



**Huish Episcopi Academy**

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# Knowledge Organisers

## Year 10

### Spring Term A

Name:

Tutor Group:

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Respect

• Ambition

• Resilience

## Year 10 English Literature Knowledge Organiser – Power and Conflict Poetry

<b>Themes:</b>	Conflict, Suffering, Reality of War
<b>Context:</b>	Intrigued by job of recording horrific events Location is ambiguous and universal
<b>Form/structure:</b>	Enjambment – reinforces the disorder and confusion. Rhyme reinforces the idea that he is trying to bring order to chaos Contrasts: imagery of rural England and nightmare war zones
<b>Images/language</b>	'all flesh is grass' 'Running children...nightmare heat' 'he has a job to do'

### War Photographer

<b>Themes:</b>	Power of Nature, Fear
<b>Context:</b>	Relates to 'The Troubles' in Northern Ireland
<b>Form/structure:</b>	Blank verse and enjambment = conversational and anecdotal -'We' - first person plural creates community, and 'You' (direct address) to immerse reader -Three sections: Confidence, Fear, Calm before storm
<b>Images/language</b>	'tame cat turned savage' 'Exploding comfortably'

### Storm on the Island

<b>Themes:</b>	Conflict, Suffering, Reality of War, Patriotism
<b>Context:</b>	Controversial message for Victorian audience
<b>Form/structure:</b>	Ballad - a form of poetry to remember history 6 verses First stanza tight structure= strict cavalry formation. Structure loosens = chaos of battle Rhythm = horses galloping and increases pace. -Repetition emphasises huge loss.
<b>Images/language:</b>	'valley of death' 'jaws of death' 'honour the...noble'

### Charge of the Light Brigade

<b>Themes:</b>	Conflict, Suffering, Nature, Reality of War, Patriotism
<b>Context:</b>	Owen was a soldier Wanted to highlight tragedy of war He had a strong sense of duty
<b>Form/structure:</b>	Motif of Cold imagery conveys Suffering -Repetition of "but nothing happens" creates circular structure = never ending -Strict rhyme scheme ABBA= monotony.
<b>Images/language:</b>	'Our brains ache' 'the merciless iced east winds that knive us...' 'we' 'our' pronouns - shared

### Exposure

<b>Themes:</b>	Conflict, suffering, reality of war
<b>Context:</b>	Poems of survivors Increased awareness of PTSD
<b>Form/structure:</b>	Monologue First 4 stanzas – in Iraq Last 3 stanzas - at home Repetition of 'probably armed, possibly not'
<b>Images/language:</b>	'his bloody life in my bloody hands' 'dug in behind enemy lines'

### Remains

<b>Themes:</b>	Power of Nature Decay Pride
<b>Context:</b>	Shelley was a Romantic poet
<b>Form/structure:</b>	Unconventional sonnet (14 lines) First 8 lines - describes statue Final 2 lines - huge and everlasting (infinite) desert
<b>Images/language:</b>	'sneer' 'cold command' 'lone and level sands'

### Ozymandias

<b>Themes:</b>	Power, Protest, Identity, Childhood
<b>Context:</b>	Poet born in Caribbean and moved to the UK. -His poetry challenges racism and prejudice.
<b>Form/structure:</b>	Dramatic monologue Black history sections arranged as serious lessons to be learned; 'traditional history' as nursery rhymes Lacks punctuation = breaks rules
<b>Images/language:</b>	Repetition of "Dem tell me": frustration. 'I carving out me identity'

### Tissue

### Checking Out Me History

## Year 10 English Literature Knowledge Organiser – Power and Conflict Poetry

<b>Themes:</b>	Power Pride Control/Status/Jealousy
<b>Context:</b>	Inspired by Italian duke Wife died suspiciously
<b>Form/structure:</b>	Dramatic monologue Sounds like a conversation Enjambment - rambling
<b>Images/language:</b>	'As if she was alive' 'I gave commands, all smiles stood'
<b>Themes:</b>	Power, inequality, Loss, Anger
<b>Context:</b>	Time of poverty Questioned church and government
<b>Form/structure:</b>	Dramatic monologue Simple ABAB rhyme scheme First 2 stanzas - focus on people 3rd stanza - institutions
<b>Images/language:</b>	'Marks of weakness, marks of woe' 'Blood down palace walls'

### My Last Duchess

### London

### Prelude

<b>Themes:</b>	Power of Nature Fear Childhood
<b>Context:</b>	Romantic poet Autobiographical
<b>Form/structure:</b>	First person narrative Regular rhythm 3 sections: 1 - confident 2 - dark and fearful 3 - reflective
<b>Images/language:</b>	'troubled pleasure' 'huge peak, black and huge'

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<b>Themes:</b>	Conflict, power, patriotism, nature
<b>Context:</b>	Cowardice or surrender brought shame in Japan
<b>Form/structure:</b>	Narrative 3rd person speaker First 5 stanza – he leaves for mission Final 2 stanzas - consequences
<b>Images/language:</b>	'fish flashing silver' 'As if he no longer existed' 'no longer the father we loved'

### Kamikaze

<b>Themes:</b>	Conflict, Power, Reality of War, Nature, Bravery, Patriotism
<b>Context:</b>	Likely set in World War 1. Hughes' father had survived battle in WW1 Contrast between the idealism of patriotism and the reality of fighting and killing
<b>Form/structure:</b>	Starts 'in media res': to convey shock and pace. Enjambment = momentum of the charge. Time stands still in the second stanza to convey the soldier's reflection Contrasts the visual and sound imagery of battle = confusion
<b>Images/language:</b>	'cold clockwork of the stars and nations' 'The patriotic tear that brimmed in his eye Sweating like molten iron'

### Bayonet Charge

<b>Themes:</b>	Conflict, Power, Identity, Protest, Bravery, Childhood
<b>Context:</b>	The home country of the speaker is not revealed – gives a timeless relevance. Relevant to many people in current climate
<b>Form/structure:</b>	First person. The last line of each stanza is the same: "sunlight": reinforces positivity of the city and poem. The first two stanzas have lots of enjambment –conveys freedom. The final stanza has lots of full-stops – conveys she is now trapped.
<b>Images/language:</b>	'I left it as a child' 'I am branded by an impression of sunlight' Personifies city: 'I comb its hair and love its shining eyes' 'My city takes me dancing' 'My city hides behind me'

### Emigree

<b>Themes:</b>	Bravery, Reality of War, Suffering, Childhood
<b>Context:</b>	Conflict is deliberately ambiguous to give the poem a timeless relevance to all mothers and families. Critical tone; soldiers can become intoxicated by glamour of military
<b>Form/structure:</b>	This is an Elegy, a poem of mourning. Free verse, stream of consciousness addressing her son directly – poignant No rhyme scheme makes it melancholic Enjambment gives it an anecdotal tone
<b>Images/language:</b>	War "blockade", "bandaged", "reinforcements" Childhood "play at being Eskimos", "bedroom" Mother's P.O.V "I was brave, as I walked with you, to the front door"

### Poppies

## Huish Episcopi Academy Year 10 Biology Knowledge Organiser B4 Bioenergetics

Photosynthesis	
1	Chemical reaction that takes place in chloroplasts in leaves. Carbon dioxide + water → glucose + oxygen $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$
2	Endothermic Reaction that absorbs/takes in energy e.g. photosynthesis
3	Glucose Product of photosynthesis
4	Limiting factor The factor that prevents the rate of photosynthesis from increasing
5	Examples of limiting factors Concentration of carbon dioxide, light intensity, temperature, amount of chlorophyll
6	Chloroplast Organelle in a plant cell where photosynthesis takes place
7	Chlorophyll Green pigment that absorbs light energy for photosynthesis
8	Inverse square law As distance from the light source increases, the light intensity decreases in a non-linear relationship

### Uses of glucose from photosynthesis

1	Converted into starch for storage
2	Used to produce fats and oils for storage
3	Used to produce cellulose, which strengthens the cell wall
4	Used to produce amino acids for protein synthesis (to produce proteins, plants also use nitrate ions that are absorbed from the soil)
5	Used for respiration

Respiration and metabolism	
1	Respiration A chemical process in all cells that releases energy from glucose.
2	Aerobic respiration Respiration that uses oxygen to release large amounts of energy from glucose, occurs in the mitochondria.
3	Anaerobic respiration Respiration that does not use oxygen and releases less energy from glucose, occurs in the cytoplasm.
4	Oxygen debt (HT only) The amount of extra oxygen the body needs after exercise to react with accumulated lactic acid and remove it from the cells.
5	Aerobic respiration Glucose + oxygen → carbon dioxide + water
6	Anaerobic respiration (muscles – animals) $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$ Glucose → lactic acid
7	Anaerobic respiration (plants and yeast) Glucose → Carbon dioxide + ethanol
8	Fermentation Ethanol produced from anaerobic respiration in plants and yeast is used to make alcoholic drinks such as beer, wine, cider and spirits.
9	Metabolism Sum of all the reactions in a cell or body.

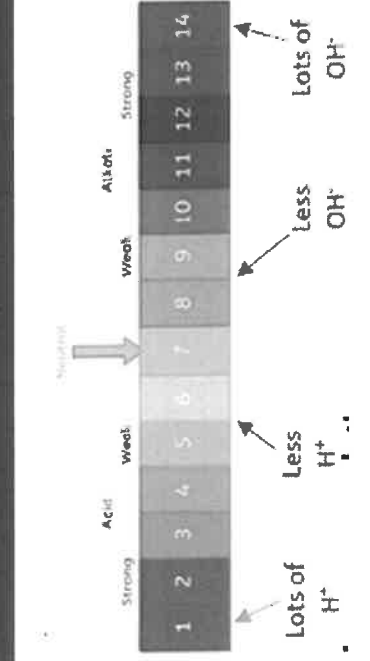


## Huish Episcopi Academy Year 10 CHEMISTRY Knowledge Organiser C4 CHEMICAL CHANGES

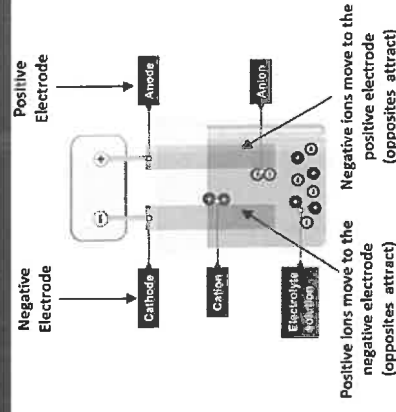
1. ACIDS AND ALKALIS	
1	Acids Contain H <sup>+</sup> ions, have a pH < 7
2	Base Any chemical capable of neutralising an acid
3	Alkalis Contain OH <sup>-</sup> ions, have a pH > 7 (max 14)
4	Neutral pH = 7
5	Neutralisation Reaction between acid and alkali which produces a salt and water
6	Indicator Changes colour in acids or alkalis. E.g. universal indicator
7	Crystallisation Separation of salt from solution. Evaporate water partially to concentrate solution. Leave to cool to form crystals.
8	Strong/weak acid (HT only) Hydrogen ions fully dissociate e.g. nitric, hydrochloric and sulphuric acids / hydrogen ions only partially dissociate e.g. ethanoic, citric and carbonic acids
9	Concentration (HT only) Amount of solute dissolved in a given volume (dilute/concentrated). Measured in g/dm <sup>3</sup> or mol/dm <sup>3</sup>

