground when harvesting; happens for two main reasons: •a loose bolt from a processing plant when autolvsis – self destruction, caused by packaging; enzymes present in the food; ·a hair from a chef in the kitchen. microbial spoilage – caused by the growth of micro-organisms, i.e. bacteria, yeasts and moulds. **Bacterial contamination** Most bacteria are harmless but a small number can cause illness. These are known as pathogenic bacteria. Food which is contaminated with pathogenic bacteria can look, taste and smell normal. Food spoilage: Autolysis - enzymes Bacteria can be transferred onto food Enzymes are chemicals which can cause through cross-contamination, via food to deteriorate in three main ways: equipment, people or pests, or can be ripening – this will continue until the food naturally present in the food. becomes inedible, e.g. banana ripening; Some bacteria can produce toxins which •browning - enzymes can react with air can cause food poisoning. causing certain foods, e.g. apples, to discolour: •oxidation - loss of nutrients, such as vitamin C from food, e.g. over boiling of green vegetables. Micro-organisms Micro-organisms need conditions to survive and reproduce these can include: temperature; Food spoilage: Microbial spoilage moisture; Spoilage can be caused by the growth of: •food: •bacteria – single celled micro- organisms •time: which are present naturally in the •oxygen and pH level. environment; yeasts – single celled fungi; Temperature ·moulds - fungi which grow as filaments in Bacteria need warm conditions to grown and multiply. •The ideal temperature for bacterial growth is 30ºC - 37ºC. Food contamination •Some bacteria can still grow at 10ºC and Food contamination can lead to food 60ºC. poisoning. There are three ways which •Most bacteria are destroyed at food can be contaminated: bacterial, temperatures above 63 ºC. chemical and physical. Bacterial growth danger zone is 5°C -63ºC. At very cold temperatures, bacteria become dormant - they do not die, but Chemical contamination they cannot grow or multiply. Chemical contamination can occur in a variety of ways at different stages of food processing and production. For example, Moisture chemicals from the farm; cleaning products used in the processing plant and fly spray used in the kitchen.

Physical contamination

Food Bacteria need a source of food to grow and multiply, these food are usually high in moisture, fat and protein, and may be ready to eat. Food where bacteria rapidly multiple in is called a high risk food. For example: meat, meat products and poultry; •milk and dairy products; •eggs - uncooked and lightly cooked; shellfish and seafood; prepared salads and vegetables: .cooked rice and pasta.

#### Time

Given the right conditions, one bacterium can divide into two every 10-20 minutes through a process called binary fission.

People at high risk of food poisoning Elderly people, babies and anyone who is ill or pregnant needs to be extra careful about the food they eat.

#### Symptoms of food poisoning

Food poisoning can be mild or severe. The most common symptoms are: feeling sick; being sick; diarrhoea: abdominal pain.

Campylobacter Sources

Raw and undercooked poultry, unpasteurized milk. contaminated water. Signs and symptoms Onset 2 - 5 days (can be longer).

Fever, headache and dizziness for a few hours, followed by abdominal pain.

Where there is no moisture bacteria cannot grow. However, bacteria and moulds can both produce spores which can survive until water is added to the food.

## **KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T4**

#### Key terms

Bacteria: Small living organisms that can reproduce to form colonies. Some bacteria can be harmful (pathogenic) and others are necessary for food production, e.g. to make cheese and yogurt. Binary fission: The process that bacteria uses to divide and multiply. Cross-contamination: The transfer of bacteria from one source to another. Usually raw food to ready to eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests. Can also relate to allergens. Food spoilage: The action of enzymes or microorganisms which make the food unacceptable to consume. Food poisoning: Illness resulting from eating food which contains food poisoning microorganisms or toxins produced by microorganisms. Toxin: A poison produced by some bacteria which can cause food poisoning.

#### Allergens

Allergenic ingredients can cause adverse reactions in some people. Care must be taken at each stage of food processing to prevent contamination.

#### **Desirable food changes**

Desirable changes that can be caused by micro-organisms include: bacteria in yogurt and cheese production; •mould in some cheeses, e.g. Stilton; blue cheese ·yeast in bread production.

#### septicemia, pneumonia. During pregnancy may lead to miscarriage or birth of an infected baby. Salmonella Sources Raw meat, poultry and eggs. Flies, people, sewage and contaminated water. Signs and symptoms Onset 6-48 hours. Headache. general aching of limbs, abdominal pain and diarrhoea, vomiting and fever. This usually lasts 1 - 7 days, and rarely is fatal.

E Coli 0157

Raw and undercooked meat and

poultry. Unwashed vegetables.

Diarrhoea, which may contain

Unpasteurised milk and dairy

meat, poultry and salad

Signs and symptoms

products, cook-chill foods, pate,

Onset 1-70 days. Ranges from

mild, flu-like illness to meningitis,

blood, can lead to kidney failure

Contaminated water.

Signs and symptoms

Onset usually 3-4 days.

Sources

or death.

Listeria

Sources

vegetables.

#### Staphylococcus aureus

Sources Humans: nose, mouth and skin. Untreated milk. Signs and symptoms Onset 1 - 6 hours. Severe vomiting, abdominal pain, weakness and lower than normal temperature. This usually lasts 6 - 24 hours.

