100% book - Year 11 Mainstream

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



Term 1

Swindon	Academy 2024-25
Name:	
Tutor Group:	
Tutor & Room:	

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

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





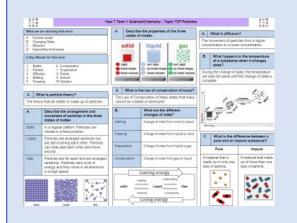






How to use your 100% book of Knowledge Organisers and Quizzable Organisers

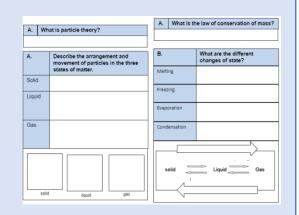
Knowledge Organisers



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

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

Quizzable Knowledge Organisers



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

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

Top Tip

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

Expectations for Prep and for using your Knowledge Organisers

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

How do I complete Knowledge Organiser Prep?

Step 1	Step 2	Step 3
Check Epraise and identify what words /definitions/facts you have been asked to learn. Find the Knowledge Organiser you need to use. Planer	Write today's date and the title from your Knowledge Organiser in your Prep Book. A What is particle theory? The beory that all matter is made upd quincles. A product the arrangement of mass of mass of mass of mass of mass of mass. A product the arrangement of mass of mass of mass of mass of mass. A product the arrangement of mass of mass of mass of mass of mass. A product the arrangement of mass of mass of mass of mass of mass. A product the arrangement of mass of mass of mass of mass of mass of mass. A product the arrangement of mass o	Write out the keywords/definitions/facts from your Knowledge Organiser in FULL. 29th May 2020 Properties of the states of matter Particle theory - all matter is made of particles Solid - regular patter Particles are arranged randomly but ore still southing each other and mare around. Ges - Particles are far opart and are arranged randomly. Perticles carry - late of energy
Step 4	Step 5	Step 6
Read the keywords/definitions/facts out loud to yourself again and again and write the keywords/definitions/facts at least 3 times. Solid = regular pattern perfiches vibrate in fixed position Solid = regular pattern particles vibrate in fixed position Solid = regular pattern particles vibrate in fixed position	Open your quizzable Knowledge Organiser. Write the missing words from your quizzable Knowledge organiser in your prep book. A What is particle theory? A What is the law of conservation of mass? A Describe the arrangement and more states of matter. B. What is the law of conservation of mass? New York is the law of conservation of mass? New York is the law of conservation of mass? New York is the law of conservation of mass? New York is the law of conservation of mass? New York is particle theory? New York is the law of conservation of mass? New York is particle theory? New York is partic	Check your answers using your Knowledge Organiser. Repeat Steps 3 to 5 with any questions you got wrong until you are confident. Particle theory = all matter is made of particles Solid = regular patter porticles vibrate in fixed position Light = particles fre arranged randomly but are still touching each other and mare around Gas = Particles are for apart arranged randomly, Particles carry of energy

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

KS4 N	IACBETH	Traditional
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					VSA MACRETH Traditional		
	1. Context				KS4 MACBETH Traditional	4. Key Vocabular	у
	Playwright: Shakespeare (April 23 rd		ne plot is partly based on fact.	2. Key Char	acters		
April 23 rd 1616) Dates: written around 1606 Published: in 'the First Folio, 1623 Era: Jacobean		reigned Scot	s a real 11 th Century king who land from 1040-1057. ''s version of the story	ruthless. He fal	eponymous protagonist is the tragic hero of this play. He is both ambitious and Is from loyal and respected warrior to a paranoid, tyrannical king, before dying	tyrant	cruel leader
		11-1:11/-	om the Chronicles of well known historian). The	in battle in Act	v.	duplicitous	deliberatly dishonest
	suffering and death of the main char Set: Scotland,	racter. play was mo	st likely written in 1606 – the e Gunpowder Plot of 1605 –		A strong, ambitious and manipulative woman who exerts pressure on rsue him ambition of becoming king by murdering Duncan. Unable to deal with	equivocation	a half truth
	Structure: Five Act Play	politics.	the insecurities of Jacobean	the guilt of the	se actions and is driven to madness and suicide.	regicide	the act of killing a king
					Weird Sisters: Supernatural and manipulative beings who seem to be able to rre. They are unearthly and omniscient.	sceptical	someone who is unconvinced or doubtful
						conflict	a serious disagreement or argument
	The Divine Right of Kings says that a monarch is not subject to earthly aut		of England (and VI of me to the throne in 1603		eth's close friend and ally is astute and loyal. Macbeth sees him as a threat. He nired by audiences, and mistrustful of the supernatural witches.	valiant	great courage in the face of danger
	and that they have the right to rule d from the will of God. It implies that o	directly following the only The play pay	e death of Queen Elizabeth I. s homage to the king's			ephemeral	lasting a very short time
	God can judge an unjust king and tha attempt to depose, dethrone or restr	that Banquo	age. The witches' prophecy will found a line of kings is a James' family's claim to have		f Scotland at the beginning of the play. He is a virtuous, strong and respected as the model of good kingship by others in the play. He is murdered by	transient	something that lasts for a short amount of time
	powers runs contrary to the will of G and may constitute a sacrilegious act action of killing a king is called regicion	t. The James was co	descended from the historical Banquo. James was convinced about the reality of		2.	androgyny	of indistinct gender
	is considered a terrible crime.	leading to w	witchcraft and its great danger to him leading to witch trials. The play is probably not written simply to please James, but		dier who is loyal to Duncan and is suspicious of Macbeth. His family is facbeth's soldiers and he eventually exacts revenge by killing Macbeth. He was	melancholy	deep sadness
			certainly looks at relevant ideas. The Great Chain of Being was a belief in a strict religious hierarchy (see key		born by caesarian section and therefore was "not of woman born".		to deprive a man of his stereotypical role
					an's son and next in line to the throne. He is described as a good man in the	catalyst	speeds up a reaction
	Shakespearean Tragedy. Macbeth is of Shakespeare's tragedies and follow					sacrilege	destruction of something holy
	specific conventions. The climax mus in a tremendous catastrophe involvin	st end vocabulary) of believed to h	vocabulary) of all things which was believed to have been decreed by God. This idea was important in Elizabethan and Jacobean beliefs. The chain starts from God and progresses downward to angels, demons (fallen/renegade angels), stars, moon, kings, princes, nobles, commoners, wild animals, domesticated animals, trees, other plants, precious stones, precious metals, and other minerals.	3. Central T	hemes	motif	repeated image
	death of the main character; the character's death is caused by their c	own Jacobean bel			The play is about the corrupting power of ambition. Both Lady Macbeth and Macbeth are urged to action by the prophecies of the witches, but they still commit their crimes themselves because they want greater power. Their ambition leads them to violence and death.	5. Key Terminolo	gy, Symbols and Devices
	flaw(s) (hamartia) yet the character h something the audience can identify	demons (fall moon, kings, wild animals		Ambition		Motif	A recurring image or idea that has symbolic importance. The best example in Macbeth would be blood.
				Kingship	The play contrasts the kind and wise rule of Duncan, who is described as a virtuous (good) king, with the brutal rule of Macbeth, who quickly becomes	Soliloquy	When a character is alone on stage and speaks their thoughts aloud to themselves.
	Conventions	s of a Shakespearean Tr	ragedy	and Tyranny	called a tyrant. The play shows how Macbeth has no divine right to rule and upsets the natural order by killing Duncan.	lambic Pentameter	A line of a play or poem that has ten syllables organised into five pairs of syllables, where the second in each pair is emphasised. e.g. "When you durst do it then you were a man"
	A tragic hero who falls from Ham	nartia – the flaw in the ic hero that destroys	A hero of status – the central characters are	Order and	The play subverts the natural order of the world. Macbeth's actions are based on a supernatural belief in a prophecy. It depicts an anarchic world: Macbeth inverts the order of royal succession; his wife inverts the patriarchal	Foreshadowing	When a hint or warning is given about a later event.
	their own character.		people of importance, with power and status to lose.	Disorder	hierarchy; the unnatural world disrupts the natural. The disruption underpins the conflict that is not only external and violent but internal as Macbeth and his wife come to terms with what they've done.	Dramatic Irony	When a character is unaware of something that the audience is aware of, so they don't know the full significance of their words.
	tragedies feature conflict are fr	rnal conflict – there frequent moments of doubt or internal	Supernatural elements – Many of Shakespeare's tragedies feature	Appearance	Characters in the play are often not what they seem. Lady Macbeth and Macbeth are duplicitous towards Duncan, the witches equivocate (not say	Symbolism	When something symbolises a set of ideas e.g. "The raven himself is hoarse" – raven symbolic of death, supernatural.
	always lead to death. torm			and Reality			When a character pauses in a conversation to speak only to the audience or another character, unheard by the rest.