2. ELECTROLYSIS	
1	Electrolysis The breaking down of a substance using electricity. Used if element is more reactive than carbon
2	Electrolyte The solution which is being broken down during electrolysis. Must be molten (melted) or aqueous to allow ions (charged particles) to move.
3	Aqueous Dissolved in water (contains H <sup>+</sup> and OH <sup>-</sup> ions)
4	Oxidation The loss of electrons or gaining of oxygen
5	Reduction The gain of electrons or the loss of oxygen
6	Anode The positive electrode
7	Cathode The negative electrode
8	Anion Ion that goes to anode (- ion)
9	Redox A reaction in which reduction and oxidation occur at the same time
10	Cryolite Substance added to aluminium oxide before electrolysis to reduce the melting point

### pH SCALE



### ELECTROLYSIS CELL



## Huish Episcopi Academy Year 10 PHYSICS Knowledge Organiser Energy (P2)

P2.1 Electrical charge and current	
1	Electrical current Flow of electrical charge. The size of the electrical current is the rate of flow of electrical charge.
2	Charge flow Charge flow, current and time are linked by the equation: $Q = I \times t$
3	Potential difference For current to flow through a circuit there must be a source of potential difference.
4	Resistance Resistance opposes the flow of electrical current
5	Current, resistance and potential difference Current, potential difference and resistance can be calculated using the equation: $V = I \times R$

P2.3 Series and parallel circuits	
1	Series circuits <ul style="list-style-type: none"> <li>The current is the same in each component</li> <li>Total potential difference of the power supply is shared between the components</li> </ul>
2	Parallel circuits <ul style="list-style-type: none"> <li>The potential difference across each component is the same</li> <li>The total current through the whole circuit is the sum of the current through the separate components</li> </ul>
3	Resistors in series <ul style="list-style-type: none"> <li>The total resistance of the components is the sum of the individual resistances</li> <li><math>R_T = R_1 + R_2 + R_3 \dots</math></li> </ul>
4	Resistors in parallel The total resistance of the components is less than the resistance of the smallest individual resistor

### UNIT P2.2 Circuit symbols and component characteristics

Current voltage characteristics for ohmic resistor, filament lamp and semiconductor diode

1. Resistor      2. Bulb      3. Diode

P2.4 Domestic uses and safety	
1	Mains electricity Alternating current with a frequency of 50Hz and a potential difference of 230V
2	Domestic appliances <ul style="list-style-type: none"> <li>Most appliances connected using a three-core cable</li> <li>Live wire – brown, Neutral wire – blue, Earth wire – green and yellow</li> </ul>
3	Function of the three-core cable <ul style="list-style-type: none"> <li>Live wire carries alternating potential difference</li> <li>Neutral wire completes the circuit</li> <li>Earth wire is for safety and stops the appliance becoming live</li> </ul>

P2.4 Energy transfers	
1	<p>Power</p> <ul style="list-style-type: none"> <li>Power is the rate of energy transfer</li> <li>Power is measured in Watts</li> <li>Electrical power can be calculated in two ways:               <ul style="list-style-type: none"> <li><math>P = V \times I</math></li> <li><math>P = I^2 \times R</math></li> </ul> </li> </ul>
2	<p>Energy transfer</p> <p>The amount of energy transferred by an appliance depends on the power of the appliance and the time it is used for</p> <ul style="list-style-type: none"> <li>Energy is measured in Joules</li> <li><math>E = P \times t</math></li> </ul>
3	<p>Calculating energy transfer</p>

P2.5 The National Grid	
1	<p>What is the National Grid</p> <p>The National Grid is a system of cables and transformers linking power stations to customers</p>
2	<p>Why are transformers used?</p> <ul style="list-style-type: none"> <li>Step up transformers increase the potential difference for transmission across the National Grid</li> <li>High voltages lead to low currents resulting in less energy loss in the overhead cables</li> <li>Step down transformers reduce the voltage to safe levels before electricity is used by customers</li> </ul>

P2.6 Quantities and units		
Quantity	Symbol	Unit
1	I	Amps (A)
2	V	Volts (V)
3	Q	Coulomb (C)
4	R	Ohms ( $\Omega$ )
5	P	Watts (W)
6	E	Joules (J)

## Huish Episcopi Academy Year 10 RE Knowledge Organiser ISLAM - Beliefs

Nature of God	
1	<b>Tawhid</b> The oneness of God. Not divided into other beings. Not created. No children. Unique
2	<b>99 Beautiful names</b> King, protector, light, eternal
3	<b>Omnipotent</b> All-powerful and all knowing
4	<b>Transcendent</b> Beyond and outside the universe. Existed before the universe.
5	<b>Immanent</b> God is present everywhere. God is within all things. God is involved with life on earth.
6	<b>Benevolent</b> All loving – all good. Generosity seen in his gift to humans of everything that they need.
7	<b>Fair and Just</b> Treats everyone fairly and justly. Will judge everyone. Will reward or punish people.

Risalah - Prophethood	
1	<b>Adam</b> <ul style="list-style-type: none"> <li>• Made from the “<b>soil of many colours</b>”</li> <li>• Built the first <b>Kaaba</b></li> <li>• <b>Forgiven</b> by Allah for the first sin</li> </ul>
2	<b>Ibrahim</b> <ul style="list-style-type: none"> <li>• Destroyed polytheist idols &amp; rescued by Allah</li> <li>• Willing to <b>sacrifice</b> his son (<b>Isma'il</b>) for Allah</li> <li>• <b>Rebuilt</b> the Kaaba- footprints are there</li> </ul>
3	<b>Isa</b> <ul style="list-style-type: none"> <li>• <b>Not</b> God- just a man.</li> <li>• Performed <b>miracles</b>- spoke to Maryam (mother) at birth to say He is a “servant of God”, breathed life into clay birds</li> <li>• Will return to defeat the “false messiah”</li> </ul>
4	<b>Muhammad</b> <ul style="list-style-type: none"> <li>• Orphaned at a young age, married Khadija.</li> <li>• Spread Islam in a polytheistic Mecca.</li> <li>• Jibril revealed Qur'an to him over <b>23</b> years.</li> <li>• His sayings are recorded in the <b>Hadith</b>.</li> <li>• Known as the ‘<b>seal of the prophets</b>’</li> </ul>

Malaikah - Angels	
1	<b>Jibril</b> <b>Revelation</b> –reveals <b>good news</b> (e.g. <b>Qur'an</b> ) Has seen <b>beauty</b> of Paradise and <b>horror</b> of Hell <b>Cleansed</b> Muhammad's heart on Night Journey
2	<b>Mikail</b> <b>'Nourisher'</b> - nourishes <b>plants</b> with rain Nourishes <b>human souls</b> by protecting us Keeps <b>Shaytan</b> (satan) out of <b>Paradise</b>
3	<b>Israfil</b> Will blow <b>horn in Jerusalem</b> to start <b>Judgement Day</b> All humans will gather on <b>Mount Arafat</b>
4	<b>Raqib and Atid</b> <b>' Noble recorders'</b> Record our deeds and niyyah (thoughts).

Akhirah - Afterlife	
1	<b>BARZAKH</b> Soul taken by <b>Azrail</b> to barzakh.
2	<b>3 QUESTIONS</b> Two angels ask <b>3 questions- who is your prophet/ god/your religion?</b> Determines barzakh <b>comfort</b>
3	<b>JUDGEMENT</b> <b>Raqib and Atid</b> present us with our book, then read aloud and weighed.
4	<b>AS-SIRAT</b> Bridge over <b>Jahannam</b> into <b>Jannah- 'thin as a hair /sharp as a sword'</b>
5	<b>JANNAH</b> Garden as eternal reward <b>'Rivers of milk and honey'</b> 7 stages of Heaven <b>1<sup>st</sup> stage= water (Adam)</b> <b>7<sup>th</sup> stage = divine light (Abraham)</b>
6	<b>JAHHANNAM</b> Physical/mental torture “Garments of fire” 7 stages of torture- darkness Potentially <b>just temporary</b>



## Huish Episcopi Academy Year 10 History Knowledge Organiser – Modern Medicine, c1900-present

Key Terms	
1	Hereditary disease
2	Diseases passed from parent to child
3	Carries genetic information
4	Complete set of DNA for building an organism
5	Chemicals which killed bacteria e.g. Salvarsan 606 and Prontosil
6	Medical care paid for by taxation
7	The first antibiotic
8	Waves of radiation used to shrink tumours
9	Drugs which kill cancer cells
10	Scans to see and diagnose illness inside the body
11	Very precise surgery
12	Tiny cameras allow surgery to happen through small incisions
13	A team which decoded the human genome to look for hereditary diseases
14	Cancer gene responsible for breast cancer
15	Removal of one or both breasts
16	A type of drug-resistant bacteria

Key Dates		
16	1911	National Insurance Act
17	1928	Fleming accidentally discovered penicillin
18	1931	Electron microscope invented
19	1932	Prontosil discovered
20	1940	Florey and Chain treat a postman with penicillin
21	1942	Diphtheria vaccine created
22	1945	Penicillin in general use
23	1948	NHS established
24	1951	DNA discovered by Franklin and Wilkins
25	1987	'Don't Die of Ignorance' HIV campaign
26	1990	Human Genome Project
27	2007	Smoking ban inside public places
28	2009	Change4Life campaign to combat obesity

## Huish Episcopi Academy Year 10 History Knowledge Organiser – Medicine on the Western Front

Key Terms		Key Dates	
<b>1</b>	Chain of evacuation	The process of getting injured soldiers away from the front line to get medical attention	<b>16</b> 1914
<b>2</b>	Regimental Aid Posts	200m away from the front where first aid was given	<b>17</b> 1914
<b>3</b>	Dressing Station	Run by RAMC staff and called the Field Ambulance	<b>18</b> 1914
<b>4</b>	Casualty Clearing Station	Place where critical injuries surgery happened	<b>19</b> 1914
<b>5</b>	Base Hospital	Hospitals near the coast	<b>20</b> 1915
<b>6</b>	FANY	Nurses	<b>21</b> 1915
<b>7</b>	Fracture	Break	<b>22</b> 1915
<b>8</b>	Western Front	Fighting in France and Belgium	<b>23</b> 1916
<b>9</b>	Attrition	Continual bombardment with bombs	<b>24</b> 1916
<b>10</b>	British Expeditionary Force	British Army sent to the Western Front	<b>25</b> 1917
<b>11</b>	Shrapnel	A piece of metal which is launched by a bomb explosion	<b>26</b> 1917
<b>12</b>	Shell shock	PTSD	
<b>13</b>	Trench foot	Damage to the feet caused by moisture	
<b>14</b>	Trench fever	Infection transmitted by lice	
<b>15</b>	Gas gangrene	A deadly bacterial infection	
		WW1 began	
		First Battle of Ypres	
		Motor ambulances sent to Western Front	
		Anti-tetanus injections used	
		Battle on Hill 60	
		First use of chlorine gas at Second Battle of Ypres	
		Gas marks, brodie helmets, whale oil and spare socks	
		FANY's begin to drive ambulances	
		Battle of the Somme	
		Battle of Arras	
		Troops deloused	