Food Spoilage, Contamination and Food Poisoning

Food spoilage As soon as food is harvested, slaughtered or processed it starts to change. This happens for two main reasons: •autolysis – •microbial spoilage –	Physical contamination This can occur in a variety of ways at different stages of food processing and production. Some examples are: -	Food Bacteria need a source of food to grow and multiply, these food are usually high in moisture, fat and protein, and may be ready to eat. Food where bacteria rapidly multiple in is called a <b>high risk</b> food. For example:	E Coli 0157 Sources Signs and symptoms	KS4 FOOD AND NUTRITION KNOWLEDGE ORGANISER T4 Quiz
		-		Key terms
		-		Bacteria:
Food spoilage: Autolysis - enzymes Enzymes are chemicals which can cause food to deteriorate in three main ways: •ripening	Bacterial contamination Most bacteria are harmless but a small number can cause illness. These are known as pathogenic bacteria. Food which	- -	Listeria Sources	Binary fission:
npening	is contaminated with pathogenic bacteria can look, taste and smell normal.	Time Given the right conditions, one		
•browning	Bacteria can be transferred onto food through cross-contamination, via equipment, people or pests, or can be	bacterium can divide into two every 10- 20 minutes through a process called	Signs and symptoms	Cross-contamination:
•oxidation	naturally present in the food. Some bacteria can produce toxins which can cause food poisoning.	People at high risk of food poisoning		Food spoilage:
Food spoilage: Microbial spoilage	Micro-organisms			
Spoilage can be caused by the growth of: •bacteria •yeasts •moulds	Micro-organisms need conditions to survive and reproduce these can include: -	Symptoms of food poisoning Food poisoning can be mild or severe. The most common symptoms are:	Salmonella Sources	Food poisoning:
	-	-		Toxin:
	Temperature Bacteria need warm conditions to grown and multiply.	-	Signs and symptoms	Allergens Allergenic ingredients can cause adverse reactions in some people. Care must be taken at each stage of food processing to prevent contamination.
Food contamination	•The ideal temperature for bacterial growth is Some bacteria can			
Food contamination can lead toThere are three ways which food can be contaminated:	is Some bacteria can still grow at 10°C and 60°C. •Most bacteria are destroyed at temperatures above •Bacterial growth danger zone	Campylobacter Sources	Staphylococcus aureus Sources	Desirable food changes Desirable changes that can be caused by micro-organisms include: -
	is •At very cold temperatures, bacteria become they do not die,	Signs and symptoms	Signs and symptoms	
Chemical contamination Chemical contamination can occur in a variety of ways at different stages of food processing and production. For example:	but they cannot grow or multiply.			-
	Moisture Where there is no moisture bacteria cannot g both produce spores which can survive until t			

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## Year 10 PRODUCT DESIGN Term 4



A. Finite Resou	irces	What we	are learning thi	is term:	D. Electronic Sys	stoms	E.	Metals & Alloys	
				3. CAD					
Finite resources will ev	Finite resources will eventually run out.		C. Renewable D. Electronic Systems E.		Input / Ser	nsor	Metals	are extracted fron	
C	oal	Metals &	Alloys F. Su	face Treatments	Light-dependent resister (LDR) –	Unnos	Ferro	us	Non-ferrous
Advantages	Disadvantages <ul> <li>Produces C02</li> </ul>	С.	Renewable I	Resources 🚳	changes with light		Low-ca steel)	arbon steel (mild	Aluminium
<ul> <li>Produces high amounts of</li> </ul>	when burned	Availabl	e naturally		Thermistor - changes with	11.00 Jan	Cast li	ron	Copper
<ul><li>energy</li><li>Enough to last</li></ul>	<ul> <li>Natural land damage from</li> </ul>		W	ind	temperature		High-c	arbon steel (tool	Tin
100s of years	mining	Advanta	ages	Disadvantages	Piezoelectric Sensor		steel)		Zinc
Natur	ral Gas		stantly lable	<ul> <li>High start up</li> <li>Low wind = no</li> </ul>	<ul> <li>changes with sound</li> <li>/ electric energy</li> </ul>	$\bigcirc$	Contai	in iron and are	Do not contain iron,
Advantages	Disadvantages		running cost	energy	/ electric energy	and a	magne	etic, prone to	not magnetic. Do not
Emits less CO2	Highly flammable			Eyesore	Process / Contr	rol Device	rust.		rust.
UK has shale	Pollutes water		S	olar	Switch		Alloys		
deposits	Dil	Advanta	ages	Disadvantages	- turn on and off power			are mixtures of two ve its properties or	o or more metals to aesthetic.
Advantages	Disadvantages	bills		<ul><li>High start up</li><li>No sun = no</li></ul>	Resistor - to limit flow of		Brass	Stainless ste	el High-speed steel
Produces high     amounts of	<ul> <li>Creates air pollution</li> </ul>	• Clea	Clean resource	energy • Eyesore	current		F.	Surface Treat	ments of Timber
<ul><li>energy</li><li>Easy to store</li></ul>	<ul> <li>Large impact on nature</li> </ul>			idal	Microcontroller - programmable	Used to improve their appearance an enhance certain properties such as d			
Nuc	clear	Advanta	ages	Disadvantages	decisions	Frank a fin	Paint		Oil or
Advantages	Disadvantages		g lasting an resource	<ul><li>High start up</li><li>Unknown impact</li></ul>	Output	t	T Gint		Wax
No harmful gases are	<ul> <li>Power stations close after 40yrs</li> </ul>		Hydro F	lectricity	Speaker - releases sound		Wood	TH PARTY MARK	Varnish
<ul><li>released</li><li>More efficient</li></ul>	Disposal is difficult & costly	Advanta		Disadvantages			Stain		a to a build
B. CAD			pollution ues can be	Affects wildlife     through flooding	Motor - releases movement		Tanalising / Pressure-treated		
Computer Aided Desig	in		ned quickly	<ul><li>through flooding</li><li>Eyesore</li></ul>				rvatives can be ad	
Advantages	Disadvantages		Bio	mass	Light-emitting diode (LED)	SALA		an of the timber, pro and insects.	precting it from rot,
<ul> <li>Can make quick and easy edits</li> <li>Can be easily shared</li> <li>High quality</li> </ul>	<ul> <li>High start up costs</li> <li>Need training</li> <li>Computer issues e.g. freeze</li> </ul>	useo • Rep	ages 2 released d by plants lacements be grown	<ul> <li>Disadvantages</li> <li>Creates pollution when burned</li> <li>Takes up land needed</li> </ul>	- releases light				sure-treated timber will no need to paint, s