1. Context					KS4 MACBETH Traditional			
					KS4 MACSETT Haditolia	4. Key Vocabulary		
				2. Key Char	acters			
				Macbeth:		tyrant		
						duplicitous		
				Lady Macbeth:		equivocation		
						regicide		
				The Witches /	Weird Sisters:	sceptical		
						conflict		
				Banquo:		valiant		
						ephemeral		
				Duncan:		transient		
						androgyny		
				Macduff:		melancholy		
						emasculate		
				Malcolm:.		catalyst		
						sacrilege		
				3. Central T	hemes	motif		
						5. Key Terminology,	Symbols and Devices	
				Ambition		Motif		
			Kingship		Soliloquy			
				and Tyranny		lambic Pentameter		
Conv	entions of a Sha	akespearean Tr	agedy			Foreshadowing		
				Order and Disorder		Dramatic Irony		
						Symbolism		
				Appearance and Reality		Aside		
	<u> </u>			l L				

Energy Stores There are 8 energy sto		1 Science / Physics P1 Energy	Specific heat capacity The amount of energy needed to change the
Store	Stored in	Calculating energy stores	temperature of 1Kg of a substance by 1ºC It is calculated by: E = specific heat capacity x mass x temp change
Kinetic	moving objects	The energy stored in a raised object can be	$E = SHC \times m \times \theta$
Gravitational potential	objects raised above ground	calculated using: GPE = mass x height x gravitational field strength	Units for SHC are J/Kg/°C Different materials have different specific heat
Elastic potential	Stretched or compressed objects	GPE= mgh The energy stored in a moving object can be	capacity values. This can be investigated using the equipment below:
Thermal	All objects due to particle movement	calculated using: KE = ½ mass x velocity ²	
Chemical	Substances (foods, fuels) that can release energy in a chemical reaction	KE = ½ m v ² Energy stored in a stretched or compressed object can be calculated using:	Immersion Heater
Nuclear	The nucleus of atoms	E = ½ spring constant x extension ²	Metal Block Thermometer
Magnetic	Magnets attracting or repelling	E = ½ k e ²	Thermometer
Electrostatic	Separation of charges	Transfers of energy:	Energy is supplied to the block by the immersion heater over a fixed time period (e.g 5 mins)
Conservation of energenergy is NEVER creat	· ·	E.g. An object above ground has GPE. If that object falls:	The thermometer measures the temperature of the block at the start and the end of the experiment
or when work is done		Decreases its GPE store Increases its KE store as it falls Waste energy transferred to the environment	 The stopwatch measures the time If the power of the heater is known (e.g 50W) the energy transferred to the block can be found using
	erred, some is often transferred to s is wasted or dissipated energy	by heating and sound	the equation:
Efficiency Tells us how much of t	the energy is transferred usefully.	Gravitational potential energy decreasing	Energy (J) = Power (W) x time (s) The specific heat capacity of different materials can be
.Emclency =	utput energy transferred by the device input energy supplied to the device	Kinetic energy increasing	 investigated by: changing the metal (independent variable) measuring the temperature increase (dependent variable)
Efficiencv	ful power out tal power in		 variable) Keeping the energy supplied, mass and insulation the same (control variables)
Wasted energy always surroundings	s ends up in the thermal store of the	Heating and sound of impact	Insulating the block reduces energy transferred to the thermal store of the environment, improving accuracy

- anging the metal (independent variable)
 - easuring the temperature increase (dependent
 - riable) eping the energy supplied, mass and insulation

Energy Stores		What is the equation linking gravitational		What is the specific heat capacity of a
Complete the table:		field strength, GPE, height and mass?		ubstance?
Store	Stored in			
kinetic		2. What is the equation linking kinetic energy,		n the hypothesis 'different metals have
	objects raised above ground	mass and velocity?		ifferent specific heat capacity values' what is he independent variable?
Elastic potential		3. What quantity is found in both equations?		
All objects due to particle movement		3. What qualitity is found in both equations:		01:00
Chemical		4. What happens to the GPE store when a		Immersion Heater —Metal Block
	The nucleus of atoms	raised object falls?		
Magnetic				Thermometer
	Separation of charges	5. What happens to the KE store of a raised		
1. What is the conse	rvation of energy law?	object when it begins to fall?		Vhat does the immersion heater do?
2. In what two gener	ral ways is energy transferred?			
3. What is wasted energy?		6. By which two pathways is energy transferred to the environment when an object falls?		Vhat two readings are taken using the hermometer?
Efficiency		Gravitational		
What is the equation to calculate efficiency?		potential energy decreasing Kinetic energy		Vhat is a sensible time period to use for ransferring energy to the block?
2. Where does wasted energy end up?		Kinetic energy increasing Heating and sound of impact		Vhat should be put round the block?

Power and work done	Reducing unwanted energy transfers		Energy resources We use energy resources for electricity			
Work done = energy transferred	Reducing wasted energy means lower costs	ge	generation, transport and heating			
Energy transferred mechanically is calculated: Work done = force x distance W (J) = F (N) x s (m)	Materials that conduct heat well have a high thermal conductivity.		lon-renewable han they can b		re being used faster d will run out.	
500N	WHERE DOES THE HEAT GO?		Example	+	-	
6m	25% ROOF		Coal, oil, natural gas	Reliable method of generating electricity	Release CO ₂ which contributes to global warming	
Work done = 500N x 6m = 3000 J Power = energy transferred per second 1 Watt = 1 Joule per second	35% WALLS		nuclear	No CO ₂ released	Produces radioactive nuclear waste	
Power = energy transferred ÷ time P(W) = e(J) ÷ t(s)	15% DRAUGHTS	О	enewable reso Ones that will n eplenished as t	ot run out , th	ey are being	
500N	Reducing energy transfers in homes • Double glazing	E	Example	+	-	
5s	 Thick walls Walls made of materials with low thermal conductivity 		Solar	No CO ₂ released	Don't work at night or well on cloudy days	
Power = Energy ÷ time	Insulation – wall and loft Reducing energy transfers in appliances:		wind	No CO ₂ released	Doesn't work if it isn't windy	
= 3000 J ÷ 5 s = 600W	Lubrication – reduces friction	I	Hydro	No CO ₂ released	Damage to habitats	
A more powerful appliance transfers more energy per second, eg:			Geothermal	No CO ₂ released	Only found in specific places	
a d d	Streamlining – reduces air resistance		waves	No CO ₂ released	Damage to habitats	
	Airflow > Spoiler	E	Biofuel	Carbon neutral	Uses crop land to grow new forests	

1.	What are the units for work done?	Why is reducing unwanted energy transfers from the home important?	Give the three main uses for energy resources
2.	What are the units for force?	What is meant by 'high thermal conductivity'?	What is a non-renewable energy resource?
3.	What is the equation to calculate work done during mechanical work?	WHERE DOES THE HEAT GO?	
4.	What is the equation to calculate power?	25% ROOF	Give 2 examples of non-renewable energy resources
5.	What is the unit for power?	35% WALLS 10% WINDOWS	4. Give two disadvantages of using coal and oil
6.	What is the unit for time in the power equation?	15% DRAUGHTS	5. Give one advantage to using nuclear resources to generate electricity.
7.	What is 1 Watt equivalent to?	3. Where is most of the heat lost through in a house?	6. What is a renewable energy resource?
8.	How would you recognise a more powerful lightbulb?	Give two ways to reduce the heat lost though the walls of a house.	7. Give 4 examples of renewable resources
9.	What is meant by a more powerful appliance?	5. What does lubrication reduce?	8. Give 2 advantages of using renewable resources to generate electricity
		6. What does streamlining reduce? Airflow	9. Give two disadvantages of using renewable resources to generate electricity

Year 10 Term 1 Science/Chemistry C2 – Bonding, structure, and the properties of matter

Formation of Ions

- lons = a charged particle made when atoms lose or gain electrons
- Positive ion = atom has lost electrons
- **Negative ion** = atom has gained electrons.

Metals form positive ions

Non-metals form negative ions

			and the second second
Group	lons	Example	Lost electrons
1	+1	Li → Li ⁺ + e ⁻	
2	+2	$Ca \rightarrow Ca^{2+} + 2e^{-}$	
6	-2	$0 + 2e^{-} \rightarrow 0^{2-}$	Gained electrons
7	-1	Br + e⁻→ Br⁻▲	

Metallic Bonding

- Happens in **metals only.**
- Positive metal ions surrounded by sea of delocalised electrons (can move).
- lons tightly packed in rows.
- Strong **electrostatic forces of attraction** between positive ions and negative electrons.

Alloys

- Alloys = mixture of two or more metal atoms
- Pure metals are too soft for many uses.

Pure Metal



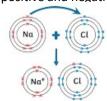


Alloy

- Atoms same size
- Different sized atoms
- Lavers slide
- · Layers cannot slide
- Softer
- Stronger

Ionic Bonding

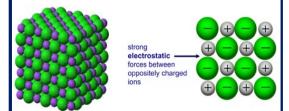
- s Between a metal and non-metal.
- Metals give electrons to non-metals so both have a full outer shell.
- **Electrostatic force of attraction** between positive and negative ions.



E.g. Sodium loses one electron to become Na⁺. Chlorine gains one electron to become Cl⁻. The two ions attract to form sodium chloride.

Ionic compounds

- Form giant lattices, as the attraction between ions acts in all directions



Properties of Ionic Compounds

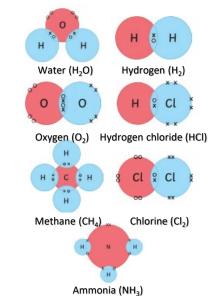
- **High melting point** lots of energy needed to overcome electrostatic forces.
- High boiling point
- Cannot conduct electricity as solid ions cannot move
- Conducts electricity when molten or dissolved – ions are free to move.