Huish Episcopi Academy Year 10 Geography Knowledge Organiser Unit 2 The living world

Ecosystems and biomes	
1	Ecosystem A natural environment and includes the plants and animals that live in an area
2	Biotic The living parts of an ecosystem
3	Abiotic The non-living parts of an ecosystem
4	Nutrient cycle How nutrients move between the stores in an ecosystem
5	Stores Litter, soil and biomass
6	Producers The plants that exist in an ecosystem
7	Decomposers Break down dead matter
8	Temperate forest The forests found in the UK with climates that are not too hot or cold
9	Tundra The cold climate found below the poles with little life
10	Savannah Grasslands found in Africa with clear wet and dry seasons
11	Polar The extreme cold environment found at the north and south pole
12	Latitude The position of ecosystems is determined by where they are located in planet earth

The tropical rainforest	
1	Forest floor The lowest level where only 2% of sunlight reaches
2	Under canopy The second level, shaded by the canopy
3	Canopy Third level where most life is found
4	Emergent Very tall trees that break through the canopy
5	Infertile soil Because nutrients are removed so quickly by the plants
6	Leaching When nutrients are washed out of the soil
7	Soil erosion When roots no longer hold the soil together it washes away
8	Drip tip leaves So rainfall can be shed quickly
9	Epiphytes Plants that grow on other plants (air plants)
10	Buttress roots Large, wide roots that stabilise tall trees
11	Deforestation When trees are cut down for economic gain
12	Transpiration Evaporation from plants and leaves that means the forest makes its own rain.

La familia	
1	abuelo/a (m/f) grandfather/grandmother
2	bebé (m) baby
3	cariño (m) affection, love
4	familia (f) family
5	hermano/a (m/f) brother / sister
6	hijo/a (m/f) daughter / son / child
7	madre / mamá (f) mother, mum
8	marido (m) husband
9	mujer (f) woman, wife
10	padre / papa (m) father, parent, dad
11	primo /a (m/f) cousin
12	tío/a (m/f) uncle / aunt
13	-astro step-
14	mi(s) my (plural)

Soler – always followed by an infinitive	
1	suelo I usually
2	solemos we usually
3	solía I used to usually
4	solíamos we used to usually

¿Cómo te llevas con tu familia?	
1	discutir to argue, discuss
2	llevarse bien/mal to get along well, bad
3	confiar en* to rely on, to trust
4	cuidar* to look after
5	pelearse* to fight, argue
6	separarse* to separate, split up
7	juntarse to get together / meet
8	conocer, conocerse to know, to meet

Key irregular verbs (already conjugated)	
1	dije I said
2	quise I wanted
3	vine I came
4	podría I, he, she could
5	debería I, he, she should
6	era (I, she, he, it, one) was, used to be
7	eras you sg were, used to be
8	iba (I, she, he, it, one) went, used to go
9	ibas you sg went; used to go
10	había there was, there were
11	tenía (I, she, he, it, one) had, used to have
12	tenías you sg had, used to have

Regular verb endings - preterite tense		
	-ar verbs	-er/ir verbs
I	-é	-í
you	-aste	-iste
he/she	-ó	-ió
we	-amos	-imos
you (pl)	-asteis	-isteis
they	-aron	-ieron

Key irregular verbs - preterite tense		
	hacer – to do	ir – to go
I	hice	fui
you	hiciste	fuiste
he/she	hizo	fue
we	hicimos	fuimos
you (pl)	hicisteis	fuisteis
they	hicieron	fueron

High frequency verbs	
1	tengo I have
2	soy I am*
3	estoy I am*
4	voy I go
5	hago I do/make

Photo description	
1 hay	there is, there are
2 se puede ver	one can see
3 a la derecha	to the right, right hand
4 a la izquierda	to the left
5 en el primer plano	in the foreground
6 en el segundo plano	in the background
7 en el centro	In the centre
8 en el fondo	in the background

Adverbs	
1 normally	normalmente
2 generally	generalmente
3 quickly	rápidamente
4 slowly	lentamente
5 especially	especialmente
6 immediately	inmediatamente
7 truly	verdaderamente
8 currently	actualmente
9 really	realmente
10 originally	originalmente

To make an adverb in Spanish, take the adjective, change it to the feminine, and add **-mente**. E.g. lento – lenta – lentamente

Key verbs		
1	encontrar	to find
2	olvidar	to forget
3	tomar	to take, to have (food)
4	pedir	to ask/request
5	viajar	to travel
6	sorprender	to surprise
7	enamorarse*	to fall in love
8	equivocarse*	to be wrong
9	sentir, sentirse*	to regret, to feel
10	abrazar	to hug
11	conversar	to chat, talk
12	descubrir	to discover
13	conocer	to meet
14	chatear	to chat
15	romper	to break, to break up
16	amar	to love
17	casarse	to get married
18	considerar	to consider
19	creer	to believe
20	vestir(se)	to dress (oneself)
21	entender	to understand
22	llevar	to wear, carry
23	llorar	to cry
24	significar	to mean

Regular verb endings - imperfect tense		
	-ar verbs	-er/ir verbs
I	-aba	-ía
you	-abas	-ías
he/she	-aba	-ía
we	-ábamos	-íamos
you (pl)	-abáis	-íais
they	-aban	-ían

Irregular verbs- imperfect tense			
There are only 3!	ir – to go	ser – to be	ver – to see
I	iba	era	veía
You	ibas	eras	veías
he/she	iba	era	veía
we	íbamos	éramos	veíamos
you (pl)	ibais	erais	veíais
they	iban	eran	veían

Meal times	
1 breakfast	el desayuno
2 lunch	el amuerzo
3 dinner	la cena
4 snack	la merienda

## HEA Year 10 French Knowledge Organiser –la famille et les amis

1. Family relationships	
• S'excuser	To apologise
• s'exprimer	to express oneself
• se fier à	to rely on
• sentir; se sentir	to feel
• séparer; se séparer	to separate
• se soucier	to show concern for
• fier/fière	proud
• pareil/pareille	similar
• même si	even if
• s'amuser	to enjoy oneself
• s'entendre	to get on
• ensemble	
• heureux/heureuse	happy, lucky, fortunate
• patient(e)	patient
• sérieux/sérieuse	serious, important
• strict/stricte	strict
• triste	sad
• quand	when
• ne ... jamais	never, not ever
• ne ... rien	nothing
• fidèle	faithful, loyal
• inquiet/inquiète	worried, anxious
• sévère	severe, strict, harsh
• cependant	however
• ne ... plus	not anymore, no longer
• rire	to laugh
• j'ai horreur de	I really hate
• je pense que	I think that
• je suis fan de	I am a fan of
• je trouve que	I find that
• anniversaire (m)	birthday
• école	school
• fête (f)	festival, party

2. My birthday	
• Venir de + infinitive	To have just
• aller	to go
• boire	to drink
• chanter	to sing
• croire	to believe
• dire	to say
• entendre	to hear
• faire la fête	to party
• finir	to finish
• partir	to leave
• prendre	to take
• recevoir	to receive
• rester	to stay
• ouvrir	to open
• pouvoir	to be able
• télécharger	to download
• argent (m)	money
• anniversaire (m)	birthday
• baskets (fpl)	trainers
• jeu (m)	game
• fatigant	tiring
• génial	great
• Passionnant	exciting

3. How to deal with difficult friendships	
• agir	To act
• combattre	to fight
• éviter de	to avoid
• expliquer	to explain
• menacer	to threaten
• raconter	to tell
• refuser de	to refuse
• fier*, fière	proud
• dépendre (de)	to depend (on)
• essayer de	to try
• cravate (f)	tie
• élève (m, f)	pupil, student
• portable	mobile phone
• victime (m, f)	victim

4. Generation gap	
• défendre	To defend, to forbid, to ban
• garder	to keep
• foyer	home
• inquiétude (f)	anxiety
• quotidien	daily
• elle-même	herself
• malgré	despite
• couper, se couper	to cut, to switch off
• travailler	to work
• égalité (f)	equality
• droit (m)	right
• progrès (m)	progress
• dur	hard, difficult
• injuste	unfair
• à mon avis	in my opinion
• encore	again, yet, still
• pire	worse

## HEA Year 10 French Knowledge Organiser – la famille et les amis

5. Memories about friends and family		6. Future plans and dreams		7. For or against marriage?		8. To stay in touch with people	
Se souvenir de	To remember		to adopt	• perte (f)	loss, waste	• ils me manquent*	I miss them
• nous avions	we used to have	• j'aurai	I will have	• fidèle	loyal, faithful	• il vaut mieux + INF*	it's better to
• vous aviez	you used to have	• j'ai envie de	I want to	• Profond(e)	deep	• courrier (m)*	mail
• ils/elles avaient	they used to have	• je serai	I will be	• de l'/d'un autre côté	on the other hand	• inconvenient (m)*	disadvantage, inconvenience
• nous étions	we used to be	• appareil (m)	device	• d'un côté*	on one hand	• auparavant*	previously, before, formerly
• vous étiez	you used to be	• métier (m)	job	• en ce qui me concerne	as far as I'm concerned	• lorsque*	when
• ils/elles étaient	they used to be	• âgé(e)	old	• il me semble que	it seems to me that	• couper	to switch off
• j'avais	I used to have	• quand je serai/aurai	When I am/have	• pourtant	yet, nonetheless	• manquer	to miss
• tu avais	you used to have	• espérer	to hope	• je dirais que	I would say that	• recevoir	to receive
• il/elle avait	he/she used to have	• habiter	to live	• il vaut mieux	it's better	• rester	to stay
• j'étais	I used to be	• me marier	to get married, to marry	• certains disent que	some people say that	• email (m)	email
• tu étais	you used to be	• penser	I'm thinking of	• avoir le droit de	to have the right to	• lettre (f)	letter
• il/elle était	he/she used to be	• rencontrer	to meet	• amour (m)	love	• voisin, voisine (m,f)	neighbour
• il/elle me manque	I miss him/her	• rêver de	I dream of	• argent (m)	money	• grâce (f) à	thanks to
• manquer	to miss	• traiter	to treat, handle, deal with	• mariage (m)	marriage, wedding	• en contact (m)	in contact, in touch
• s'entendre	to get on	• j'aimerais	I would like	• partenaire (m, f)	partner		
• se rappeler; rappeler	to recall, remind; to remember	• je vais +INF	I'm going to +verb	• essentiel	essential		
• mort(e)	dead	• je veux	I want to	• important	important		
• il y a (number) ans	(number) years ago	• je voudrais	I would like	• avant de + INF	before + verb		
		• avenir (m)	future	• sans (+ INF)	without (+ verb)		
		• enfant (m)	child	• aujourd'hui	today		
		• quelqu'un	someone				
		• bien-payé	well-paid				
		• riche	rich				
		• seul(e)	alone				
		• qui	who				
		• dans dix ans	In 10 years				