and the second sec		Year 10 PRODUCT DESIGN Term 4							SF.
A. Finite Resourc	es AP	What we are learning this term:			D. Electronic Sys	stems	E.	Metals & Alloy	s
Finite resources will			Resources E wable D. Electr	3. CAD ronic Systems E.	Input / Ser	nsor	Metals	are extracted fro	m
Coa	1		Alloys F. Sur			EDDOO	Ferrous	6	Non-ferrous
Advantages	Disadvantages	C.	Renewable F	Resources 🚳	=				
• ·	•	Renewa	able resources	are		19.00 A			
			w	ind	=				
•	•	Advant	ages	Disadvantages					
Natural	Gas	•		·	=	(Qa		iron and are ic, prone to	Do not contain iron, not magnetic. Do not
Advantages	Disadvantages	•					rust.		rust.
· [	·			olar	Process / Contr	ol Device	Alloys		
		Ashrant			=				to or
Oil		Advant	ages	Disadvantages			mpiore		
Advantages	Disadvantages	·		•					
•	•	•		•	=		F.	Surface Trea	tments of Timber
•	•		Ti	idal			Used to	)	and to
Nucle		Advant	ages	Disadvantages	=				_ such as
	Disadvantages	•		·	Output				
·	·		Hydro E	lectricity	=			2.28	
		Advant	ages	Disadvantages					and the second
B. CAD		•		•	=	HEEL		Tanalising / P	ressure-treated
CAD stands for		•		•			Preserv	atives can be ac	lded to r, protecting it from
Advantages	Disadvantages		Bio	mass	=	SQUE		;;	and
•	•	Advant	ages	Disadvantages					sure-treated timber will
	:	•   • 		·					,, o



Key learning aims from Component 1

G.



#### What we are learning this term:

- A. Understanding professional works
- B. What is a professional work
- C. What is a practitioner
- D. How do we analyse a performance
- E. What are physical skills
- F. What are interpretive skills
- G. Three different performance styles / genres

#### 6 Key Words for this term

1 Practitioners	4 Performance material
2 Physical skills	5 Analyse
3 Interpretive skill	6 Intentions

A. Key question – What is the artistic purpose of a performance work? When watching a professional performance, the key questions you need to think about are the following... How do we Explore artistic purpose? Explore artistic purpose (across all three disciplines/styles) including: to educate to inform to entertain to provoke to challenge viewpoints to raise awareness

to celebrate.

Α.

#### Component 1 – Key focus

In this component of the qualification students will develop their understanding of drama by examining the work of existing practitioners and the processes used to create performance. Students should experience a range of work across the discipline of drama by viewing recorded and/or live work. While this is primarily a theoretical study of the performing arts practical investigations, students will be working at developing practical skills through workshops and links with Component 2 Developing Skills and Techniques in the Performing Arts, to engage in primary exploration of specific repertoire.

C.	Key question from Assessment objectives					
2. What	are interpretive skills	<ol> <li>What is a professional work</li> <li>What is a practitioner</li> <li>How do we analyse a performance</li> </ol>				
3. How do we use these skills practically?3. How do we analyse a performance4. How do we IMPROVE on these skills?4. What are a practitioners creative in						

Konwordo

		E.	Keywords	
Learning aim A: Examine professional practitioners' performance work	A1: Professional practitioners' performance material, influences, creative outcomes and purpose Examine live and recorded performances in order to develop	Practitio	ners	A professional theatre maker who creates in a specific style led by a specific theatre ideology.
	understanding of practitioners' work with reference to influences, outcomes and purpose. Focus on thematic interpretation of particular issues and how artists communicate their ideas to an	Perform	ance material	The practical work that a practitioner creates for performance.
	audience. Roles and responsibilities in theatre.	Creative	e Intentions	The ideas behind the choreography, why the choreographer choose to create the work.
Learning aim B:	Processes used in performance	Review		Look over your current work and the work of others and be able to review an comment on your own and others practice
Explore the interrelationships between constituent features of existing performance material	<ul> <li>Responding to stimuli to generate ideas for performance material.</li> <li>Exploring and developing ideas to develop material.</li> <li>Discussion with performers.</li> <li>Setting tasks for performers.</li> <li>Sharing ideas and intentions.</li> </ul>	Analyse	:/ Evaluate	Watch and then analyse your own performance and the work of others and giving comments and judgements on what you see
	Providing notes and/or feedback     on improvements.	Influenc	es	How the practitioner has been influenced by others, their experiences, their training and how this has affected the work they create.
		Physica	I skills	The physical attributes that an actor uses, stamina, strength, flexibility, control, to dance with technical accuracy.





What we are learning this term:	
<ul> <li>A. Understanding professional works</li> <li>B. What is a professional work</li> <li>C. What is a practitioner</li> <li>D. How do we analyse a performance</li> <li>E. What are physical skills</li> <li>F. What are interpretive skills</li> <li>G. Three different performance styles / genres</li> </ul>	C.       Key question from Assessment objectives         1. What are physical skills       1. What is a professional work         2. What are interpretive skills       2. What are interpretive skills         3. How do we use these skills practically?       3. How do we analyse a performance         4. How do we IMPROVE on these skills?       4. What are a practitioners creative intentions
6 Key Words for this term         1 Practitioners       4 Performance material         2 Physical skills       5 Analyse         3 Interpretive skill       6 Intentions         A. Key question – What is the artistic purpose of a performance work?         When watching a professional performance, the key questions you need to think about are the following         How do      ?         (across all three disciplines/styles) including:         to	Learning aim A:       A1: Professional practitioners' performance material, influences, creative outcomes and purpose       Practitioners         practitioners'       performance in order to develop of partitioners' work with reference tos, os and pse.       Practitioners         Focus oni and how artists cte their ideas to an responsibilities in theatre.       Of reactive Intentions         Review       Review
A.       Component 1 – Key focus         In this component of the qualification students will develop their understanding of drama by examining the work of	Learning aim B: Explore the interrelationships between constituent features of existing performance       Processes used in performance to generate id dto generate id. • Exploring and developing ideas to develop material. • Don with performers. • Settingfor performers. • Settingfor performers. • Settingfor performers. • Settingfor performers. • Settingfor performers. • Settingon with performers. • Settingfor performers. • Settingfor performers. • Settingnot performers. • Providingand/or feck on impnts.       Influences         Influences       Physical skills