Covalent Bonding

- **Covalent bonding** = sharing a pair or pairs of electrons for a full outer shell.
- Between **non-metals only.**

Dot and cross diagrams

- Show the bonding in simple molecules.
- Uses the outer shell of the atoms
- Crosses and dots used to show electrons
- You should be able to draw the following:



Simple Covalent Molecules

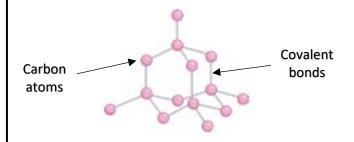
- Form when all atoms have full outer shells so bonding stops
- Examples are the molecules shown above.
- Have low melting and boiling points
- Due to weak intermolecular forces
- Do not conduct electricity

Yea	rr 10 Term 1 Science/Chemistry C2	<u> – В</u>	onding, structure, and the p	rope	erties of matter				
1.	What is an ion?	1.	Ionic bonding happens between	1.	What is covalent bonding?				
 3. 	What happens to form a positive ion? What happens to form a negative ion?	2.	What do metals give to non-metals?	2.	What type of atoms does covalent bonding happen between?				
4.	What type of ions are formed by: 1. metals 2. non-metals	3.	What type of attraction is between the positive and negative ions?	3.	Draw dot and cross diagrams for the following:				
1.	What are metal ions surrounded by?	4.	What structure do ionic compounds form?	Wa	ter (H ₂ O)				
2.	Name the type of attraction between the electrons and ions.	5.	What are the melting points of ionic compounds like?	Ме	thane (CH ₄)				
3.	Why do metals conduct electricity?				(2.)				
4.	What is an alloy?	6.	Why can solid ionic compounds not conduct electricity?		ygen (O ₂) Do simple covalent molecules				
5.	Why are pure metals too soft for some uses?			hav	ve a high/low melting point?				
6.	Why are alloys stronger than pure metals?	7.	When can ionic compounds conduct electricity?	6. V	Why is this?				

Year 10 Term 1 Science/Chemistry C2 – Bonding, structure, and the properties of matter

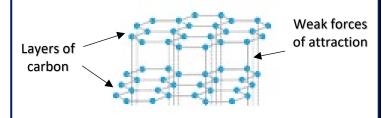
Giant Covalent Structure - Diamond

- Each carbon atom **covalently** bonded to **four** others.
- Forms a giant structure
- This makes diamond strong → a lot of energy needed to break lots of strong covalent bonds.
- **Does not conduct electricity** has no free electrons.



<u>Giant Covalent Structure – Graphite</u>

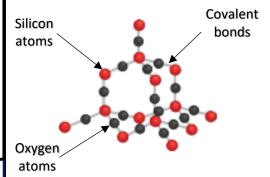
- Layers of carbon arranged in hexagons.
- Each carbon bonded to **three** other carbons.
- Leaves one delocalised electron → moves to carry electrical charge throughout structure.



- Layers held together by weak forces
- Layers can slide over each other easily
- Makes graphite soft/slippery → good lubricant.
- Has **high melting point** as has many strong covalent bonds.

Silicon Dioxide

- Similar structure to diamond
- Giant covalent structure.
- Lots of strong covalent bonds.
- These require lots of **energy** to break.
- High melting and boiling points.



Fullerenes and Nanotubes

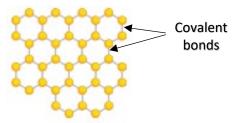
- Molecules of carbon shaped into hollow tubes or balls.
- Used to deliver drugs into body



- Carbon nanotubes = long narrow tubes
- Can conduct electricity
- Can strengthen materials without adding weight.
- Used in electronics and nanotechnology.

Graphene

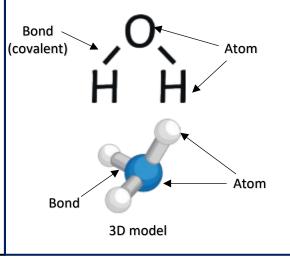
- Graphene = one layer of graphite.
- Very strong → lots of strong covalent bonds.



- Each carbon bonded to three others.
- One free delocalised electron → can move to carry electrical current throughout the structure.

Molecular models

- There are different ways to show a molecule other than dot and cross diagrams.

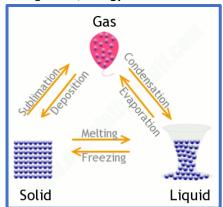


Vos	Year 10 Term 1 Science/Chemistry C2 – Bonding, structure, and the properties of matter							
1. 2. 3.	How many bonds do each carbon atom have in diamond? What type of bonds are in diamond? Why is diamond hard? Why does diamond not conduct electricity?	1.	What structure does silicon dioxide have? Why does this structure have a high melting and boiling point?	1. 2. 3.	What is graphene? State a property of graphene. How many bonds does each carbon have? What does this allow graphene to do?			
1. 2. 3. 4. 5.	What element is graphite made from? How many bonds does each carbon have? Why can graphite conduct electricity? What holds together the layers of graphite? Why is graphite soft/slippery? Does graphite have a high/low melting point? Why?	1. 2. 3.	What can fullerenes be used for? What is the formula of buckminsterfullerene? State two uses of carbon nanotubes.	1.	What are three ways that H ₂ O could be drawn?			

Year 10 Term 1 Science/Chemistry C2 – Bonding, structure, and the properties of matter

States of Matter

- Three states of matter: solid, liquid & gas.
- To change state, energy must be transferred.



- When heated, particles gain energy.
- Attractive forces between particles begin breaking when melting or boiling points are reached
- Amount of energy needed to change state depends on how strong forces are.

<u>Gas</u>

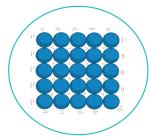
- Randomly arranged.
- Particles move quickly all directions.
- Highest amount of kinetic energy.



- Gases are able to flow fill containers
- Can be compressed as there is space between particles

Solid

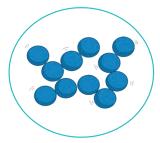
- Regular pattern (rows and columns)
- Particles vibrate in a fixed position.
- Particles have low amount of kinetic energy.



- Have a fixed shape cannot flow because of strong forces of attraction between particles
- Cannot be compressed particles close together.

Liquid

- Particles **randomly** arranged and touching.
- Particles can move around.
- Greater amount of kinetic energy than solid



- Liquids able to flow take shape of containers.
- Cannot be compressed particles are close together and cannot be pushed closer

State symbols

- States of matter shown in chemical equations:
- Solid (s)
- Liquid (I)
- Gas (g)
- Aqueous (aq)
- Aqueous solutions = substance dissolved in water.

Identifying Physical State of Substances

- If the temperature is lower than a substance's melting point – substance is solid.
- If the temperature is between the melting point and boiling point – substance is liquid.
- If the temperature is **higher** than the boiling point substance is a **gas**.

Limitations of Particle Model (HT)

- No chemical bonds are shown.
- Particles shown as solid spheres not the case, particles are mostly empty space like atoms.
- The diagrams don't show any of the forces between particles
- The diagrams are unable to show the movement of the particles.

L.	What are the three states of matter?	1.	How are solid particles arranged?	1.	Where are state symbols used?
		2.	Do solid particles move?	2.	Write the symbols for solid, liquid, gas and aqueous.
2.	What happens to particles when they are heated?	3.	Do particles in a solid have a high or low amount of kinetic energy?	3.	What does aqueous mean?
_		4.	Can solid particles flow?		
3.	What happens to attractive forces when particles are heated?	5.	Can solids be compressed?	1.	If the temperature is lower than melting point, the substance is
1.	What does the amount of energy needed to change state depend on?			2.	If the temperature is between melting and boiling point, the
	needed to ondrige state depend on:	1.	How are liquid particles arranged?		substance is
		2.	Do particles in a liquid move?	3.	When would a substance be gas?
1.	How are gas particles arranged?	3.	Do the particles in a liquid have		
2.	How do gas particles move?		more or less kinetic energy than solids?		State two limitations of the particle odel.
3.	Do particles in a gas have more or	4.	Can liquid particles flow?		
	less kinetic energy than those in solids and liquids?	5.	Can liquids be compressed?		
4.	Can gases be compressed? Why?				



GCSE Geography. Paper 2. 2. Economic world. UK futures



1. Economic change in the UK ent share (%) 50 š due to mechanisation. Primary 7 due to industrial revolution then Secondary due to de-industrialisation. 7 due to wealth (7 disposable income) Tertiary High-tech jobs including research and IT. 7 due to government policies and Quaternary the increase in technology. Why has our economy changed? The decline of a county's traditional De-industmanufacturing industry due to exhaustion of raw materials, loss of rialisation markets and competition from NEEs. Government A plan decided by a government to policies manage issues in a country. The process which has created a more Globalconnected world; with increases in the isation movement of goods/people worldwide

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

3. Environmental impact of industry Air and water pollution. Soil degradation. Releases CO2 increasing the rate of global warming. Transport of materials is by road 7 air pollution. Example of modern industry being environmentally sustainable Google London Landscraper started 2018. 686 bikes spaces Encourages cycling to work. < congestion/CO2 emissions. 4 car spaces Solar panels. Reduces fossil fuel consumption 19,800 kWh and reduces carbon footprint. Urban greening. < CO2. Collects Rooftop gardens rainwater. Encourages wildlife.

4. Chang	ges in the rural landscape
Population	Outer Hebrides
decline	(away from cities, limited opportunities).
Social	† Declined by >50% since 1901.
	† ↑ aging population = care issues.
changes	₱ Less children > schools shut.
Economic	Services close ie post offices.
changes	å ↑ tourists but infrastructure not there.
changes	Government subsidies cost of ferries.
Population	South Cambridgeshire
growth	(near large cities, people can commute).
	Migrants from Cambridge, some now
Social	from Eastern Europe too.
	† Proportion of elderly increasing (>65).
changes	† 80% car ownership = > congestion.
	† Young people are costed out.
Economic	å ↑house prices. Less affordable
changes	housing
	å Petrol prices ↑.