## Huish Episcopi Academy Year 10 German Knowledge Organiser – die Freizeit (Free Time)

### Beschreib deine Familie – Describe Your Family

1	Mein Bruder, der (Stefan) heißt,	My brother, who is called (Stefan),
2	Meine Schwester, die (Suzi) heißt,	My sister, who is called (Suzi)
3	Meine ... die (Suzi und Stefan) heißen,	My... Who are called (Suzu and Stefan)
4	(er/sie) hat	(he/she) has
5	(sie) haben	(they) have
6	braune/schwarze Haare	Brown/black hair
7	blonde / rote Haare	Blonde/ red hair
8	lange/ kurze Haare	Long/short hair
9	blaue / grüne / braune Augen	Blue / green / brown eyes
10	braune/schwarze Haare	Brown/black hair
11	er/sie ist	He/she is
12	sie sind	They are
13	glücklich	Happy
14	freundlich,	Friendly
15	traurig	Sad
16	lustig	funny
17	komisch	Strange
18	locker	Laid-back, relaxed
19	böse	Angry
20	ehrlich	Honest
21	ernst	Serious
22	Fleißig	Hard-working
23	unabhängig	independent
24	süß	Sweet

### Beziehungen - Relationships

1	Ich habe eine gute Beziehung zu...	I have a good relationship to...
2	Ich verstehe mich gut mit...	I get on well with...
3	...meiner + feminine (i.e.Mutter)	...my + feminine (i.e. mother)
4	...meinem + masculine (i.e. Vater)	...my + masculine (i.e. father)
5	...meinen + plural (i.e. Eltern)	...my + plural (i.e. parents)
6	wir streiten uns oft	We often argue with eachother
7	wir lachen viel zusammen	We laugh a lot together

### Vorbilder – Role Models

1	(...) ist ein gutes Vorbild	(...) is a good role model
2	gegen (Rassismus) kämpfen	To fight agains (racism)
3	die Homophobie, die Transphonie	Homophobia, transphobia
4	Minderheiten unterstützen	To support minorities
5	(Mobbing) erleben	To experience (bullying)
6	die Diskriminierung	Discrimination
7	schwul, lesbisch	Gay, lesbian
8	nicht binär	Non-binary
9	behindert	Disabled
10	die Ausbildung	Education, training
11	das Recht, die Rechte	The right
12	der Unterschied	The difference
13	(...) ist mir wichtig	(...) is important to me





## Huish Episcopi Academy Year 10 German Knowledge Organiser – die Freizeit (Free Time)

Feste - Festivals	
1	vom... bis zum... From... until...
2	am (ersten/zweiten/dritten) (Oktober) On the (first/second/third) (October)
3	es dauert (ein Tag/zwei Wochen) It lasts (one day/2 weeks)
4	man trägt traditionelle Kleidung People wear traditional clothing
5	man lacht viel People laugh lots
6	man feiert (mit Freunden) People celebrate (with friends)
7	Oktoberfest Beer festival in Munich
8	Heiliger Abend "Holy Night" (Christmas Eve)
9	Weihnachten Christmas
10	(m) Weihnachtsmarkt(-märkte) Christmas market (markets)
11	Eisfasching Winter tradition: people swim in an ice-cold lake in Berlin
12	Geschenke Presents/gifts

Letztes Jahr – Last Year (Festivals in the Past)	
1	Letzten Sommer/Winter... Last summer/winter
2	bin ich nach (Deutschland) gefahren I went to (Germany)
3	Ich habe (Oktoberfest) besucht I visited (Oktoberfest)
4	Es war wirklich prima! It was really great!
5	Ich habe (Wurst) gegessen I ate (sausage)
6	Mein Vater hat (Bier) getrunken My dad drank (beer)
7	Es gab (viele Menschen) There was/were (lots of people)
8	Ich habe/wir haben... I/we... (past)
9	...gefeiert celebrated
10	...gelacht laughed
11	...gesungen sang
12	...getanzt danced

Meiner Meinung nach... - in my opinion...	
1	Ich finde den Markt/das Fest... I find the market/festival...
2	teuer expensive
3	schlecht bad
4	denn das macht Spaß because it's fun
5	denn es ist bunt Because it's brightly coloured
6	denn es interessiert mich (nicht) Because it (doesn't) interest(s) me
7	denn es gibt zu viele Leute Because there are too many people
8	denn es ist zu laut Because it is too loud
9	denn ich mag (das Essen/die Natur) Because I like (the food/nature)

Partyzeit! - Party time!	
1	(m) Geburtstag birthday
2	(m) Silvester New Year's Eve
3	(m) Anfang Start
4	(m) Kuchen Cake
5	(nt) Neujahr new year
6	es hat Spaß gemacht it was fun

## Huish Episcopi Academy Year 10 BTEC Music Knowledge Organiser - Component 1 Key Terms

Key terms for use in Component 1	
<b>Compositional Features</b>	
1	Melody The tune / main theme and the organisation of the sequence of notes.
2	Harmony The effect created when additional notes are used to complement the melody.
3	Tonality The overall sound of a piece of music, as defined by the key in which is played (will refer to a specific scale / mode).
4	Rhythm The duration of notes and how they are organised.
5	Metre The organisation of the pulse – beats per bar and the types of beats used.
6	Tempo The speed of the piece – fast / slow / moderate or beats per minute.
7	Structure The different sections of a piece of music, and how they are organised.
<b>Sonic Features</b>	
8	Instrumentation The instruments or voices used in a piece of music.
9	Texture They layers of sound and how they are organised.
10	Dynamics The volume of the music – overall loudness / softness / gradual changes.
11	Timbre (Sonority) The quality of sound produced, either from an instrument or through effect manipulation.
12	Production The process of creating, recording and finalising a piece of music, which includes decision making about equipment and technical aspects.
<b>Other useful terms</b>	
13	DAW Digital Audio Workstation – Music Technology used for music creation and manipulation.
14	Brief To work to a set outline of instructions (in relation to practical music making)

## Huish Episcopi Academy Year 10 BTEC Music Knowledge Organiser - Component 1 Key Terms

Key terms for use in Component 1	
Production terms	
15	SoundTrap DAW used to compose / produce music
16	Looping Repetition of a music phrase or section, creating a continuous musical texture
17	Sampling Reusing part of a song and using it in a new piece.
18	Remix A new version of a piece of music which has been created by putting together the individual instrumental and vocal parts in a different way.
19	Automation Automatically performing tasks over time within a DAW, e.g. follow dynamic markings, tempo changes, panning etc.
20	Panning The placement of sounds within the stereo field e.g. left, right, central
21	EQ Equalisation – adjusting the levels of frequencies within music to achieve clear, balanced sounds.
22	Compression A tool which controls the dynamic range of the piece.
23	Reverb Simulated reverberation of sound, making the music sound like it is a space
24	Delay Time based audio effect which plays the sample back after a certain amount of time
25	Distortion An audio effect which deforms the sound, pushing the limits of EQ and compression
26	8-Bit Synthesized electronic music made with sound chips or synthesizers found in computers, machines, and video games.
27	Foley Recorded sound effects which can be added to video games after the music has been recorded.
28	Mixing The process of refining individual parts to get the correct sonic balance of sounds.
29	Exporting Downloading music from a DAW into an audio format such as mp3 or wav files.

## Huish Episcopi Academy – Year 10 Drama GCSE Knowledge Organiser – Spring Term

### Section A: Costume & Sound Terminology

1	Fit	How the costume fits the actor, eg tight, oversized
2	Condition	Conveys info about a character's circumstances eg, scruffy=poor
3	Fabric	What a costume is made of. Can indicate social status, eg a wealthy character=silk dress
4	Accessory	Something you wear or have in addition to clothing because it is decorative or useful
5	SFX	Acronym for Special Effect used for Make-up/Lighting etc
6	Diagetic	Sound expected as part of the story
7	Non-Diagetic	Sound that doesn't exist within the world of the play
8	Volume	How loud or quietly the sounds are played/performed
9	Recorded	Pre-made sound effects produced digitally
10	Live	Sounds made either on stage or off stage by actors

### Section B: Performance Skills

1	Projection	How loud or quiet your voice is
2	Pitch	How high or low (deep) your voice is
3	Pace	The speed an actor delivers their lines or performs actions
4	Emphasis	The stress placed on certain words or phrases in dialogue
5	Tone	The emotion heard in your voice
6	Gesture	Movements of the hands/arms that express ideas/emotions
7	Eye Contact	Looking direct into another character's eyes or avoiding this
8	Facial Expression	Movement of facial muscles to convey emotions/reactions
9	Posture	The way an actor holds and positions their body
10	Body Language	Non-verbal communication conveyed through movement



## Huish Episcopi Academy Year 10 GCSE PE Knowledge Organiser 1.2.a – Components of fitness

UNIT NUMBER.1 TITLE OF SUBTOPIC/OBJECTIVE		Component of Fitness	Definition	Example	Fitness Test
1	Cardiovascular endurance / stamina	The ability to continue exertion while getting energy from the aerobic system used to supply the body with energy.	<b>Example in sport:</b> running, cycling, swimming and aerobics	Cooper 12 minute run Multi stage fitness test	
2	Muscular endurance	The ability to move your body and muscles repeatedly without fatiguing.	<b>Example in sport:</b> cross country running, cycling, swimming, rugby and football	Press up test Sit-up test	
3	Speed	The ability of the body to move quickly	<b>Example in sport:</b> athletics, swimming, squash, football and basketball	30m sprint test	
4	Strength	The ability of a muscle to exert a force over a short period of time.	<b>Example in sport:</b> rugby scrum	Grip strength dynamometer test 1 repetition max (RM)	
5	Power	The ability to exert a maximal force in as short a time as possible. <i>Power = strength x speed</i>	<b>Example in sport:</b> triple jump, games such as rugby, sprinting and throwing	Standing jump test Vertical jump test	
6	Flexibility	The range of movement about a joint.	<b>Example in sport:</b> gymnastics, dance, games such as hockey and football, tennis and table tennis	Sit and reach test	
7	Agility	The ability to change direction at speed; nimbleness	<b>Example in sport:</b> trampolining, gymnastics, netball, rugby, volleyball and basketball	Illinois agility test	
8	Co-ordination	The ability to move two or more body parts under control, smoothly and efficiently.	<b>Example in sport:</b> activities include dance, racket sports, team games and martial arts	Wall throw test	
9	Reaction time	The time it takes to initiate an action or movement, or the time it takes to make a decision to move.	<b>Example in sport:</b> start of a race, the return of serve in a racket sport and team games	Ruler drop test	
10	Balance	The ability to stay upright or stay in control of body movement.	<b>Example in sport:</b> Gymnastics, dance and games such as rugby, netball and hockey	'Stork stand' test	