# **Musical forms and devices**

# Area of study 1 - Eduqas GCSE Music

Baroque era	Classical era	Romantic era	Form and structure	Devices				
(1600-1750)	(1750-1810)	(1810-1910)	BINARY A B	Repetition	A musical idea is repeated exactly.			
Harpsichord	<ul> <li>Slightly larger orchestra</li> </ul>	<ul> <li>Lyrical, expressive melodies</li> </ul>	key (e.g. dominant or relative minor), but B	Imitation	An idea is copied in another part.			
<ul> <li>Ornaments</li> <li>Terraced dynamics</li> </ul>	<ul><li>Piano introduced</li><li>Alberti bass</li></ul>	<ul><li>Large orchestra</li><li>Wider range of</li></ul>	Large orchestra	returns to the tonic. B will contain with some change/contrast.	Sequence	Repetition of an idea in the same part at a higher/lower pitch.		
Basso continuo	<ul> <li>String quartets</li> <li>Symphony, solo</li> </ul>	dynamics <ul> <li>Richer harmonies</li> </ul>	TERNARY A B A Three sections: section B provides a contrast	Ostinato	A short, repeated pattern or phrase.			
<ul> <li>Small orchestra (mostly strings, plus</li> </ul>	sonata, solo concerto	and use of chromatic chords				(e.g. new tune key change). A may return exactly or with some slight changes.	Drone	A long held or constantly repeated note(s).
some wind)	<ul> <li>Balanced, regular phrases</li> </ul>	<ul><li>Programme music</li><li>Opera symphony</li></ul>	RONDO A B A C A	Arpeggio/ broken chord	The notes of a chord played individually.			
<ul> <li>Suite, sonata, oratorio, chorales, trio sonata</li> </ul>	<ul> <li>Haydn, Mozart, Beethoven</li> </ul>	<ul> <li>Tchaikovsky, Grieg, Schumann, Dvorak,</li> </ul>	A longer form: A returns throughout the piece, with contrasting sections called 'episodes', containing new ideas and using	Alberti bass	A broken chord accompaniment (I,V,iii,V) common in the Classical era.			
<ul> <li>Bach, Handel, Vivaldi</li> </ul>		Brahms, Verdi, Wagner	different keys.	Anacrusis	An 'up-beat' or pick-up before			

### Scales and chords

A CHORD is a group of two or more notes played at the same time. A TRIAD has three notes. A CHORD SEQUENCE/ PATTERN is a series of chords. **DIATONIC HARMONY** is based on the chords of major/minor scales.

Primary chords I, IV, V Secondary chords ii, iii, vi, vii





#### MINUET AND TRIO II: AB: II II:CD :II AB

The minuet was a type of graceful dance from the 17-18th century, and was often used as the 3rd movement in symphonies in the Classical era. The minuet had two repeated sections, the trio had two new repeated sections, with a return to the minuet at the end (no repeat).

#### VARIATIONS

The main theme (tune) is repeated and developed a number of times in a variety of different ways.

AaAAA

AAA

### STROPHIC

A simple form where the song uses the same melody over and over.

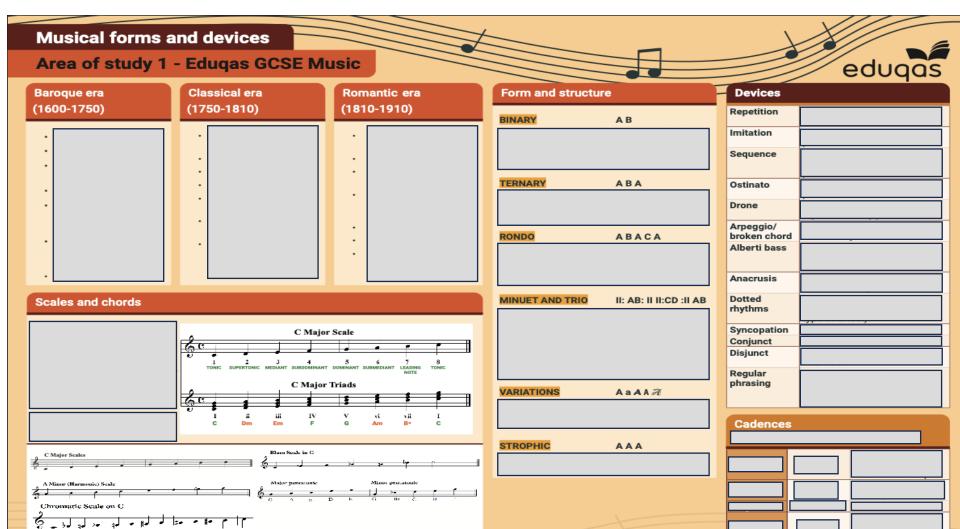
	pitch.
Ostinato	A short, repeated pattern or phrase.
Drone	A long held or constantly repeated note(s).
Arpeggio/ broken chord	The notes of a chord played individually.
Alberti bass	A broken chord accompaniment (I,V,iii,V) common in the Classical era.
Anacrusis	An 'up-beat' or pick-up before the first strong beat.
Dotted rhythms	A rhythm using dotted notes (gives a 'jagged' or 'bouncy' type of effect).
Syncopation	Off beat accents.
Conjunct	Notes that move in steps.
Disjunct	Notes that move in leaps/ intervals.
Regular phrasing	Balanced parts of a melody (like the phrases in a sentence) e.g. four bar phrases.

eduo

#### Cadences

The two chords at the end of a phrase

Perfect	V-I	Strong ending – sounds 'finished'; a musical full stop.
Plagal	IV-I	Sounds finished but 'softer'; Amen.
Imperfect	I-V, ii-V, vi-V	Sounds unfinished.
Interrupted	V-vi	Moves to an unexpected chord; 'surprise'.



Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAA

What we are learn							
A. Key words	В	What are the n	nain life stages?	C	C What are the 4 areas of growth and development (PIES)?		
B. What are the n C. What are the 4	areas of growth and	Age Group	Life Stage	Developmental Characteristics and Progress		sical	P = growth patterns and changes
development ( D. How do Huma	PIES)? ns develop physically (P)?	0-2 years	Infancy	Sill dependent on parents but growing quickly and developing physical skills.			in the mobility of the large and small muscles in the body that
A. Key words fo	r this Unit	3-8	Early	Becoming increasingly independent,		ll "	happen throughout life.
Characteristics	Something that is typical of people at a particular life stage.	years	Childhood	improving thought processes and learning how to develop friendships.	Dev	lectual elopment	I = how people develop their thinking skills, memory and
Life stages	Distinct phases of life that each person passes through.	9-18 years	Adolescence	Experiencing puberty, which bring physical and emotional changes.	(I)	Ð	language.
Growth	Increased body size such as height, weight.	19-45 years	Early Adulthood	Leaving home, making own choices about a career and may start a family.	Dev	otional elopment ⓒⓒ	E = how people develop their identity and cope with feelings.
Development	Involves gaining new skills and abilities such as riding a bike.	46-65 years	Middle Adulthood	Having more time to travel and take up hobbies as children may be leaving home;	(L) Soci	8	S = describes how people develop
Gross motor development ( <b>G)</b>	Refers to the development of large muscles in the body e.g. Legs	65+	Later Adulthood	beginning of the aging process. The aging process continues, which may affect memory and mobility.	(S)		friendships and relationships.
Fine motor development <b>(F)</b>	Refers to the development of small muscles in the body e.g. Fingers	years					
Language development	Think through and express ideas	0-2					nto something, walk unaided, climb
Contentment	An emotional state when people feel happy in their environment, are cared for and well loved		<ul> <li>stairs, kick and throw, walk upstairs, jump.</li> <li>Fine Motor Development (F) = hold a rattle for short time, reach for an item, pass item from one hand to hold between finger and thumb, scribble, build a tower, use a spoon, draw lines and circles, turn page of</li> </ul>				s and circles, turn page of a book.
Self-image	How individuals see themselves or how they think others see them	3-8	ride a bike, • F = hold a c	ricycle, catch a ball with two hands, walk backwa catch a ball with one hand, balance along a thin crayon to make circles and lines, thread small be dels with construction bricks, joined up writing, u	line. ads, co	py letters ar	nd shapes with a pencil, make
Self-esteem	How good or bad an individual feels about themselves and how much they values their abilities.	9-18	<ul> <li>Girls = pube</li> <li>Boys = voic</li> </ul>	erty starts at 10-13 years, breasts grow, hips wid e deepens, muscles and strength increase, erec c and underarm hair, growth spurts.	en, mei	nstruation b	egins, uterus and vagina grow.
Informal relationships	Relationships formed between family members	19-45		nature, sexual characteristics are fully formed, pe	eak of p	hysical fitne	ess, full height, women at most
Friendships	Relationships formed with people we meet in the home or in situations such as schools, work or		<ul> <li>Physically matters, sexual characteristics are fully formed, peak of physical intress, full height, women's menstrual cycle fertile.</li> <li>Later in the life stage people may put on weight, hair turn grey and men may lose hair, women's menstrual cycle was slow down</li> </ul>			ose hair, women's menstrual cycle	
Formal	clubs relationships formed with non-	46-65	• Women go through the menopause – when menstruation ends and they can no longer become pregnant.			o longer become pregnant.	
relationships	family/friends – such as teachers and doctors.	65+	<ul> <li>Men may continue to be fertile throughout life but decrease in sperm production in this life stage.</li> <li>Women's hair becomes thinner, men may lose most of their hair, skin loses elasticity and wrinkles appear, nails</li> </ul>			sticity and wrinkles appear, nails	
Intimate relationships	romantic relationships.			ittle, bones weaken, higher risk of contracting inf action time, muscle and senses (hearing, sight, t			d illness.

Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA

What	we are learnin	ng this term:						
A. K	ey words		В	What are the main life stages?				e the 4 areas of growth and ment (PIES)? Explain them.
	Vhat are the ma Vhat are the 4 a	ain life stages areas of growth and	Age Group	Life Stage	Developmental Characteristics and Progress	Phys		
	evelopment (PI low do Humans	ES)? s develop physically (P)?	0-2			Deve (P)	lopment	
	Key words for t		years			(F)		
	cteristics		3-8 years			Intelle	U ectual	
Life sta	ages		9-18 years			Davia	lopment	
Growth			19-45 years			Emot Deve (E)	lopment	
Develo	opment		46-65 years				00	
Gross develo	motor pment ( <b>G)</b>		65+ years			Socia Deve (S)		
Fine m develo	notor pment <b>(F)</b>						/ · ·	
Langua	age		D.	How do humai	ns develop physically (P)?			
develo			0-2					
Conter	ntment		3-8					
Self-im	nage		3-0					
Self-es	steem		9-18					
Information			19-45					
Friends	ships							
			46-65					
Forma relation								
Intimat relatior			65+					