5. Improvements in infrastructure					
Road	Upgrading 'Smart motorways' M4. Variable speeds, reducing accidents, extra lanes. 2014 Road investment strategy £15 bill. New construction jobs, boost economy.				
Rail Rail					
Port	Liverpool 2. Doubles capacity to over 1.5 million containers a year. 96% of UK imports/exports through ports.				
Airports	Heathrow expansion. 3rd runway £18.6bill				

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

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



Science parks Business parks

GCSE Geography. Paper 2. 2. Economic world. UK futures



1. ECOI	ionnic change in the OK
70 (%) 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pre-industrial Industrial Post-industrial
Primary	
Secondar	у
Tertiary	
Quaterna	
Why has o	our economy changed?
De-indust rialisation	^
Governmei policies	nt
Global- isation	
2. Post	industrial economy
Tertiary ar	nd quaternary sector employed 81% in 2011.
IT	
Services	
Finance	
Research	

3. Environmental impact of industry					
Example of m	odern industry being				
environmenta	Illy sustainable				
Google					
686 bikes spaces					
4 car spaces					
Solar panels.					
19,800 kWh					
Rooftop					
gardens					

4. Chang	4. Changes in the rural landscape					
Population						
decline						
Social						
changes						
Economic						
changes						
Population						
growth						
Social						
changes						
Economic						
changes						

5. Improvements in infrastructure						
Road						
Rail						
Port						
Airports						

6 North-South divide						
Causes						
Impacts in north						
Strategie	es attempting to resolve					
regional	differences					
Devolving more powers						
Northern Powerhous	e					
Enterprise Zones						



Year 11 OCR A Term 1 – People of the world



					_					
A.	How can	can we measure development?			B. What has caused uneven development?			E.	What is Nigeria like?	
Life expec	tancy	The average lifespan of someone born in that country		Natural resource		(, 3 ,		Nigeria's environmental,/ political/ economic		
Birth rate		Number of live births per 1000 per year		Colonialism		One country goes into another country and claims they are in power. They can steal their raw materials.		_	<u>ntext</u>	
GDP per c	apita	An average of the national gross domestic product per person per year in \$						 Nigeria is an EDC in west Africa. It borders Niger to the north and Benin to the west. Nigeria lies on the Atlantic Ocean. 		
Literacy rate		Percentage of people over the age of 15 who can read and write		Industrialisation		and increas	re built, increasing trade sing economic		 Nigeria has a tropical climate in the South (near the Niger delta) and semi-desert 	
Death rate		Number of deaths per 1000 people per year		_		development			climate in the North.	
HDI		Measures life expectancy, education and income per capita. Scored 0-1, 0 is low.		Trade			be fair or unfair. Helps a country ase their economy.		Nigeria was colonised by the UK and became independent in 1960 It has high levels of international migration	
Internet us	ers	Percentage of people who have access to the internet		Climate		Extreme climate (too hot or too col- will limit industry and affect health			due to jobs in the oil industry	
A.	Ho	How can we measure development?					,	Agriculture in Nigeria provides a stable food supply for much of West Africa		
		POSITIVE	NEGATIVE					Nigeria has had a stable government since		
Life expectanc		nows condition of althcare and quality of	Does not consider political factors such as war	C. The diffe		When a country or organisation gives resources to another country (e.g. Money,		2015 What has enabled Nigeria to develop?		
	se	rvices								
		lows development of althcare (e.g.,	Does not consider how long babies survive in the country	Bi lateral aid		products or technologyp		With a population of 182 million,		
		ntraception)	,			International aid given by one country to another. Often has 'strings' attached.		Nigeria has the largest population of any African country.		
cou		nows how wealthy a untry's population is uality of life)	Very small/ large populations can disrupt data (e.g. China)	Multilateral aid		Given by many different countries or charity organisations (e.g. Oxfam, red cross)		Nigeria has grown mainly through the export of raw materials such as		
edu		nows the quality of ucation received in a untry	Does not consider other factors that disrupt education (e.g. water collection)	Short-term aid		Aid given to sup	to support a country following a e.g. after an earthquake)		 oil, oil palm and cocoa. They export In 2014 it has the highest GDP in 	
he		nows the quality of althcare/ disease/ od/water	Can be disrupted if country has an elderly population (Japan)			Aid given over a long period of time to support a country's development (e.g. Oxfam goat aid)		Africa		
		es a combination of easures= more accurate					Factors contributing to N		a's economic growth	
		lows the development of	Does not consider the quality			Imports	Goods coming into a count	ry		
		frastructure in a country of this infrastructure		Ex		Exports	Goods leaving a country			
D. Hov	v does aid	es aid promote and hinder development?			Tnter		ternational When one country (e.a.		UK) funds businesses in another country (e.g.	
Promote Aid can help a country improve it's healthcare, communications using ready developed technology from more developed nations help a country recover quickly after a natural disaster.				dly by investment Nigeria)		-, ,	as submission and management (e.g.			
Hinder Aid		Aid can hinder a country's development by encouraging depende money from more developed nations. If a government is corrupt,		dence on		Population structure	The 'make-up' of the population. E.g how old or young/ males and fema		. E.g how old or young/ males and females.	
in a		aid could be used in the wror	ng places (e.g. armament). Tied a spend money buying goods from	aid can p	uta	Employment	How the workforce is divi	ded u	p (primary/ secondary/ tertiary)	

structure

country into more debt as they spend money buying goods from wealthy

nations,

	Year 11 OCR A Term 1 – I					ne world		
A. How	can we measure development	?	В.	What h	as caused uneve	n development?	E.	What is Nigeria like?
Life expectancy			Natur	ral resourc	es			eria's environmental,/ political/ economic
Birth rate			Color	nialism			COI	<u>ntext</u>
GDP per capita			Color	lialism				
Literacy rate			Indus	strialisatior	ı			
Death rate							41	
HDI			Trade	e				
Internet users			Clima	ate				
A.	How can we measure develo	pment?						
	POSITIVE	NEGATIVE					_	
Life expectancy			C.	The diff	erent types of aid	ı	Wh	at has enabled Nigeria to develop?
Birth rate			- Aid					
			Bi late	eral aid			1	
GDP per capita							┨	
			Multil	ateral aid				
Literacy rate			Short	t-term aid			╢	
Death rate			Long-	-term aid				
HDI								
וטו		X				Factors contributing to	Niger	ia's economic growth
Internet users					Imports			
D. How does	l s aid promote and hinder devel	lopment?			Exports			
Promote	·				International investment			
					Population structure			
Hinder					structure			
					Employment structure			

Pizarro's Second Expedition Pizarro - First Expedition

3. The Spanish Empire 1528-1555

Pizarro was with Balboa when

they reached the Pacific. Pizarro was impressed by

Cortes and his success in Mexico Tales of vast wealth in Peru encouraged Pizarro to find his

own success. November 1524 - First expedition

Not a success. Only reached Columbia before bad weather, lack of food and attacks by hostile natives forced Pizarro to turn back.

The mangrove swamps put off any idea of establishing a settlement too.

Impact of Gold and Silver on

Used to make 8 sided coins - 'pieces of eight. Widely accepted in Europe due to high silver content.

The Crown took 25% of

bullion coming into Spain.

75% of wealth went to

Spanish merchants and

conquistadors.

European traders put up

prices for the wealthy Spanish merchants.

High prices led to inflation - workers demanded

higher wages in Spain.

wealthy by finding bullion

instead of making products

and selling.

Charles I invested money in the military – not industry

and business.

Spanish were getting

Justice was managed through the audiencias (courts), with judges who were independent of the viceroys. The role of the encomienda system: This was imposed officially across the Spanish Empire. An encomienda was land granted to a Spaniard, who was then called an encomendero. He could demand tribute from natives. In return he was responsible for their

the encomendero.

Mexico city and one in Lima (Peru).

They acted on behalf of the government.

The role of the Viceroys:

Governing the Empire

effectively.

the Indies'.

The New Laws:

protection and their conversion to Christianity.

It was made illegal to enslave natives.

The amount of tribute that could be collected was limited.

Significance of the New Laws 1542: Laws introduce to improve the rights of native people, but encomenderos opposed

them and the viceroy of Peru refused to implement them. Revolts in Peru: the most serious in 1544 had to be put down by the Spanish government and led to a temporary halt in the Spanish conquest of the New World in

The goverr of Panama sends a

The Spanish needed to find a way to govern the discovered territories to restore peace

and stability. They needed to make sure basic essentials were available, laws were in

Bartolome de las Casas - was a priest that tried to encourage the fair treatment of

natives in the New World. 1527 he wrote a book 'A Short Account of the Destruction of

Encomiendas had to be passed back to the Spanish government on the death of

The Council of the Indies appointed two viceroys to govern Spanish territories: one in

place, conquistadors didn't fight among themselves and ensure daily life was managed

Although forced to suspend the laws, Charles I insisted encomiendas be passed back to the crown on the death of an encomendero. Natives continued to be exploited in the New World.

wealth, including Llamas, silver and gold. Having been refused

to Charles I.

licence, the

authorising him to

conquer Peru.