## Huish Episcopi Academy Year 10 D&T - Knowledge Organiser – Skills Based Projects

1. Mock NEA	
1	<p>In year 10 students in Product Design &amp; Textiles undertake a series of skills-based projects.</p> <p>The projects are effectively a series of mini coursework tasks. This prepares students for the coursework element of the course in year 11 which is worth 50% of the final grade awarded.</p> <p>Homework's set will link to the current project being undertaken and set weekly. Homework's will also link to the core content</p> <p>The tasks set will take approximately 1 hour.</p>

## Huish Episcopi Academy GCSE – Product Design – KO - Core Knowledge – Natural & Manufactured Timbers

1. Hardwoods			
Material	Appearance	Properties	Uses
1	Hardwoods	This wood comes from trees that lose their leaves during autumn.	
2	Hardwood	Trees are slow-growing and therefore less amounts are available, which makes it more expensive	
3	Oak	Moderate brown colour with close, straight grain.	High quality furniture, doors, skirting and staircases.
4	Beech	Is pink-tinted, closely grained.	It is popular with products that require a hardwearing and robust material.
5	Mahogany	Is a dark red/ brown with very close grain.	Popular for furniture and cabinet making.
6	Ash	Light coloured, smooth-grained.	Ideal for tool handles. It is also makes good oars, flooring, hockey sticks and rackets.
7	Balsa	White to oatmeal in colour with high silky lustre.	Used in crafts such as model aircraft.

2. Softwoods			
Material	Appearance	Properties	Uses
1	Softwoods	Come from evergreen trees, possibly bearing pinecones and needles, not leaves.	
2	Softwoods	Grow quicker and in more locations. They are readily available and less expensive.	
3	Pine	Is a pale-yellow coloured wood with darker brown grain.	For construction and furniture products.
4	Larch	Is a darker shade with brown grain.	Used for exterior cladding and boats.
5	Spruce	Light, yellowish-white to reddish-white.	Used for sounding boards in pianos and construction.

3. Natural timber availability		
1	Stock forms	Hardwoods and softwoods are available in a variety of forms including plank, board, strip, square and dowel.
2	Sawing and seasoning	Natural timbers need to be cut at the sawmill and seasoned before use. Many are planed and cut to standard sizes ready for sale.

4. Finishes for hardwoods and softwoods		
1	Surface finishes	can be aesthetic and functional. High-traffic areas like floors might require a hard-wearing and sealing finish like polyurethane, which can be oil or water based, and matt, semigloss or high gloss finish.
2	Enhancement finishes	Waxes and oils are popular to provide enhancement of the natural grain in the wood.
3	Preservative finishes	Stains and varnishes help to add colour to natural wood, and even change colours to match colour schemes. Preservatives are sometimes used to provide protection and ensure the wood is long-lasting

5. Manufactured board			
Material	Appearance	Properties	Uses
1	Man-made	Like MDF, plywood and chipboard are all manufactured boards	
2	Man-made boards	Are made from wood fibres, normally collected from recycled wooden materials, bonded together with resins to form sheets.	
3	MDF	Light brown, it has no grain.	It is popular for interior DIY furniture.
4	Chipboard	Is made from small 'chips' of timber bonded together	Kitchen worktops can be made using chipboard with an additional veneer applied
5	Plywood	Plywood has a variety of facing layers so its appearance changes	Sometimes, the facing layers can be high quality, e.g. birch, to provide a better aesthetic finish.

6. Finishes for manufactured boards		
1	Veneers	Man-made boards like plywood are often finished depending on the visibility of the veneers.
2	Stains / Paints	MDF can be stained to match other natural woods, or it can be painted.
3	Veneers	Chipboard can look unattractive and is normally finished with a veneer e.g. a melamine layer.
4	Sprays / Varnishes	Face veneers / MDF can be finished using a spray-on lacquer or a paint-on varnish.

## Huish Episcopi Academy Year 10 D&T - Knowledge Organiser – Skills Based Projects

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## Huish Episcopi Academy GCSE Textiles Knowledge Organiser Core knowledge topic 3

1. New and emerging technologies					
<b>1</b>	<b>Automation</b> Involves the use of automatic equipment in manufacturing				
<b>2</b>	<b>Robotics</b> Robots can be programmed to carry out automated tasks.				
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<b>3</b>	<b>CAM</b> Computer aided manufacture, CAM machines manufacture designs, for example an embroidery machine				
<b>4</b>	<b>CAD</b> Computer aided design, allows users to draw designs and model products.				
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<b>5</b>	<b>Flexible manufacturing systems</b> (FMS) consists of CNC machines that work alongside a production line that can be programmed to perform different tasks depending on manufacture requirements.				
<b>6</b>	<b>Lean manufacturing</b> Minimises waste in the manufacturing process, saving money and resources.				
<b>7</b>	<b>Just in time production</b> (JIT) a process where stock arrives just in time for manufacture reducing the need for warehouse storage.				
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2. Scales of production	
<b>1</b>	<b>Scales of production</b> Products are made using different types of production. The method depends on the type of product being made.
<b>2</b>	<b>One off production</b> Products made to meet specific customer requirements, production can be time consuming and costly.
<b>3</b>	<b>Batch production</b> A specific quantity of a product is made, this is useful when making small quantities.
<b>4</b>	<b>Mass production</b> Used to produce large quantities of identical products quickly. The production process is broken down into different tasks sometimes called a sub assembly.
<b>5</b>	<b>Continuous production</b> This production method runs 24 hours a day 7 day a week. Identical products are made without interruption.

3. Production aids and QC	
<b>1</b>	<b>Reference points</b> A reference point or datum, is a point where all measurements are taken, increasing accuracy.
<b>2</b>	<b>Templates, jigs and patterns</b> Tools to help improve the accuracy of repetitive designs. Patterns are templates that can be used in textiles.
<b>3</b>	<b>Quality control</b> Used to check the quality of a product against a set of standards.
<b>4</b>	<b>Quality assurance</b> Quality assurance is the process for preventing quality failures involved in all stages of a product's development: production, testing, packaging, and delivery.
<b>5</b>	<b>Tolerance</b> The margin of error that is considered acceptable to not affect the products functionality.
<b>6</b>	<b>Tailors chalk</b> Used to mark out fabric and can be erased.
<b>7</b>	<b>Pattern master</b> A tool used when drafting or altering patterns for drawing straight or curved lines, adding seam allowance and marking grainlines.



# Huish Episcopi Academy - Year 10 Food Preparation & Nutrition Knowledge Organiser: Unit.2 Carbohydrates and Food Science

## 1. Carbohydrates

1. Macronutrient	Carbohydrates are a macronutrient - (Protein and Fat & oils are also macronutrients).
2. Energy	Carbohydrates is needed for providing us with energy. They make up a third of our diet. We get 50% of our energy each day from carbohydrates.
3. 1g of Carbs =	4Kcal (3.75) of energy, Fat = 9Kcal Protein = 4 Kcal
4. Protein 'sparer'	Carbohydrate acts as a protein sparer. If the diet is low in carbohydrate, then protein is used as an energy source. Carbohydrate should stop the use of protein as an energy source so that the protein can continue its primary function for growth and repair.
5. 3 Groups	Carbohydrates can be divided into 3 groups: sugars, starches and dietary fibre.
6. Sugar	Sugars are the simplest form. They are easily broken down by the body. Absorbed quickly into the blood stream. Providing an instant burst of energy.
7. Starches	A complex carbohydrate – Known as polysaccharides. They are made up of many simple sugars (glucose) joined together.
8. Dietary Fibre	A Complex carbohydrate – Known as a polysaccharide. Found in cell walls of vegetables, fruits, pulses and cereal grains.

## 2. Excess and deficiency of sugars & starches and dietary fibres

- Eating too much sugar is bad for us.
- A diet rich in sugar will cause tooth decay and a gain in weight.
- A lack of carbohydrate in the diet would cause weight loss, lack of energy and severe weakness. But this is unusual.
- Some people choose to follow diets that reduce the amount of carbohydrates they eat.
- A diet rich in cereals can reduce the body's ability to absorb iron and calcium. The cereal can bind with the minerals making them less likely to be absorbed in the intestines.
- A deficiency of dietary fibre can contribute towards constipation. This could lead to an increased risk of bowel cancer.

## Diagram A - Starchy Carbohydrate - Section of the Eat Well Guide



## 3. Type of Carbohydrates

Type of Carbohydrate:	Molecule:	Sources:	Food Items:	How does the body use the energy?
Simple Carbohydrates	Monosaccharide	Glucose	Ripe Fruits and vegetables	The body quickly digests these simple carbohydrates, making blood sugar levels rise quickly, providing a short burst of energy.
		Fructose	Fruits, vegetables and honey	
		Galactose	Milk from mammals	
	Maltose	Berley, syrups, hot drink powders, confectionary		
	Disaccharide	Sucrose	Sugar	
		Lactose	Milk and milk products from mammals	
Complex Carbohydrates		Starch	Cereals and cereal products, starchy vegetables	The body slowly digests these complex carbohydrates, making blood-sugar levels rise slowly, providing a slow and steady release of energy.
		Pectin	Some fruits and vegetables	
	Dextrins	Formed when starchy food is baked or toasted. E.g. Toast		
	Fibre/Non-Starch Polysaccharide (NSP)	Wholegrain cereals and fruits and vegetables with skin on.		

## Huish Episcopi Academy Year 10 – Food Preparation and Nutrition – Food Science

### 4. Food Science

1	Dextrinisation	Is when foods containing starch are broken down into dextrin by dry heat (for example baking, grilling, toasting)
2	Dextrinisation	Dextrinisation occurs when the heat breaks the large starch polysaccharides into smaller molecules known as dextrins which produce a brown colour.
3	Dextrin	Dextrin adds a sweet taste to baked goods.
4	Caramelisation	Occurs when food products containing sugar come into contact with heat.
5	Caramelisation	Causes changes to a food's colour and also to its flavour. (buttery, toasty or even a nutty flavour to food)
6	Caramelisation	When sucrose (table sugar) is heated above its melting point (about 180 degrees) it undergoes physical changes (it darkens and turns from clear to dark amber) and chemical changes to produce caramel.
7	Caramelisation	Caramelisation happens because water is released from the sugar as it is heated. The water is released as steam
8	Gelatinisation	When starch is mixed with water and heated, the starch granules swell and eventually rupture, absorbing liquid, which thickens the mixture.
9	Gelatinisation	Stirring will prevent lumps forming. On cooling, if enough starch is used, a gel forms. Gelatinisation occurs between 75°C and 87°C
10	Raising Agents	Raising agents include anything that causes rising within foods and are usually used in baked goods. Raising agents can be:
11	Raising Agents	biological, e.g. yeast;
12	Raising Agents	chemical, e.g. baking powder, baking soda
13	Raising Agents	mechanical, e.g. adding air through or steam, example: beating or folding, whisking, sieving, creaming or rubbing in.
14	Fortification	Means adding micronutrients (vitamins and minerals) to food that were usually not originally in the food.