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAA

What we are learning this term:			F. How do humans develop emotionally (E)?					
		Imans develop intellectually (I)?	Infancy and Early Childhood			Adolescence and adulthood		
	How do hu	umans develop emotionally (E)? umans develop socially (S)? numans develop intellectually (I)?	Bondin	ig and att	ttachment achment describe the emotional ties an individual s. It starts in the first year of life between infants	Self-image and Self-esteem Self-image is heightened during adolescence because of the physical changes we experience. Our self-esteem can change		
L.		At birth brains are already well	and their main carer because that person fulfils the infants needs which makes them feel safe and secure.			from day to day based on a variety of factors including employment and health status.		
developed. Infants use all of their senses to learn about the world around them. Infancy is a time of rapid intellectual development. A months infants can remember routines. At 9-12 months infants developing their memory. At 12 months to 2 years infants unders processes and how things work.		around them. Infancy is a time of rapid intellectual development. At 3 months infants can remember routines. At 9-12 months infants are developing their memory. At 12	<b>Security</b> For infants and young children, security is mainly the feeling of being cared for, being safe and loved – it is closely linked with attachment.			Security Adolescence may feel insecure because of puberty. Adults may feel insecure about relationships, job security of income. Later in life adults may feel insecure about staying in their own home or going into a care home. Feeling secure helps us cope better with everyday situations.		
		processes and how things work. Language begins to develop during	Infants		ng children are content if they have had enough lean and dry and all other needs are met.	<b><u>Contentment</u></b> When people feel discontented with aspects of their life – for example, relationships or work – their emotions can be negatively affected.		
Early child		At 3-4 years of age children become more inquisitive and enjoy exploring objects and materials. They ask lots of questions and enjoy solving simple problems. At 5-6 years old children's memory is becoming well developed. This helps		ons. Infant n enter ea	s to care for yourself and make your own ts are completely dependent on their carer. As arly childhood they develop more independence get dressed. However, children still need a lot of arer.	Independence Adolescence are dependent on their parents but are beginning to enjoy more independence and freedom to make their own choices. Adults enjoy living independently and controlling their own lifestyle and environment. Later in adulthood people become more dependent on others again.		
		them to talk about the past and anticipate the future.	G.		How do humans develop socially (S)?			
Adol	escence	During this time abstract thought is	Life St	age	Types of relationships and social development			
71001		builting this time abstract thought is developed – thinking logically and solving complex problems are possible by the end of this life stage. Adolescents may find it difficult to understand the consequences of their actions but they are developing empathy – seeing things from another's point of view.	Infancy	/	<ul> <li>Solitary Play - From birth to 2 years, infants te carer; they may be aware of other children bu</li> </ul>	nd to play alone although they like to be close to their parent or t not play with them.		
ł			Early childho	ood	game; they are not socialising or playing with • Cooperative or social play – from 3 years upw	by playing next to other children but are absorbed in their own other children. ards, children start to play with other children; they have developed ogether; they often make up games together, such as being a		
Early Midd Aduli		By these life stages most adults have a good range of general knowledge. They use this knowledge and	Adoles	scence	<ul> <li>People become more independent and build r</li> <li>Social development closely linked to emotions</li> <li>Often strongly influenced by peers – 'peer grown's peers' of the strongly influenced by peers' peer grown's peers' peer grown's peers' pee</li></ul>	S		
		experience to solve problems that they come across in their personal and work lives.		bod	<ul> <li>Increased independence means greater control of decisions about informal relationships.</li> <li>People may be developing emotional and social ties with partners and their own children.</li> <li>Social life often centred on the family but social skills are required to build and maintain formal relationships.</li> </ul>			
Later adult	hood	During this life stage people continue to learn and develop intellectually, however, their speed of thinking and	Middle adulthc		<ul> <li>Children have often left home, but there are lii</li> <li>Social circles may expand through travel, spe</li> </ul>	kely to still be strong family relationships. nding more time on hobbies or joining new groups.		
€ຳ		however, their speed of thinking and memory may decline. This may affect their ability to think through problems and make logical decisions.	Later adultho	bod		social time with family and friends or join new groups. gin to feel isolated if they struggle to get out or if partners and		

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAA

What we are learning this term:			F. How do humans develop emotionally (E)? Explain each.			
		umans develop intellectually (I)? umans develop emotionally (E)?	Infancy and Early Childhood			Adolescence and adulthood
G.	How do hu	imans develop socially (S)?	Bonding and Attachment			Self-image and Self-esteem
Е.	How do h	numans develop intellectually (I)?				
Infar	псу					
			<u>Securi</u>	<u>ty</u>		Security
F	<b>J-\</b>					
			<u>Conte</u>	ntment		Contentment
Early child	/ hood		Indepe	endence		Independence
1	R					
	<b>7</b>		G. How do humans develop socially (S)?			
	-		Life St	age	Types of relationships and social development	
Ado	escence		Infancy	/		
1			Early			
			childho	DOQ		
	_					
Earl	/ and		Adoles	cence		
Midd	Middle Adulthood					
	$\mathcal{R}$		Early adultho	bod		
Late	r thood		Middle			
uuui			adultho	bod		
			Later adultho	bod		

## What we are learning this term:

- H. Key words
- I. How do physical factors affect development?
- J. How does lifestyle affect development?
- K. How do social and cultural factors affect development?
- L. How do relationships and isolation affect development?
- M. How do economic factors affect development?

H Key words:			
Genetic inheritance	Genes the person inherits from their parents		
Genetic disorders	Health conditions that are passed on from parent to child through their genes. e.g. cystic fibrosis		
Lifestyle Choices	Include the food you eat and how much exercise you do. They also include whether you smoke, drink alcohol or take illegal drugs.		
Appearance	The way that someone or something looks		
Factor	A circumstance, fact, or influence that contributes to a result		
Gender role	The role and responsibilities determined by a person's gender.		
Culture	ideas, customs, and social behaviour.		
Role models	Someone a person admires and strives to be like.		
Social Isolation	Lack of contact with other people		
Material possessions	Things that are owned by an individual		
Economic	To do with person's wealth and income.		