Pizarro's appeal to

the Spanish King

Charles I

In 1528 Pizarro

Pizarro and the 13 men reach Tumbe

the natives

They see evidence o gold, silver

Pizarro sails

return to

PANAMA

Panama an: equip a thin

with the rescue expedition

returned to Spain

with evidence of Inca

permission to launch April 1532 a third expedition by the governor of Nov 1532 Panama, he appealed Pizarro received a Capitulacion de Toledo, in July 1529,

> July 1533 1533 Founding of La Paz, 1548

Date

Dec 1518

Sept 1520

1525-1527

1527

1529

Event

Capac's son).

La Paz was founded to symbolise the end of the revolt and to

Smallpox epidemic in Haiti.

returning to help his people.

First cases of smallpox in Mexico

Smallpox spreads along the Caribbean coast.

Smallpox reaches Peru. Huayna Capac dies from smallpox after

Civil War breaks out between Huascar and Atahuallpa (Huayna

Huascar is captured and killed. Atahuallpa takes over Cuzco.

The Battle of Cajamarca - Pizarro's men hid in the town square

of Cajamarca. When Atahuallpa's men entered the town they

met with a priest who showed them a bible. Atahuallpa threw

men to attack and they took Atahuallpa prisoner.

Manco made puppet ruler of the Inca Empire.

the bible on the floor which was the signal needed for Pizarro's

Atahuallpa promised to fill his prison with treasure in order to

secure his release. Although he did this, the Spanish still

sentenced him to death. On 26th July he was garrotted.

Conquistador Revolt in Peru 1544

encomenderos were unhappy with the

Pizarro, brother of Francisco Pizarro.

Inca territory for 2 years.

authority

New Laws. This revolt was led by Gonzalo

It was a success and Gonzalo ruled over the

The arrival of a Spanish army resulted in his

The revolt raised the issue of control. Spain

needed to govern its territories and control

(went to S. America) and the

New Spain (went to Mexico).

the rebellious conquistadors and

execution and the restoration of Spanish

A serious revolt took place as the

demonstrate that Spain had the overall authority in the New World, not the conquistadors. It became the administrative centre of the Spanish Empire. The Viceroy and the audiencias (courts) were based here. It was founded close to trade routes to ensure it maintained control over the silver mines based in Potosi and Oruro.

Pizarro and the Conquest of the Inca Empire

Discovery of silver in Bolivia and Mexico By 1550 silver had been discovered in Potosi (Bolivia) and in Guanajuato and Zacatecas (Mexico), Some was sent back to Spain but most was kept by the conquistadors. Large mining towns developed to house workers for the mines. Colonisation of the New World increased as adventurers, merchants, speculators and their employees came in search of wealth

encomenderos. This led to the founding of 25% of silver shipped to Spain went La Paz in 1548 straight into the treasury. **Pirates and Privateers**

Spanish treasure was a target for Pirates and

Privateers (funded by government/monarchy). The ships were easy to find as they took well-defined and predictable

routes across the Atlantic. War with France (1542-46) meant Spain had to adapt ships and

develop systems to deal with French privateers. Galleons patrolled the sea Treasure fleet system routes and started carrying developed: the Tierra Firme

treasure as they were well

armed.

the New World.

supply slaves to the New World. Licences sold to the

World, there was a labour shortage.

Casa de Contratacion (House of Trade)

trade with the New World.

Revolt of the Incas 1536

The Spanish saw Manco as a

puppet king who would rule on

their behalf. When Manco

escaped from the Spanish he

assembled an army and attacked

the base at Cuzco.

The Seige of Cuzco 1536-1537

-10,000 Inca warriors faced 150

Spanish and 1000 native allies.

-The Inca warriors broke into

town, burning buildings to try to

drive out the Spanish, but the

Spanish were able to put the fires

-The Spanish used their cavalry to

attack the Inca warriors.

-The Spanish captured the fortress

of Sacsahuaman from the Incas.

which the Inca army then

besieged.

-The siege ended when Spanish

forces exploring Chile returned.

-Manco withdrew and established

a separate kingdom which lasted

until 1572.

All goods imported to Europe had to go through

Seville. Merchants travelled from all over Europe to

buy and sell goods. This gave Spain a monopoly over

Due to the number of deaths of natives in the New

Under the Treaty of Tordesillas, Spain could not

Established in 1503 by Isabella. Collected colonial

taxes. Approved voyages of exploration and trade

and kept secret information on new lands and trade

directly get slaves from W. Africa. Spanish merchants could get licences (asientos) to highest bidder who could then buy from Portuguese merchants and sell to merchants in the New World.

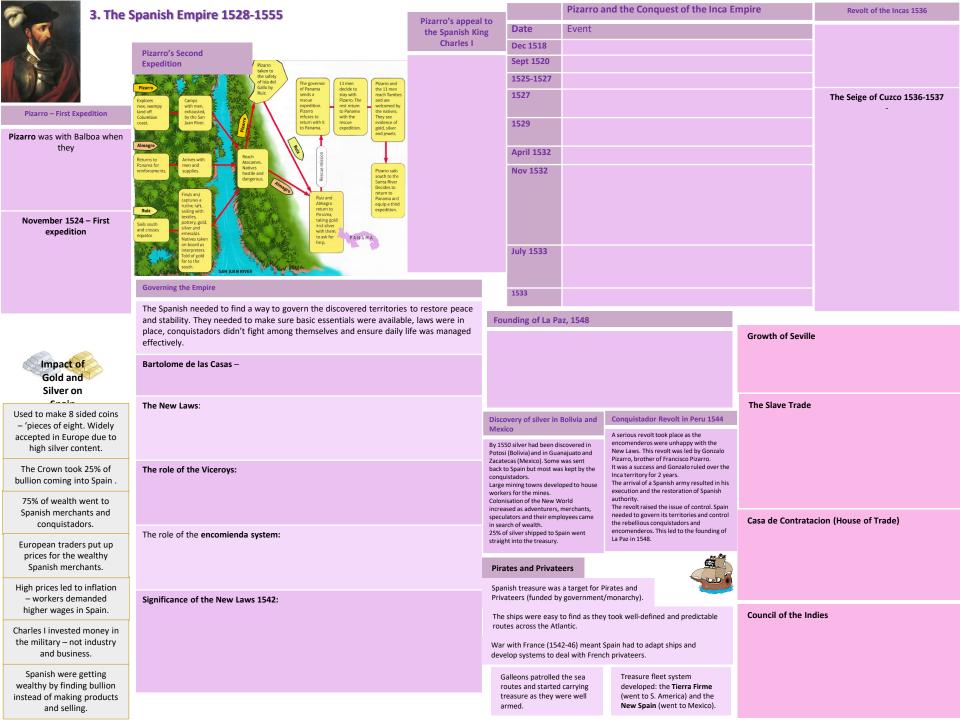
Growth of Seville

The Slave Trade

routes. Licenced captains of ships. In theory, no Spaniard could sail anywhere without the approval of the Casa.

Council of the Indies

Formed in 1524 and based in Spain. Controlled all matters concerning the New World. Messages received from Viceroys would be discussed and advice given to the King. Decisions made were sent from the Council to the Viceroys. This was Spain's way of trying to maintain control over its empire in







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

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

Is violent protest or terrorism acceptable?

С

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

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

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

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





A.	Cai	n you define these key words?	What we are		e are exploring this term: Pacifism . Protest. Terrorism. Weapons of mass destruction Just war		
Key wor	<u>d</u>	Key definition	С	Is	violent protest or terrorism acceptable?		
Forgivene	SS		_	1.		1.	
Greed				ļ			
Holy War				2.		2.	
Just War							
Justice				3.		3.	
Pacifism							
Conflict				4,		4.	
Jihad							
			Е	Is	s pacifism wrong? Yes		No
Protest							
Reconcilia	tion			1	1.		1.
Retaliation				2	2.		2.
Self-Defence							3.
Terrorism				3	3.		4.
D		re the rules of the just war theory?			Can just war theory make war fair?		
	1. 2.				1.		1.
	3. 4.				2.		2.
	5. 6.				3.		3.
	7.				4.		4.
					5.		5.
В. /	Religiou	s and non religious beliefs about weapons of mas	s de	struc	ction		
1							
2							
3							





Year 11 RE Christianity Quotes: Peace and Conflict	
"Obey the authorities, for God is the one who put it there. All governments have been placed in power by God." Romans 13:1	Jesus said he was sent to 'free the oppressed' Old Testament 'let justice roll down like the waters, and righteousness like an ever-flowing stream.'
Genesis 9:5-6 From his fellow man I will require a reckoning for the life of man. "Whoever sheds the blood of man, by man shall his blood be shed, for God made man in his own image."	But I tell you, do not resist an evil person. If anyone slaps you on the right cheek, turn to them the other cheek also.
Beat your swords into ploughshares , and their spears into pruning hooks: nation shall not lift up sword against nation ,	Old testament : 'When thou goest out to battle against thine enemies, be not afraid of them: for the LORD thy God is with thee'
Christianity Quotes For religion, peace and conflict	
'And the soldiers likewise demanded of him, saying, And what shall we do? And Jesus said unto them, "Put your sword back into its place; for all those who live by the sword, die by the sword."	Thou shalt not kill.
Luke 6:27 "But I say to you who hear, Love your enemies , do good to those who hate you,	New testament Blessed are the peacemakers: for they shall be called the children of God.
The catholic church and Church of England accept war under the conditions of just war theory.	Many weapons destroy the environment eg nuclear weapons. The quote below can be applied to this issue; 'You shall not defile the land in which you live, in the midst of which I dwell'
Jesus violently protested when 'he made a whip out of cords, and drove all from the temple courts, he scattered the coins of the money changers and overturned their tables'	The Lord will fight for you; you have only to be still.'
'protect the weak and needy'	Peace alone, not war, is holy (said by Pope Francis in the 2000s)
Year 11 RE Christianity Quotes: Peace and Conflict	
"have been" Romans 13:1	Jesus said he was sent to ' the oppressed' Old Testament 'let, and righteousness like an ever-flowing stream.'
Genesis 9:5-6 From his fellow man I will require a reckoning for the life of man. "Whoever sheds the blood of man,"	But I tell you, do not on the right cheek, turn to them the other cheek also.
Beat your into, and their spears into pruning hooks: nation shall notagainst,	Old testament 'When thou goest out to battle against thine enemies, be not afraid of them: for
Christianity Quotes For religion, peace and conflict	
'And the soldiers likewise demanded of him, saying, And what shall we do? And Jesus said unto them, "Put your sword; for those whoby the sword,by the sword	Thoukill.
Luke 6:27	New testament
"But I say to you who hear, Love your enemies , do good to those who hate you,	are the peacemakers: for they shall be called theof God.
The catholic church and Church of England accept war under the conditions of just war theory.	Many weapons destroy the environment eg nuclear weapons. The quote below can be applied to this issue; 'You shall not
Jesus violently protested when 'he made a whip out of cords, and drove all from the temple courts, he scattered the coins of the money changers and overturned their tables '	The Lord willfor you; you have only to be
'protect theand needy'	alone, not war, is holy (said by Pope Francis in the 2000s)