### Diagram B – The 14 Allergens



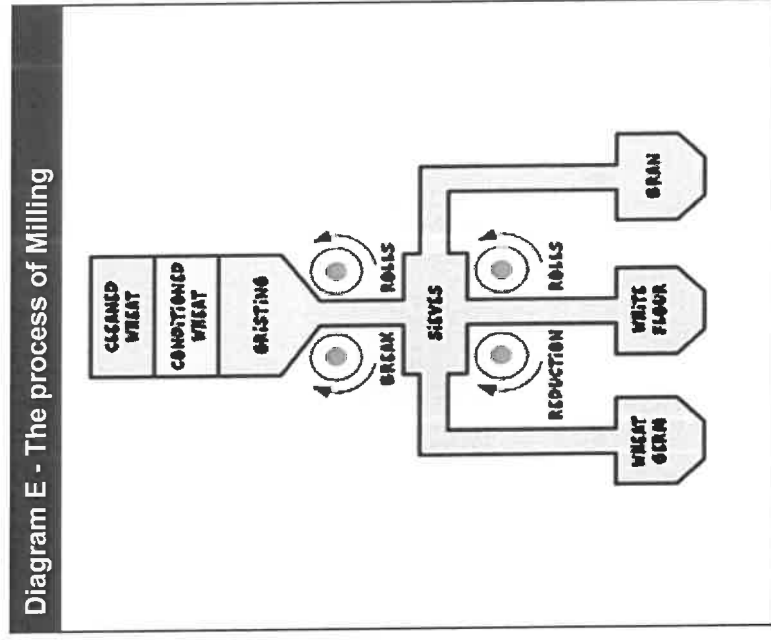
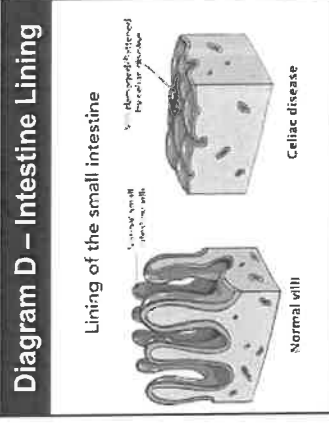
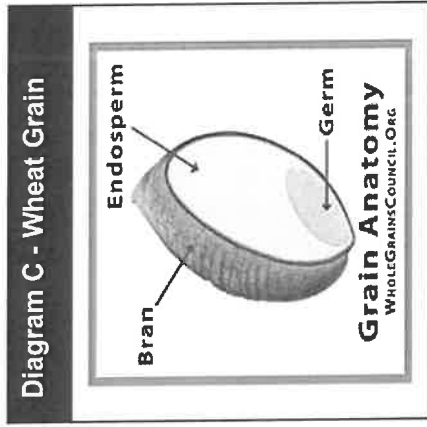
### 5. Different types of Flour

White	Usually contains 75% of the grain and most of the bran and wheatgerm are removed.
Brown	Usually contains about 85% of the original grain and some of the bran and wheatgerm are removed.
Whole meal	Made from the whole wheat grain.
Malted wheat grain	Brown or whole meal flour with malted grains added after milling.
Wheatgerm	White or brown flour with at least 10% made up of wheatgerm added during milling.
Strong	Contains a higher gluten content to make a range of different breads, pizzas and crumpets.
Plain	Contains a lower gluten content and used to make biscuits, pastry, sauces, pancakes, batters and Yorkshire puddings.
Self-raising	Baking powder is added as part of the milling process and mainly used to make cakes and scones.

## Huish Episcopi Academy Year 10 – Food Preparation and Nutrition – Cooking with Fats

6. Method of transferring heat to food and the scientific procedure	
Wheat	Wheat is a good source of starchy carbohydrate, found in the endosperm. It is also a good source of protein and provides us with a range of vitamins and minerals.
Wheat	If the wheat still has the bran it will provide dietary fibre in the form of non starch polysaccharides (NSP).
Wheat	B vitamins are found in the bran layers. Flour sold in the UK is fortified with calcium, iron and B vitamins.
Alternative flours	Around the world there are flours which are not made from wheat. Some of the less common types include flour made from coconut, potato, peas and chickpeas. Other grains such as rye, oats and spelt are also used.
Fortification	Wheat flour (apart from wholemeal) is fortified with iron, thiamin and niacin, and all flours (except wholemeal and some self-raising varieties) with calcium. It is a legal requirement to fortify flour in the UK. 85% of flour in the UK is milled from wheat that is grown in the UK.

7. The Process of Milling	
1	The harvested grain is delivered to the mill, where it is cleaned and conditioned.
2	The wheat is blended with other types of wheat to make different kinds of flour – this is called 'gristing'. The grist is passed through a series of fluted break rolls, rotating at different speeds, designed not to crush the wheat but shear it open to separate the white inner portion from the outer skins.
3	The fragments are then separated by the sieves and the white particles are channeled through a series of smooth 'reduction' rolls for final milling into white flour. The outer skins are now blended to make different types of flour.
4	The percentage of the grain used in producing flour is known as the extraction rate, which in turn affects the nutritive value of the flour milling.



8. Coeliac Disease	
Coeliac disease	Coeliac disease is an autoimmune condition.
Coeliac disease	This is where the immune system – the body's defence against infection – mistakenly attacks healthy tissue.
Coeliac disease	In coeliac disease, the immune system mistakes substances found inside gluten as a threat to the body and attacks them. This damages the surface of the small bowel (intestines), disrupting the body's ability to absorb nutrients from food.
Coeliac disease	Gluten is found in wheat, barley and rye. Symptoms can include: fatigue, diarrhoea, abdominal pain, indigestion, vomiting, bloating and itchy rashes.

## Huish Episcopi Academy Year 10 Film Studies Knowledge Organiser Component 2 Section A SLUMDOG MILLIONAIRE

1. INSTITUTIONAL INFORMATION	
1	<b>Director</b> Danny Boyle
2	<b>Writer</b> Simon Beaufoy
3	<b>Cinematographer</b> Antony Dod
4	<b>Production Companies</b> Celador Films and Film 4 (British)

### 2. NARRATIVE

1	<b>Narrative</b>	Method and means by which events of a story are constructed into a plot
2	<b>Episodic narrative</b>	Questions mark the chapters in Jamal's life – cumulative tension as final question heralds the dénouement
3	<b>Circular narrative</b>	(a) Narrative starts near end, later goes back in time to return to same point (b) Flashbacks and voiceover show Jamal's childhood
4	<b>Narrative viewpoint</b>	(a) Confessional first-person narrative (b) Restricted to his POV
5	<b>Binary oppositions</b>	Create conflict
6	<b>Binary opposition eggs</b>	Jamal & Salim, poverty & wealth, happiness & status, India & west; realism & fantasy
7	<b>Structure</b>	3 act structure

### 5. CONTROVERSY

<b>1: Casting – Dev Patel (British)</b>	Contrast to <b>traditional Bollywood male</b> (strong/handsome/hero). Some praised the casting for going against the traditional Bollywood representations. Some <b>criticised the casting of a Brit</b> rather than an Indian lead.
<b>2: Representation</b>	The film faced criticism from the Indian public that it 'glorifies' and takes advantage of poverty narrative
<b>3. Payment of cast and crew –</b>	Indian cast and crew were <b>underpaid</b> and treated <b>inadequately</b> ; this was investigated by Indian authorities and found <b>not</b> to be the case

### 3. CONTEXT

1. Set in <b>Mumbai, 2006</b>
2. Directors wished to <b>transport Western audiences</b> to the slums of India to portray the energy and community to <b>challenge traditional representations of poverty-stricken slum dwellers</b>
3. Dharavi slum is the <b>third-largest slum</b> in the world; it is also one of the most densely populated areas on Earth.
4. <b>Contrast of India</b> where poor street children are exploited whilst others enjoy the latest developments in technology due to rapid globalization & a booming economy
5. <b>Corrupting influence of Western values</b> is shown in the representation of Salim's greed for money; he is willing to sacrifice his relationship with his brother
6. References to <b>the tradition of Bollywood</b> (superstar Amitabh Bachchan shown as well as the final dance scene a nod to traditional dance scenes in Bollywood romances).

### 4. CHARACTERS

Name	Propp	Narrative function
<b>1. Jamal</b>	Hero	Jamal is on a quest – to find Latika, not win the money
<b>2. Latika</b>	Princess	To be rescued from the villains
<b>3. Salim</b>	Villain/Helper	Thwarts Jamal's chances of happiness, but then helps Latika escape at the end
<b>4. Prem</b>	False "Helper" – actually villain	Appears to be helping Jamal, but actually trying to stop him winning
<b>5. Maman</b>	Villain	Appears to be helping Jamal, but actually using him for his own ends
<b>6. Javed</b>	Villain	Takes the princess and keeps her from Jamal
<b>7. Police Inspector</b>	Donor	Believes Jamal and sets him free to complete the quest

Huish Episcopi Academy Year 10 Film Studies Knowledge Organiser Component 2 Section A SLUMDOG MILLIONAIRE

6. MICRO-FEATURES			
Technique	Example	Effect	
Cinematography	1. Dutch angle ggggggggg	Opening sequence of the quiz studio	creating confusion and reflecting the feelings of the protagonist, Jamal Malik, positions us with him from the start
	2. Mid-shots and crane shots	Opening sequence of the quiz studio	conventional to game show – audience as voyeurs
	3. Lighting/coloured tints	Opening sequence of the quiz studio	Shows <b>strands of narrative</b> (interrogation – yellow; TV studio – <b>high key</b> and <b>single source lighting</b> )
	4. Use of SI-2K digital cameras; 11 frames per second	Latika motif sequence	making the <b>audience feel</b> dreamlike quality; also <b>slow-motion</b> aspect
Sound	1. Diegetic sounds and leitmotif of WWTBAM	Opening sequence of the quiz studio	indicate the <b>setting</b> and the <b>link</b> between the film and the global TV export, <sup>[11]</sup> <i>Who Wants to be a Millionaire</i>
	2. Sound bridges	Opening sequence and Latika's race to the studio	connect the <b>different elements of narrative</b>
	3. Urban soundtrack by A. R. Rahman featuring MIA	Train sequence	reflects the <b>gritty realism</b> and the <b>film's Mumbai/Western fusion</b> .
Mise-en-scene	1. Contrast between WWTBAM studio and police station/slums	Opening sequence and throughout	The <b>studio setting</b> (glossy surfaces, lighting, dress) <b>contrasts</b> with the <b>grimy and gritty</b> setting and shows the <b>difference</b> between rich and poor in Mumbai
	2. Questions on screen	Throughout	Foreground <b>episodic</b> structure
	3. Importance of place shown through language, captions, dialogue	Throughout, especially in opening sequence	The <b>place</b> is central to the narrative – it is about the struggles in this particular place and time
Editing	1. Cross cutting	Throughout	When Latika is rushing to the studio it is used to <b>prolong</b> the scene, create <b>tension</b> and <b>suspense</b>
	2. Flash cutting	Opening Sequence	create sense of <b>confusion</b> between <b>threads of narrative</b>

### 3.2.3 – The economic climate



Interest rates are the cost of borrowing and the reward for saving.