	I.	How do	physical factors affect developmen	nt?						
nent?			Genetic Disorders		Disease and Illness					
t st	Physical Develop		A person's physical build can affect abilities. Inherited diseases may affe and stamina needed to take part in the	ect strength	May affect the rate of growth in infancy and childhood. Could affect the process of puberty. Could cause tiredness and/or mobility problems. Could limit of prevent participation in physical activity.					
oment?	Intellect Develop		Some genetically inherited diseases missed schooling, or have a direct ir learning – conditions such as Edwar impact learning.	mpact on	School, college, university, work or training could be missed. Memory and concentration could be affected.					
from their passed on	Emotion Develop		Physical appearance affects how ind themselves (self-image), and how o to them impacts on their confidence wellbeing.	thers respond	May cause worry and/or stress. Individuals may develop negative self-esteem. Could lead to feelings of isolation.					
gh their	Social Develop	ment	Physical characteristics or disease r opportunities or confidence in buildin and becoming independent.		May cause difficulty in having opportunities to socialize with other and build wider relationships.					
nd how much o include										
alcohol or	J. How does lifestyle affect development?									
something	Lifestyle	choices i	nclude; diet, exercise, alcohol, smokir	ng, sexual relatio	nships and illegal drugs, appearance.					
fluence that	<ul><li>Healt</li><li>Posit</li></ul>			Negative lifestyle choices lead to:         • Being overweight or underweight         • Lack of energy         • Ill health						
es gender.		i health tional secu	rity	Sexually	self-image transmitted diseases (STDs) ed pregnancy					
l behaviour.			cludes: body shape, facial features, ha		sonal hygiene and our clothing.					
es and strives	Our appearance can affect the way we view ourselves- self-image         Positive self-image:         • Feel good about yourself.         • Healthy hair, skin, nails and teeth         • Big social circle.									
people										
an individual	• High	self-esteer self-confid	n. <b>I. J</b>	• Can • Can	lead to anxiety or depression lead to self-harm					
h and income.				-	ative impact on building relationships- social circle reases.					
				I						

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAA

What we are lear	ning this term:	I.	How do	physical factors affect developm	ent?		
J. How does life K. How do socia development' L. How do relati development'	onships and isolation affect	Physical Develop Intellect Develop	ment ual	Genetic Disorder	<u>'s</u>	Disease and Illne	<u>ss</u>
H Key words:							
Genetic inheritance Genetic disorders		Emotion Develop					
		Social Develop	ment				
Lifestyle Choices				s lifestyle affect development?	king sexual	I relationships and illegal drugs, appearance	e
Appearance				choices lead to:		tive lifestyle choices lead to:	
Factor		•   •   •		الح	   :   :		V <sup></sup>
Gender role		•			•		
Culture		Our appe	earance in earance ca	cludes: body shape, facial features, in affect the way we view ourselves-	, hair and na - self-image	ails, personal hygiene and our clothing.	
Role models			self-imag		<u> </u>	Negative self-image	L.
Social Isolation		•					ν
Material possessions		•			•		
Economic					•		

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAA

K How do social and c development	ultural factors affect	What we are learning this term:					
<ul><li>religion because it affected</li><li>Values: how they behave</li></ul>	9	K. L. M.	L. How do relationships and isolation affect development?				
Lifestyle choices: diet, a     Positive affects of a     postative affects of a	Negative affects of a persons	L	How do relationships and isolation affect development?	м	How do economic fa	actors affect development	
<ul> <li>persons culture/religion:</li> <li>A sense of security and belonging from sharing the same values and beliefs with others.</li> <li>Good self-esteem</li> </ul>	<ul> <li><u>culture/religion:</u></li> <li>Feeing discriminated against by people who do not share their religion/culture which leads to low self-image</li> <li>Feeing excluded and</li> </ul>	1	In adolescence, young people often argue with parents because they want more independence- negative affect on family relationships- can lead to isolation from them.	give fam	ing enough money is individuals and their ilies feeling of content security	Not having enough money causes stress and anxiety.	
through being accepted and valued by others	isolated because their needs like diet, are not catered for.	2	In later life, older people might need to rely on their children for support. This then has a positive affect on their development because all their need are catered for.	mea	ing enough money ans that the whole ily is eating healthy.	Not having enough money can mean that the family is not about to eat well balanced diet, and this has a negative	
<b>Community</b> refers to: local area where people live, school, religious group or hobby clubs. They have common values and goals.		3	Relationships are important because they provide emotional security, contentment and positive self- esteem.		effect on their physical development		
<ul> <li>Belonging to a community:</li> <li>Brings sense of belonging essential for emotional development.</li> </ul>	<ul> <li>Brings sense of belonging essential for emotional development.</li> <li><u>community:</u></li> <li>Minimal contact with others- isolation</li> </ul>		The breakdown of personal relationships can have a negative effect on persons PIES development:	eno ther	Elderly people rely on state pension to live which is no enough and have to cut down on travel, shopping, bills therefore it speeds their aging process and lead to health decline.		
Building and maintaining relationships- social development	<ul> <li>Anxiety leading to depression</li> <li>Making negative lifestyle</li> </ul>	Low self-esteem, loss of confidence, stress.			ng in good housing open spaces:	Living in a poor housing with cramped and damp	
<ul> <li>development</li> <li>Feeling of security.</li> <li>Increases self-image and self-confidence</li> <li>Making negative lifestyle choices</li> <li>Feeling less secure</li> <li>Difficulty in building relationships</li> <li>Slow self-image and</li> </ul>	5	Isolation can happen when individuals do not have the opportunity of regular contact with others. They have no one to share their feelings, thoughts and worries with resulting in feeling insecure and anxious.	•	Feeling good about hemselves Be more likely to stay healthy, Space to take exercise Feel safe ad secure	<ul> <li><u>conditions:</u></li> <li>Have low self-esteem and self-image</li> <li>Be more likely to experience ill health</li> <li>Be lesson likely to</li> </ul>		
Self-confidence Traditionally, men and women had distinctive responsibilities and expectations which for their gender called <b>gender</b> <b>roles</b> . However, nowadays UK equality legislation stops		6	Isolation can happen because they live alone, are unemployed or retired, are discriminated against or have an illness or a disability.	•	Warmth	exercise <ul> <li>Anxious and stressed.</li> </ul>	
<ul> <li>people being discriminated against because of their gender.</li> <li>What happens when people face discrimination because of gender: <ul> <li>They might be excluded from a group</li> <li>They may be refused promotion at work</li> <li>They may be expected to carry out a particular role</li> <li>They may be paid less.</li> </ul> </li> </ul>			People have role models- infants learn by copying others, and adolescence base their identity on their role models. Role models can influence how people see themselves compared to others and their lifestyle chices0 can be positive or negative.	new pos pers bec mor	erial possession like a phone or coat has a itive effect on the sons development ause they might have e friends as they look r, high self-image.	Not having a phone or the newest trainers can have a negative affect in the persons self-image and self-esteem. They might feel isolated from others.	