Year 11 RE Christianity Quotes: Peace and Conflict	
" the authorities, for God is the one who put it there"	Jesus said he was sent to ' the oppressed'
There	Old Testament
Romans 13:1	'let, and righteousness like an ever-flowing stream.'
Genesis 9:5-6	But I tell you, do not on the right
From his fellow man I will require a reckoning for the life of man. "Whoever sheds the blood of man,, for God made	cheek, turn to them the other cheek also.
man"	
Beat your, and their spears into	Old testament
pruning hooks: nation shall notagainstagainst	'When thou goest out to battle against thine enemies, be not afraid of them: for
Christianity Quotes For religion, peace and conflict	
'And the soldiers likewise demanded of him, saying, And what shall we do? And Jesus said unto them, "Put your sword; for those whoby the sword,	Thoukill.
Luke 6:27	New testament
"But I say to you who hear, Love your enemies , do good to those who hate you,	of God.
The catholic church and Church of England accept war under the conditions of just	Many weapons destroy the environment eg nuclear weapons. The quote below car
war theory.	be applied to this issue; 'You shall not in which you live, in the midst of which I dwell'
Jesus violently protested when 'he made a whip out of cords, and drove all from the temple courts, he scattered the coins of the money changers and overturned their tables'	The Lord willfor you; you have only to be
'protect theand needy'	alone, not war, is holy (said by Pope Francis in the 2000s)

Year 11 RE Christianity Quotes: Peace and Conflict					
"the authorities, for God is the one who put it therehave been" Romans 13:1	Jesus said he was sent to ' the oppressed' Old Testament 'letroll down like, and righteousness like an ever-flowing stream.'				
Genesis 9:5-6 From his fellow man I will require a reckoning for the life of man. "Whoever sheds the blood of man,, for God made man"	But I tell you, do not on the right cheek, turn to them the other cheek also.				
into, and their spears into pruning hooks: nation shall not	Old testament 'When thou goest out to battle against thine enemies, be not afraid of them: for				

Christianity Quotes For religion, peace and co	nflict
'And the soldiers likewise demanded of him, saying, And what shall we do? And Jesus said unto them, "Put your sword back into its place; for all those who live by the sword, die by the sword."	Thou shalt not kill.
Luke 6:27 "But I say to you who hear, Love your enemies , do good to those who hate you,	New testament Blessed are the peacemakers: for they shall be called the children of God.
The catholic church and Church of England accept war under the conditions of just war theory.	Many weapons destroy the environment eg nuclear weapons. The quote below can be applied to this issue; 'You shall not defile the land in which you live, in the midst of which I dwell'
Jesus violently protested when 'he made a whip out of cords, and drove all from the temple courts, he scattered the coins of the money changers and overturned their tables'	The Lord will fight for you; you have only to be still.'
'protect the weak and needy'	Peace alone, not war, is holy (said by Pope Francis in the 2000s)

Christianity Quotes For religion, peace and conflict	
'And the soldiers likewise demanded of him, saying, And what shall we do? And Jesus said unto them, "Put your sword; for those whoby the sword, by the sword	Thoukill.
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B.

C.

D.

E.

3.

traer

tranquilamente

el ordenador

What we are learning this term:

6 Key Words for this term

divertirse

hispánico

el turismo

Learning about local customs

Talking about a Spanish festival

Skim reading for key information

Using past expressions of time

Learning about Spanish life and routines

Learning about Latin American culture

GCSE Unit 4 SPANISH Knowledge organiser. **Topic Customs and Festivals**

4.1F Algunas costumbres regionales

la actuación performance

pleasant

atmosphere el ambiente

old antiquo/a la batalla battle el caballo horse

la camisa shirt el concurso

conmemorar correr

6. los antepasados

4. el desfile

5. celebrarse

4.1G La vida en familia

a media mañana at mid-morning

acostarse to go to bed

el bollo bun la cena evening meal to catch coger

la comida food, meal, lunch el desayuno breakfast la dieta diet

la leche milk to get up levantarse ligero/a light participar

to participate, to take part probar to try, to try out break el recreo healthy

saludable la sobremesa sitting chatting at the table after a meal el trabajador worker la tradición tradition to bring

calmly

el vaso glass

4.1H ¿Cambian las costumbres? to go to bed acostarse to close cerrarse to catch coger short corto/a empezar to start it is hot hace calor levantarse to get up el marido husband la mayoría majority

computer

agradable

competition to commemorate to run custom

la costumbre demasiado too much, too many el desfile parade, procession devil el diablo to enjoy oneself exciting bull run

divertirse emocionante el encierro encontrar to find enorme enormous to understand entender to train entrenarse

el espectáculo show, display extraño/a strange fatal awful to form formar histórico historic humano human impresionante impressive incómodo/a uncomfortable llevar to wear, take, carry el Mediterráneo Mediterranean

el/la moro/a Moor (historically a person from North Africa) nadie no one natural natural el origen origin pasarlo bien to have a good time el peligro danger peligroso/a dangerous por encima de over

precioso/a beautiful el producto product saltar to iump la seguridad safety, security la suerte luck el toro bull la torre tower

suit, costume

only, unique

to dress (in)

several

el traje

único/a

varios/as

vestirse (de)

Key Verbs Disfrutar To go To enjoy

Disfruto

Disfruta

Disfrutamos

We enjoy

Disfrutan

They enjoy

I enjoy Disfrutas You eniov

He/she enjoys

Hacemos We do Hacen They do

Hacer -

Hago

Haces

You do

Hace

s/he does

I do

to do/make

Disfrazar

Disfrazo

I dress up

Disfrazas

Disfraza

You dress up

Disfrazamos

We dress up

Disfrazan

He/she dresses up

To dress up

They dress up 4.2F Las fiestas del mundo hispano altar, shrine

americano/a American australiano/a Australian británico/a **British** lorry

T-shirt

carnival

to shower

(entry) ticket

to start

photo

people

to limit

to clean

to arrive

hose, hosepipe

the main square

everyone, everybody

to return, to go back

wet, soaked

heap, pile

first

red

dirty

typical

to throw

tomato

tourism

several

visitor

volunteer

soon

(time) ago

Japanese

to enjoy oneself

Voy

I go

Vas

Va

You go

s/he goes

Vamos

They go

They go

at the end

Van

4.2G Las fiestas de España - la Tomatina

Celebrar

Celebro

Celebras

celebrates

Celebran

al final

el camión

la camiseta

el carnaval

divertirse

empezar

la entrada

duchar

la foto

limitar

limpiar

llegar

la gente

hace (+ tiempo)

japonés/esa

la manguera

la plaza mayor

todo el mundo

mojado/a

el montón

primero/a

pronto

rojo/a

sucio/a

típico/a

el tomate

el turismo

varios/as

volver

el/la visitante

el/la voluntario/a

tirar

Celebramos

We celebrate

They celebrate

You celebrate

Celebra - he/she

I celebrate

To celebrate

aparecer el azúcar

el altar los antepasados

ancestors to appear sugar

la calavera celebrarse

completamente

describir

el desfile

el diablo

disfrazado

en honor a

encendido/a

el esqueleto

los familiares

el/la minero/a

la montaña

la normalidad

el número

Spanish speaking world)

Mexican chocolate sauce

el estaño

famoso/a

hispánico

la mina

el mole

muerto

la plata

proteger

el pueblo

la flor

skull

to be held cemetery

city, town

el cementerio cerca de la ciudad

close to, near to

comenzar to start

completely

to describe

in honour of

family members

Hispanic (i.e. of the

skeleton

famous

flower

mine

miner

dead

mountain

normality

to protect

village, (small) town

number

silver

'mole' sauce /

dressed up, disguised

parade

devil

lit

tin



6 Key Words for this term

4.1G La vida en familia

to catch

breakfast

to get up

to bring

computer

to try, to try out

light

divertirse

hispánico

el turismo

a media mañana

acostarse

el bollo

la cena

la dieta

la leche

el recreo

saludable

la sobremesa

after a meal

el trabajador

la tradición

la mayoría

GCSE Unit 4 SPANISH Knowledge organiser.