Higher interest rates means that borrowing is expensive – people and businesses borrow less.

Lower interest rates mean that borrowing is cheaper – people and businesses borrow more.



The Bank of England can raise or lower interest rates. They might do this to either stimulate or suppress borrowing. If people are spending money too quickly, prices will rise because demand rises. If prices rise too fast, soon we won't be able to afford to live as comfortably. This is called inflation.



One person's spending is another person's income. If fewer people have jobs, then the average amount of money being earned is lower. If, on average, we have less money then we can only spend less money. If we spend less, then someone else will earn less, and so they spend less. It becomes a self-reinforcing cycle.



The more we spend the more companies must supply. As people earn more or less money, and can borrow more or less money, the amount we spend (and so the amount of goods and services we demand) will change. When people earn more or can borrow more, we see demand increase, but the same is true vice-versa. If people stop spending so much then demand falls, and when demand falls prices fall, this is called deflation.

### 3.2.1 - Technology

E-Commerce has changed the process of doing business dramatically. Not just retail, but all markets have been affected by the introduction of new technology and online shopping. Everyone shops online – even businesses. Ordering is now completed online.

M-Commerce is now growing even faster, it's possible for businesses to access more customers in more places more easily. Social media marketing allows businesses to target individuals based on their likes and dislikes. It puts advertising in front of them at the right time to make it more likely for them to buy.

Digital Communication speeds up the rate at which information can be moved around. It has also replaced the need to travel as far and as often. Video conferencing apps like FaceTime and Skype mean that you can talk to people all over the world, face to face, without travelling, saving time, money, and the environment.

Important examples:



AGA GCSE Business 9-1: 8132

## Influences on business

# Unit 2

Appears in:  
Paper 1 & Paper 2

### 3.2.4 - Globalisation



#### Imports and Exports

Foreign currency exchange has a major impact on how much we import or export. If a currency is strong then it buys more of another currency. If it is weak it buys less.

**SPICED – Strong Pound, Imports Cheaper, Exports Decline**  
£1 can buy more of the product coming from overseas so it becomes cheaper. But it costs someone overseas more to buy products made here, so exports are more expensive and reduce.

**WPIDEC – Weak Pound, Imports Decline, Exports Cheaper**  
£1 buys less of the product coming from overseas so it becomes more expensive, so less is imported. It costs someone overseas less to buy products made here, as their currency can buy more pounds. Exports become cheaper.

**Operating worldwide** – globalisation has made it cheaper to relocate to other parts of the world to be nearer to raw materials or markets. International travel and shipping means that products can be made anywhere and sold anywhere. Costs remain an important factor in any decision.

### 3.2.5 - Legislation

Legal changes affect business, when the law changes it is likely that a business will have to change how they operate in order to comply with the law. Even small changes can mean large costs for the business, as the administration and work involved in making the change takes time.

#### Key Legislation:

##### National Minimum/Living Wage:

- This sets a minimum amount of money a worker can be paid per hour, depending on their age.
- Raising the minimum wage will increase costs and could lead to the business having to reduce its workforce.
- By increasing the minimum wage, the government should see the lowest earners in the country receive higher wages allowing them to improve their living standards.

##### Equality Act (2010):

- This protects individuals from discrimination by employers in relation to certain protected characteristics
- This Act is an important part of British Values as it promotes mutual respect and tolerance – it protects our individual liberty as it ensures who we are does not limit what we can do.

##### Health and Safety at Work Act (1974):

- Sets out the duties of the employer and employee in creating a safe working environment
- A safer environment for employees makes them feel safe and cared for, and more likely to see the company as a good employer. This can lead to better retention of staff, and so lower recruitment costs, and to a better reputation making it easier to recruit better quality workers.

##### Trade Descriptions Act (1968):

- This Act prevents businesses from misleading customers. This helps to protect the consumers from being tricked into spending money or receiving poor quality goods and services.

### 3.2.6 - The competitive environment

**Monopoly** – a market which is dominated by one seller or producer. By law a monopoly occurs if a firm has a market share of 25%. Trying to compete with a business that has a monopoly is very difficult because they can dictate prices.

**Competitive Market** – a situation where multiple businesses compete for the same customers.

Price	Selecting the right price can improve your competitiveness – customers may be attracted by a lower price or by promotional pricing
Quality	Higher quality may set a product apart from the competition. In relation to luxury goods in particular, quality is often the most important factor.
After sales service	For products like cars, the quality of after sales care is very important. i.e. the features of the warranty, whether a courtesy car is available.
Location	Businesses selling convenience goods are going to benefit from being very close to their customer, where casual dining restaurants need to be near to the competition to benefit from increased footfall.
USP	Unique Selling Point – this is a feature of the product or service that is unique to this business. By having a unique selling point that adds value, it allows the business to charge a higher price and to attract more customers.
Delivery	A range of options for customers for how they receive/take possession of the product will increase the number of customers by adding convenience. Click and Collect and home delivery alongside in-store shopping make it easier for customers by reducing wait time and the need to travel.
Branding	The design and reputation of a brand can increase the appeal. Apple have managed to make the most obvious success of branding, as it has become such a desirable brand to own – whether with an iPhone, iPad, Watch, TV, MacBook, iMac, iPod etc.

Ethics are the rules that require a business to operate in a way that is fair and honest. Modern consumers expect businesses to behave in a way that treats them well, but that also minimises:

- The use of single-use materials such as black plastic which cannot easily be recycled, or of palm oil the production of which is responsible for significant deforestation and harm to wildlife.
- Unnecessary travel, particularly air travel, which is especially bad for the environment.
- The amount of waste going to landfill, and an increase in the amount of recyclable raw materials used.
- The emission of air pollution, this is a topical issue at the moment – diesel exhaust fumes cause significant harm to human beings living in cities.
- Noise pollution, from loud vehicles, factories, and antisocial behaviour.
- Traffic congestion, as a result of increasing numbers of vehicles on the roads.

Ethics in business are mostly concerned with doing what is right. However, this often comes at a cost; there is likely to be a trade-off between doing what is cheapest and doing what is right.

**Sustainability** is a goal of most businesses, and it is to avoid unnecessary use of materials and energy to avoid causing damage to the planet.



They take this approach to achieve two things:

- Improve their reputation
- Ensure they can continue to operate long into the future

Operating this way can result in short-term losses as operating sustainably can be expensive – reusable materials can often cost more.



# Influences on business

## Unit 2

Appears in:  
Paper 1 & Paper 2

Key Term	Definition
Air pollution	Harmful substances and fumes in the air that cause disease, allergies, or damage to humans or other living organisms, or to the environment.
Competition	The presence of other businesses in the same market attempting to sell to the same customers
Consumer law	Laws that are designed to protect the consumer, by ensuring that products and services offered by businesses are safe, and that they deal with their customers in an honest and fair way.
Consumer spending	The amount of money being spent by households on the goods and services they want and need.
Contracts of employment	The legal document that states the terms and conditions for both the employer and the employee when paying someone to do a job.
Digital communication	Transmitting information between computing devices.
E-Commerce	Transactions that are carried out using the internet. i.e. Amazon
Economic Climate	Key factors within a country such as the level of consumer spending, the level of production, the number of people unemployed, rates of inflation and interest.
Employment Law	These laws govern what can and can't be expected of an employee, and how a business may treat its employees.
Equality Act (2010)	This act of parliament is a set of laws that protect individuals from discrimination. It lists the characteristics that are protected, and that cannot be discriminated against. These are: Age / Disability / Gender reassignment / Marriage and civil partnership / Pregnancy and maternity / Race / Religion or belief / Sex / Sexual orientation
Ethical Objectives	Aims that relate to abiding by their moral code in order improve reputation. This could include trying to act fairly, protecting the environment, or contributing to charitable activities.
Ethics	The moral principles that determine how a business wishes to operate.
Exchange Rates	The price at which one currency can be exchanged for another. For example, £1:€1.10 To find £250 in Euros, multiply by 1.10 To find €250 in Pounds, divide by 1.10
Export	Selling a product to a customer outside of the country that you operate in.
External Costs	Negative impacts caused on people, places, or other organisations by a business' activity.
Global Warming	The increase in the average temperature of the earth, leading to negative consequences for life, caused by the release of carbon dioxide and other greenhouse gases.

Key Term	Definition
Globalisation	The increasingly 'local' nature of the planet – businesses operate worldwide, with money, goods, services, and people moving across national borders.
Health and Safety at Work Act (1974)	Laws relating to processes and procedures that businesses must follow in order to keep their employees and customers safe.
Import	Buying from a company outside your national borders.
Interest Rates	"The reward for saving and the cost of borrowing." Expressed as a percentage, it is the rate at which either savings or debts grow over time. Borrowing or saving £1,000 at an interest rate of 5% means that at the end of the year you would either owe £1,050 or have £1,050 in your account.
Inward investment	People and businesses from outside of your national borders investing in your country's businesses or land.
Level of employment	What percentage of the population who could work, are working. Often a percentage, if the level of employment is 97%, then it means that 3% are unemployed.
Markets	The place where buyers and sellers meet, to exchange money or credit, for goods and services of a particular type. i.e. the Car market, clothing market, wheat market, or the stock market.
M-Commerce	Business transactions completed on a mobile device such as smartphone or tablet.
Multinational Company (MNC)	A company with offices or divisions in more than one country.
National Minimum/Living Wage	The minimum hourly rate for employees in the UK. It tends to increase each year and changes in April. As of April 2019, the rate for 25 year olds was £8.21/hour. The rate is different for different age groups below that.
Noise Pollution	Noise that causes some level of disturbance, either from vehicles, or business operations. It could include customers arriving or leaving a business.
Recycling	Converting waste into useable material.
Risk	The chance that an investment might not deliver a profit.
Social responsibility	Businesses needing to act in a way that protects people within society rather than harming them.
Sustainability	Businesses operating in a way that does not damage the environment or use up natural resources.
Traffic congestion	More vehicles on the roads than they can handle without queues and longer journey times.
Uncertainty	This occurs when it is difficult to predict the outcome. In economic terms, uncertainty leads to people saving rather than spending money. The level of investment falls.
Waste	Unwanted materials. Businesses may have to pay to dispose of waste.
Waste Disposal	The removal and disposal or destruction of unwanted items or materials. Through either landfill, incineration, or recycling.
Zero-hour contract	Terms of a job that mean there is no minimum number of hours guaranteed for a worker, per week. Likewise, there is no expectation that a worker has to accept hours that are offered.