#### Year 10 BTEC Health and Social Care- Component 1: Human Lifespan Development. LAA Κ How do social and cultural factors affect What we are learning this term: development K. How do social and cultural factors affect development? Development can be influenced by the persons culture or How do relationships and isolation affect development? L. religion because it affected their: M. How do economic factors affect development? Values: how they behave Lifestyle choices: diet, appearance ٠ How do relationships and isolation affect L Μ How do economic factors affect development development? Positive affects of a Negative affects of a persons persons culture/religion: culture/religion: Not having enough Having enough money.... . 1 money ..... 2 Having enough money Not having enough means that .... money can mean that ... Community refers to: 3 Elderly people rely on state pension to live which is not Not belonging to a Belonging to a community: enough and have to cut down on travel, shopping, bills, community: therefore it speeds their aging process and lead to 4 • health decline. Living in good housing Living in a poor housing with cramped and damp with open spaces: conditions: 5 • . 6 Traditionally, men and women had distinctive responsibilities and expectations which for their gender called gender ٠ roles. However, nowadays UK equality legislation stops Material possession like a Not having a phone or people being discriminated against because of their gender. new phone or coat has a the newest trainers can 7 have a negative affect What happens when people face discrimination because of positive effect on the persons development on Because gender: because.....

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAB

What we are	learning this term:	0.	How do people deal with life events?			
N. What are O. How do p	life events? eople deal with life events?	Individual	<ul> <li>The effects of life events vary from person to person based on how they deal with their new situation.</li> <li>Some people react to able to react to life events positively, others find it more difficult due to a range of factors.</li> </ul>			
supported	ealing with life events d? re life events?	Factors	<ul> <li>Factors that may affect how people cope with life events: age, other life events happening at the same time, the support they have, their disposition (their mood, attitude and general nature), their self-esteem, their resilience (how quickly they recover).</li> </ul>			
N. What a	ire me events :	Adapting	Adapt – to adjust to new conditions or circumstances.			
Life Events	Life events are expected or unexpected events that can		Expected on unexpected life events can often force people to make changes to their lives. Individuals must find their own way to adapt to the changes that life throws at them.			
	affect development. Examples include starting nursery, getting married or becoming ill.	Resilience	<ul> <li>Resilience – a person's ability to come to terms with, and adapt to, events that happen in life.</li> <li>Resilience is stronger in people who have a positive outlook on life, accept that change happens, has supportive family and friends and plans for expected life events.</li> </ul>			
Expected Life Events	Expected life events are life events that are likely to happen. Examples include	Time	<ul> <li>Sometimes people need a long time to adapt to unexpected life events.</li> <li>It can take time for people to move on from and accept difficult changes in their life.</li> </ul>			
	starting primary school aged four and secondary school	Ρ.	How is dealing with life events supported?			
Unexpected	aged 11. Unexpected life events are	Types of Support	How this helps individuals deal with life events			
Life Events			Emotional support is needed to help individuals deal with all life events – expected and unexpected. Having someone to talk to helps people feel secure and adapt to change. Sometimes individuals can find this support in family and friends or professionals to process difficult life events – such as bereavement.			
Description     Description       Physical Events     Physical events are events that make changes to your body,		Information and Advice	Life events, particularly unexpected ones, can cause people to feel like they do not know what to do. Information and advice can help people to have a better understanding of their situation, which allows them to deal with it more successfully. Information and advice help them know where to go for help, the choices than are available to them and how to make healthy choices.			
	physical health and mobility. Examples include illnesses such as diabetes and injuries and accidents such as car accidents.		<ul> <li>Financial help – an individual may need money to help them adapt to a life change i.e. money to pay for a stair lift if t mobility has been effected.</li> <li>Childcare – an individual may need support looking after their children i.e. a lone parent after a divorce that needs to to work.</li> </ul>			
Relationship Changes	Relationship changes could be new relationships such as the		<ul> <li>Transport – an individual may need support with transport if they have mobility problems i.e. a car could be adapted to support a person who has had an accident and can no longer walk.</li> </ul>			
enangee	birth of a sibling, a new friendship or romantic relationship. Relationship	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.			
changes can also be changed to existing relationships su as divorce.         Life       Life circumstances are		Professional 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 options, act advice and information or change their lifestic			
Circumstance s	different situations that arise in our life that we must deal with. Examples include redundancy (losing a job), moving house or retirement (finishing work in later adulthood).	Voluntary Support	and emotions, get advice and information or change their lifestyle. 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.			

# Year 10 BTEC Health and Social Care- <u>Component 1</u>: Human Lifespan Development. LAB

What we are learning this term:			О.	How do people deal with life events?
0. H	low do p	life events? eople deal with life events? ealing with life events	Individual	
s	upportec	1?	Factors	
N.	What a	re life events?	Adapting	
Life Ev	vents		Resilience	
Expec	ted Life		Time	
Events	6		P.	How is dealing with life events supported?
			Types of Support	How this helps individuals deal with life events
Unexpected Life Events			Emotional Support	
Physic			Information and Advice	
			Practical Help	
Relatio Chang				
enang	,		Informal Support	
			Professional Support	
Life Circun s	nstance		Voluntary Support	