Topic Custo	oms and Festivals
ng this term:	4.1F Algunas costumbres regio
Spanish life and routines	performance

What we are learning this term:			4.1F Algunas costumbres	
A. B. C. D. E.	Learning about Spanish life and routines Learning about local customs Talking about a Spanish festival Learning about Latin American culture Skim reading for key information Using past expressions of time		el ambiente antiguo/a	performand pleasant battle horse

la camisa competition conmemorar correr la custom too much, too many

4. el desfile 5. celebrarse 6. los antepasados



calmly glass 4.1H ¿Cambian las costumbres? to go to bed to close coger corto/a empezar it is hot to get up el marido

parade, procession el diablo to _____ divertirse emocionante el encierro to find enormous to understand entrenarse el espectáculo extraño/a awful to form histórico humano impressive uncomfortable llevar el Mediterráneo el/la moro/a Moor (historically a person from North Africa) nadie

natural

origin

over

beautiful

product

to jump

safety, security

suit, costume

only, unique

pasarlo bien

el peligro

la suerte

el toro

la torre

varios/as

vestirse (de)

peligroso/a

Celebran al final australiano/a la camiseta el carnaval empezar la gente llegar la manguera mojado/a pronto rojo/a sucio/a el tomate el turismo el/la visitante come back

nales

celebrate

Celebras

celebrates

You

Key Verbs Hacer -Disfrazar To celebrate To go To enjoy to do/make To dress up Vov Disfruto Hago Disfrazo I go You go You enjoy You do You dress up Celebra - he/she Disfruta Hace Disfraza He/she enjoys He/she dresses up s/he goes Vamos Disfrutamos Disfrazamos We celebrate We enjoy We do They go They enjoy They do They dress up 4.2G Las fiestas de España - la Tomatina 4.2F Las fiestas del mundo hispano altar, shrine American los antepasados aparecer British el azúcar lorry skull to be held cemetery to enjoy oneself close to, near to to shower la ciudad comenzar (entry) ticket completamente photo to describe parade hace (+ tiempo) devil el _____ Japanese dressed up, disguised to limit en honor a to clean encendido/a el esqueleto el estaño los familiares heap, pile famous the main square la flor Hispanic (i.e. of the first Spanish speaking world) la mina el/la minero/a typical 'mole' sauce / to throw Mexican chocolate sauce todo el mundo la montaña muerto la normalidad several number silver volunteer to protect to return, to go back, to el pueblo

Translation Practice. G -	blue F – orange H - Green
Normalmente cereals	Normally for breakfast we have
Ayer una manzana	Yesterday I ate an apple
Carmen de casa a las ocho	Carmen leaves the house at 8.00
Esta tarde con la familia de mi amigo	This afternoon I chatted with my friend's family
Muchas veces no nada	Many times they don't drink anything
No hablamos	We don't speak a lot
El año pasado Pamplona	Last year I visited Pamplona
El es una tradición extraña	The bull run is a strange tradition
Fue muy	It was very exciting
dos años fuimos a Burgos	2 years ago we went to Burgos
Ayer fuimos a ver el	Yesterday we went to see the procession
El pueblo interesante	The town was interesting
Vimos un muy interesante	We saw a very interesting competition
¿Qué?	What did you do ?
Hoy me muy temprano	Today I got up very early
Compré para mi familia.	I bought presents for my family
Lafue que	The disadvantage was that
mucha basura.	There was a lot of rubbish.

Key Questions: Answer the following in your own words. Use these model answers		
Describe una fiesta popular en España	Una fiesta muy popular en España es laTomatina. La gente celebra la Tomatina en Agosto en Buñol cerca de Valencia. Durante la fiesta, la gente tira tomates, hay desfiles y bailes, se puede comer comida tradicional, la gente lleva disfraces. Después de la fiesta las calles están llenas de tomates. Es mi fiesta española favorita porque es muy entretenida y cómica.	
Describe una fiesta popular en tu país	En Inglaterra celebramos la fiesta de Fuegos artificiales. Cada 5 de noviembre, celebramos el día de Guy Fawkes. Durante la noche, la gente va a parques o el centro de la ciudad y hay muchos fuegos artificiales. Celebra la noche cuando GuyFawkes intentó poner fuego al gobierno de Inglaterra. Es muy entretenida y cómica.	
Describe tu experiencia la última vez que fuiste a una fiesta en tu país	La última vez que fui a una fiesta en Inglaterra fue muy entretenida y cómica. Fue en Noviembre cuando celebramos la fiesta de Guy Fawkes. Fuimos en el centro de la ciudad o el parque para ver muchos fuegos artificiales. Fue muy entretenido, porque comí algodón de azúcar y pasé la noche con mis amigos.	
¿Qué diferencias notas entre la vida española y la vida de tu propio país?	La vida en España y en Inglaterra es un poco diferente. En España se come una dieta mediterránea, la gente come muchas frutas, verduras, mucho pescado y aceite de oliva. En Inglaterra comemos más patatas fritas y más carne y menos frutas y verduras. En Inglaterra los jóvenes suelen llevar uniforme para ir al colegio pero en España los jóvenes no llevan uniforme. ¡Qué bueno! También, en España los jóvenes de 17 o 18 años no suelen emborracharse durante el fin de semana pero en Inglaterra hay más problemas con los jóvenes y el alcohol.	

Key Grammar		
Forming the preterite (past tense). Always remove the –AR, -ER, -IR endings first	Remember the preterite (past) tense endings for –AR, -ER, -IR verbs. They are: -AR: -é, -aste,-ó, -amos, -astéis, -aron -ER: -í, -íste, -ió, -imos, -istéis, - ieron -IR: -í, -iste, -ió, -imos, -istéis, - ieron	
Imperfect Tense (Past, ongoing actions, descriptions, 'used to' or 'was doing')	-ar -aba, -abas, -aba, -ábamos, - abais, -aban -er and –ir -ía, -ías, -ía, -íamos, - íais, -ían	
Using the immediate future tense IR + A + INFINITIVE	Voy a casarme = I'm going to get married Va a discutir con su padre = He / She is going to argue with his/her father	

Year 11 Computer Science – Term 1

What we are learning this term:
A. Ethical Terms
B. Networking Terms
C. Laws
C. Malware
E. Stages of Software Development

A.	Ethical	Ethical Terms	
E-Waste		Electronic Waste consisting of digital products.	
Planned Obsolescence		Producing goods which are designed to become obsolete and require replacement.	
Ethical Concerns		Ensuring public safety and the security of data.	
В.	B. Networking Terms		

Ethical Concerns		Ensuring public safety and the security of data.	
В.	Netw	orking Terms	
		network that covers a small ea, e.g. a school or office.	
	Co	A piece of hardware used in Computer Networks to connect multiple devices.	
		A network of personal devices, such as Bluetooth etc.	
	A device for connecting multiple networks together.		
	co	A group of two or more computers connected together and communicating with each other.	
	co	A circuit board installed in a computer allowing it to connect to a network.	
	A network which spans across a large geographical area. Multiple buildings, national, internet. Etc.		

C.	Laws	
Computer Misuse Act of 1990. Data Protection Act 1998.	Offence Unauthorised access to computer material Unauthorised access to computer materials with intent to commit a further crime Unauthorised modification of data Making, supplying or obtaining anything which can be used in computer misuse offences Controls how your personal infor organisations, businesses or the	•
GDPR General	have the right to find out what in government and other organisat Limit Storage of Personal Data Don't keep it longer than you need it. Limit Da	parent is a big no-no under the GDPR.
Data Protection Regulation.	Integrity and Confidentiality Use encryption, 2FA, and tamper-evident logging. Limiting Kept Data Murba Compliance. Limiting Kept Data Murba Compliance.	Do we need all this data? If the answer is no, delete it. Hake sure that data
Investigatory Powers Bill 2016	Requires companies and internet store records on emails and brow also gives the authority for police services to access computers and for data.	vsing histories. It e and security
Copyright, Designs and Patents Act	As soon as something is created, intellectual property and is prote the case of software, the copyrig choose to sell and license it (propright away (open-source).	ected by copyright. In ht holder can

D.	Malware		Legal? Tick or cross
Adw	are	Software which causes advertising popups and collects marketing data.	>
Ran	somware	Malware which encrypts a user's files then demands a ransom to decrypt them.	X
Spy	ware	Malware which collects information about the user and their activities.	×
Troj	an	Malware which appears legitimate but performs malicious activity when running.	×
Virus		Malware which replicates itself and damages computer systems and files.	×
E.	Stages of Software Development		

This should be a representation of

the algorithm such as in a flowchart or pseudocode.

Implementing the designed algorithm in code in order to turn it into a working program/ solution.

Testing the implemented program for errors. This looks for valid, boundary and erroneous data.

Refining and assessing the implemented program based on testing.

Design

Implementation

Testing

Evaluation

Year 11 Computer Science – Term 1

What we are learning this term: A. Ethical Terms B. Networking Terms C. Laws C. Malware E. Stages of Software Development

A.	Ethical Terms	
E-Wast	te	
Planne Obsole	d scence	
Ethical Concer		

B. Networking Terms		
		A network that covers a small area, e.g. a school or office.
		A piece of hardware used in Computer Networks to connect multiple devices.
		A network of personal devices, such as Bluetooth etc.
		A device for connecting multiple networks together.
		A group of two or more computers connected together and communicating with each other.
		A circuit board installed in a computer allowing it to connect to a network.
		A network which spans across a large geographical area. Multiple buildings, national, internet. Etc.