**Don't forget!** PESTLE-C

is a useful acronym for reminding yourself of all of the external factors that affect businesses.

- P** – Political issues like a change in government, leading to different types of laws being passed.
- E** – Economic increases or decreases in consumer spending, interest and exchange rates, or borrowing.
- S** – Social changes in the fashions and trends that lead consumers to buy and try different products
- T** – Technological things like Apple Pay have been *disruptive* they have changed how businesses operate.
- L** – Legal new laws change the rules and businesses have to change to follow them, increasing costs.
- E** – Environmental and Ethical changes in what people want to see your business doing
- C** – Competition what they do will have a big impact on you, their actions will affect your decisions.



## Huish Episcopi Academy Year 10 Psychology Knowledge Organiser – Perception

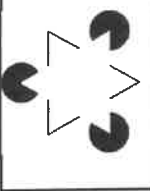

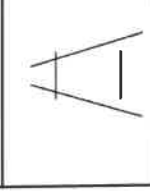
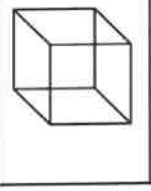
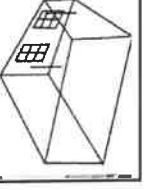
Perception Terms	
1	Ambiguity Being able to be interpreted or understood in more than one way.
2	Appetite A desire to meet a physical need. Most often it refers to the desire to eat food.
3	Behaviour The way a person, group or species acts in response to a situation or stimulus.
4	Binocular Depth Cues Sensory information that allows perception of depth or distance and is received from <b>both eyes</b> .
5	Context The surroundings for an event, thought or memory which enable these things to be more fully understood (E.g A classroom is a context with boards/teacher etc.)
6	Convergence Depth perception cue related to the extent that eyes have to turn inward in order to focus on images/objects.
7	Cultural The way of life, especially the customs, beliefs and behaviours of a particular community of people at a particular time
8	Depth Cue Ways of perceiving depth or distance – can be binocular or monocular.
9	Expectation Beliefs or feelings about what it is that we will experience.

10	Fiction When an object, colour or movement is perceived but is not actually there. E.g Kanisza Triangle
11	Height in plane Distant objects are seen or shown as being higher in the visual field in relation to items that are nearer.
12	Inference Reaching a conclusion based on the information you have before you and your past experiences. Our inferences are not always correct as we may not have the 'whole picture'.
13	Innate Inborn or genetic, rather than learned.
14	Learned Abilities or characteristics that are gained through experience rather than being present at birth.
15	Linear perspective When parallel lines appear to converge or join together at some point in the distance.
16	Misinterpreted depth cue When binocular or monocular depth cues are not understood accurately.
17	Monocular Depth Cue Ways of perceiving depth or distance that will work with just one eye.
18	Motion Parallax Close objects in our visual field seem to move more/faster than objects that are further away in our visual field.

## Perception Terms

19	Nature	Refers to the argument that characteristics and behaviours are genetically influenced.
20	Nurture	Refers to the argument that characteristics and behaviours are influenced by upbringing, environment and experiences.
21	Occlusion	When an object covers part of other objects in our visual field, this makes it appear to be closer to us than the partly covered objects.
22	Perception	How we organise, interpret and make sense of the sensory information that we receive from the world around us.
23	Perceptual set	A tendency or inclination to observe some aspects of sensory information from the world around us, but to not notice other aspects of it.
24	Relative size	The larger objects in the visual field appear to be closer than the smaller objects.
25	Retinal disparity	The difference between the sensory information received through each eye which is the result of the slightly different angles they have of the world. The more disparity the closer an image/object is.
26	Sensational	Information from the world around us that we receive through our sense organs.
27	Size constancy	Being able to perceive an object as being the same size, regardless of whether it is nearby or far away.

## Illusions named in the specification

	<b>Kanizsa Triangle</b>	<b>Fiction</b>
	<b>Rubin Vase</b>	<b>Ambiguity</b>
	<b>Ponzo Illusion</b>	<b>Misinterpreted depth cue</b>
	<b>Necker cube</b>	<b>Ambiguity</b>
	<b>Ames room</b>	<b>Misinterpreted depth cue</b>

**1.4.1 Threats to computer systems and networks**

1	Malware	Software designed to harm, exploit, or otherwise compromise a computer system. Examples include viruses, worms, and trojans.
2	Social Engineering	A tactic used by cybercriminals to trick people into revealing confidential information, such as passwords, by pretending to be someone trustworthy.
3	Phishing	A type of social engineering attack where attackers send fraudulent messages (often emails) to trick individuals into revealing sensitive information, like login credentials or credit card numbers.
4	Brute-Force Attacks	Brute-force attacks involve trying many different passwords or keys until the correct one is found. This method relies on computational power to guess passwords.
5	Denial Of Service Attacks	A Denial of Service (DoS) attack aims to make a computer or network service unavailable to its intended users by overwhelming it with a flood of internet traffic.
6	Data Interception And Theft	When unauthorised individuals capture and steal data as it is being transmitted over a network.
7	SQL Injection	SQL injection is a code injection technique that exploits vulnerabilities in an application's software by inserting malicious SQL statements into an entry field for execution.

**1.4.2 Identifying and preventing vulnerabilities**

1	Penetration testing	A simulated cyber attack against a computer system to check for exploitable vulnerabilities.
2	Anti-malware	Anti-malware software is designed to detect, prevent, and remove malicious software from computers and networks.
3	Firewalls	A network security device that monitors and controls incoming and outgoing network traffic based on predetermined security rules.
4	User access levels	User access levels define the permissions and access rights of different users within a system, ensuring that users can only access data and functions necessary for their role.
5	Passwords	Secret words or phrases used to authenticate a user's identity and grant access to a system or service.
6	Encryption	The process of converting data into a coded format to prevent unauthorised access. Only those with the correct decryption key can read the data.
7	Physical security	Protecting computer hardware and data from physical threats, such as theft, vandalism, and natural disasters.

1.5.1 Operating systems	
1	Operating systems Software that manages computer hardware and software resources and provides common services for computer programs. Examples include Windows, macOS, and Linux.
2	User Anyone who interacts with a computer system or software application.
3	Memory management and multitasking The process of controlling and coordinating computer memory, assigning blocks to various running programs to optimise performance. Multitasking allows multiple processes to run simultaneously on a computer.
4	Peripheral management and drivers Involves controlling external devices (peripherals) like printers, keyboards, and mice. Drivers are software that allow the operating system to communicate with these devices.
5	User management Creating and managing user accounts, setting permissions, and ensuring users have the appropriate access to resources.
6	File management The process of organising, storing, and keeping track of files on a computer system.

1.5.2 Utility software	
1	Utility software Utility software helps manage, maintain, and control computer resources. Examples include antivirus programs, disk cleanup tools, and backup software.
2	System software System software includes the operating system and all utility programs that manage computer resources at a low level.
3	Encryption software Encryption software is used to encrypt and decrypt data, ensuring that sensitive information is protected from unauthorised access.
4	Defragmentation software Reorganises the data on a hard drive so that files are stored in contiguous sections, improving access speed and efficiency.
5	Data compression software Reduces the size of files, making them easier to store and transmit. Examples include ZIP and RAR formats.

## Huish Episcopi Academy Year 10 Health and Social Care

## Knowledge Organiser Spring One Component One

### A Component 1 Human Lifespan Development

1	Environmental	Space and location affecting health and wellbeing.
2	Pollution	Air, water, land and noise pollution can have affect on development.
3	Economic	Amount of money can have a marked affect on the services and support that can be accessed.
4	Employment	Affects skill levels, money to spend and self-esteem.

### B Component 1 Human Lifespan Development

1	Retirement	Affect of stopping work on physical, intellectual, emotional and social aspects of life.
2	Financial	Amount of support e.g. benefits available to support health and well-being.
3	Support	Informal and formal examples of people who can provide advice and information.
4	Assistance	Support e.g. domiciliary care that can help out with daily tasks to ensure they don't impact on health.

### C Component 1 Human Lifespan Development

#### Task 1 – PIES growth and development through life stages

##### Describe and explain:

- how an individual's PIES characteristics grow and develop through the life stages of **adolescence and middle adulthood**
- how the PIES characteristics have changed from **adolescence to middle adulthood**.

### D Component 1 Human Lifespan Development

#### Task 2 – Impact of different factors on PIES growth and development through the life stages

##### Describe and explain:

- how the factors of **gender roles and expectations and housing needs, conditions and location** impact the PIES growth and development of individuals in **adolescence and middle adulthood**
- the reasons why there is a difference in the impact of the factors between the given life stages.

### E Component 1 Human Lifespan Development

#### Case study 1

Dmitri, aged 25, has recently qualified as a civil engineer and moved jobs from the company where he completed his training to a position in a new company. This involves travelling for 45 minutes more each day than he did previously.

He has a wife and two young children. His wife works long hours at the local hospital.

At work Dmitri has responsibility for several workers. Although he is enjoying the challenges in his new job, which have boosted his self-esteem, he is struggling with some of his co-workers who have been in the company a long time and are much older than him. Dmitri is very resilient, and this will help him deal with the issues in his life.

When Dmitri is not at work, he attends his local church. There he meets people who he enjoys talking to. He has a good relationship with the priest who is a similar age to him.

Dmitri's parents live close by, and they have a good relationship with their grandchildren. Dmitri and his family visit his parents several times a week. They usually have a meal with them at the weekend and the grandchildren sometimes sleep over at their grandparents' house on those nights.

#### Case study 2

Judith aged 59, has recently retired from work as a pharmacist at her local hospital. She is finding the change difficult and has realised she has no friends outside of her old workplace. She has taken a drop in income to retire, and this has caused her to worry about her ability to cope financially. She is becoming increasingly anxious about her situation and her negative disposition means she is struggling to cope.

At work she was an active member of the 'social committee' who organised nights out for the department. Her friends who still work in the department have invited her to continue going to the nights out, but she does not feel comfortable doing so. She is worried that she will not be welcomed by some of the colleagues who used to work for her, and as a result she is feeling socially excluded.

Judith is Jewish and has been an active member of her place of worship in the past, but as her position at work become more time consuming, she stopped going as often. She feels that the congregation, who are mostly older than her, would not understand the problems she is having because of her retirement. The rabbi (religious leader) is new to the area, and she does not feel confident introducing herself to him due to her low self-esteem.

#### Task 3a – Impact of life events on PIES growth and development

- **Identify the life events for Dmitri and Judith**
- **Describe and explain** how each of their life events has impacted on their growth and development **physically, intellectually, emotionally and socially**.