C.	Laws		
	Offence	Penalty	
	Unauthorised access to computer material	Up to six months in prison and/or an up to a £5,000 fine	
	Unauthorised access to computer materials with intent t commit a further crime	O Up to a five-year prison sentence and/or an unlimited fine	
	Unauthorised modification of data	Up to a five-year prison sentence and/or an unlimited fine	
	Making, supplying or obtaining anything which can be used in computer misuse offences	Up to a ten-year prison sentence and/or an unlimited fine	
	Controls how your personal information is used by		
	organisations, businesses or the government. You have the right to find out what information the		
	government and other organisa		
	government and other organisations store about you.		
	With D	Implied consent is a big no-no under the GDPR.	
	Personal Data than you need it.	Data to No scooping up	
	What	No scooping up data just because you can.	
	Integrity and Confidentiality Use encryption, 2FA, and tamper-evident logging. Limitin	ng Do we need all this	
	Kept D	Do we need all this data? If the answer is no, delete it.	
	Accountability Keep a paper trail to demonstrate compliance. Data N		
	Requires companies and interne	et service providers to	
	store records on emails and bro	•	
	also gives the authority for police and security services to access computers and phones to search		
	for data.		
	As soon as something is created	l, it becomes	
	intellectual property and is protected by copyright. In		
	the case of software, the copyright holder can		
	choose to sell and license it (proprietary) or give that		
	right away (open-source).		

D.	Malware			Legal? Tick or cross
Adware				
Ransomware				
Spy	ware			
Troj	an			
Viru	S			
E.	Stages o	of Software Development		
	Design			
Implementation				
Testing				
Evaluation				

1. Methods of growth

When a market is growing, it is important for a business to grow in order to retain market share.

Method of growth	Explanation		
Internal/organic growth	A business can grow by creating new products,		
	entering new markets, increasing their advertising and		
	opening new premises.		
External/inorganic	A business can grow by merging with another company		
growth	or by winning a takeover of another company.		

2. Finance for growth

A business must find sources of capital to pay for growth.

Term:	Definition:			
	A business can use 'retained profit' (capital they			
	have saved from profit) or they could 'sell assets'			
Internal sources of	(selling old or unused machinery/equipment).			
	Internal sources of funding are from an internal			
financing.	sources such as an existing business owner or the			
	business itself rather than from someone or an			
	organisation outside of the business.			
	A business could take out a loan (loan capital), or sell			
5 to 10 to 1	shares (share capital). External sources of funding			
External Sources of	are from an external sources such as a bank or an			
financing.	investor rather than from the business owners or the			
	business itself.			

3. Why do aims & objectives change?

As businesses evolve, they need to adapt their aims and objectives to changing circumstances.

circumstances.		
Changing market conditions	Controlled by customer behaviour, what do customers want?	
Changing technology	As technology changes, business needs to adapt to how customers use technology.	
Changes in performance	If costs increase, the chances are the profit margin of the business will decrease. A business needs to be clear on whether they are aiming for quality or price.	
Changes in legislation	If the law changes, this can bring uncertainty as the business may have to stop manufacturing/selling a certain product or be unable to predict future trends.	
Internal Reasons	Changes in management or changes to the culture of the company.	

	GCSE Business. Pap	per 2.	Growing the	business
1. Methods of grow	th	3. Why do aims & objectives change?		
When a market is growing, it is important for a business to grow in order to retain market share.		As businesses evolve, they need to adapt their aims and objectives to changing circumstances.		
Method of growth	Explanation			
Internal/organic growth		Changing condition		
External/inorganic		Changing	technology	
growth				
2. Finance for growth				
A business must find sources of capital to pay for growth.		Changes i	Changes in performance	
Term:	Definition:			
Internal sources of financing.		Changes i	n legislation	
External Sources of financing.				
		Internal R	leasons	

GCSE Business. Paper 2.

Growing the business

4. Globalisation

The increasing tendency for countries to trade with each other and to buy global goods such as Coca-Cola or services such as Costa Coffee.		
Imports	Goods brought into one country from another.	
Exports	Goods sold to one country from another	
4. Globalisation		
Barriers to trade	Definition: Measures put in place by a government to control the numbers of goods imported into a country.	
Tariffs	Import taxes – taxes on imported goods.	
Trade blocs	An agreement between some countries to trade freely without any tariffs, but countries not within the agreement will be charged tariffs.	

5. Ethics & business

How the behaviour of a business is judged against human morals.			
Term	Definition		
Fair Trade	A global scheme that states that farmers or producers are paid a fair price for their goods. Business costs are higher, but customers will pay more for Fair Trade products.		
Environmental	Businesses are constantly monitored for their environmental impact. Behaving in an environmentally ethically manner means to not pollute or damage the local/national/global environment – sea, land or sky.		
Labour	Human morals dictate that a business should pay its workers fairly and that working conditions should be safe and clean. If a business sub-contracts work to international manufacturers in Asia, human morals dictate that those workers of the contractor are paid fairly and work in safe, clean conditions also.		

6. Ways to extend the Product Life Cycle of a Product

ldea:	Explanation
Find new uses for the product	If a product can be used for multiple purposes, ensure that your target audience is aware of this
Change the appearance, format or packaging	Changing the appearance of a product can give it a new lease of life and allow the customer is perceive it as new again.
Encourage use of the product on more occasions	If a product can be used for multiples different occasions make sure the customer base is aware of this
Adapt the Product	Continue to make small adaptations to products to improve the quality of the product on offer.

	GCSE Business. Paper 2.	Growing the business
4. Globalisation		
The increasing tendency for countries to trade with each oth	ner and to buy global goods such as Coca-Cola or servio	ces such as Costa Coffee.
Imports		
Exports		
4. Globalisation		
Barriers to trade		
Tariffs		
Trade blocs		
5. Ethics & business		
How the behaviour of a business is judged against human morals.		
Term		
Fair Trade		
Environmental		
Labour		
6. Ways to extend the Product Life Cycl	e of a Product	
Idea:		Explanation
Find new uses for the product		
Change the appearance, format or packaging		
Encourage use of the product on more occasions		
Adapt the Product		



Year 11 PRODUCT DESIGN Term 1



New and emerging technologies

Companies are trying to save money, improve products, develop new materials and become more efficient. New technologies are developed to positively impact the manufacturing industry and society.

Crowdfunding	Uses websites to advertise products as investment opportunities, where people can choose to back a project with a financial donation
Virtual marketing and retail	Promotion of products online and sharing experiences, reviews and recommendations
Cooperatives	Cooperatives are organisations with lots of people working together towards common goals.
Fair trade	Fair trade is a trading partnership that ensures workers in developing countries are given suitable working conditions and are

Sustainability 6

If materials are not reused or recycled, the planet will run out of them. If trees are not replanted as quickly as they are felled, we will run out of timber. A material is said to be sustainable if it can be replaced continuously or if it can be recycled or reused indefinitely.

paid a fair wage.

What we are learning this term:

- A. New and emerging technologies B. Sustainability
- C. Impact on environment D. Impact on People E. Informing design decision

C.

Impact on people D.



People influence how technology is developed to suit their own wants and needs: however, technological developments can change people's lifestyle and behaviours.

Technology push

- Research and development in science and industry can lead to new discoveries
- This is known as technology push, and it happens before there is consumer demand for a product.
- SMART phones are a good example of technology push

Market Pull

Market pull is when product ideas are produced in response to market forces or customer needs

Changes in culture

- Fashion trends continue to be influenced by changing technology.
- Wearable items embrace new technology, such as high-tech watches, while textile technology utilises electrically-conductive material or 3D-printing technology.

Physical Disability



Products aimed at users with physical disabilities will ensure they can use the product with ease.

User needs are met by understanding the nature of the physical disability, eg visual impairment, mobility restrictions or motor control.

Elderly

When designing products aimed at elderly users, it is important to understand -

The difficulties this user group may experience, such as mobility issues, visual impairment and hearing loss.

Religious Groups

Religious groups have a variety of preferences that can be addressed through design. The use of certain symbols, dietary restrictions and clothing requirements all need to be considered so that beliefs are upheld.

User centred design

User-centered design (UCD) is a design process in which designers focus on the users and their needs in each phase of the design process. In UCD, design teams involve users throughout the design process via a variety of research and design techniques, to create highly usable and accessible products for them.

Universal Design

Universal Design: focuses on serving the broadest range of users as possible (90%), rather than trying to address individual accessibility or inclusion objectives.

Impact on the environment



Modern companies are encouraged to be less wasteful and more considerate of how they affect the natural environment.

Continuous improvement

Continuous improvement is the practice of continually making small adjustments to production techniques to improve speed and quality and save resources.

Efficient working

It is important to ensure that companies work in an efficient manner. This includes increasing the speed of production, reducing errors and reducing waste, which can be done by utilising automation or computer aided manufacture (CAM).

Pollution

Pollution is caused when harmful substances are released into the natural environment. Pollution can occur in the air. water or natural land. Legislation has been brought in to help with this issue.

Global warming

- Manufacturing processes in factories or the use of day-to-day products like cars can cause harmful chemicals, such as carbon monoxide and nitrogen oxides.
- These chemicals pollute the air and natural land



Year 11 PRODUCT DESIGN Term 1



A.	New and	emerging technologies	Wha	t we are learning this term:			E.	Informing design decision ిగ్లో
Companies are trying to improve products, and become more New		A. New and emerging technologies B. Sustainability C. Impact on environment D. Impact on People E. Informing design decision			Physic	cal Disability		
	nologies are	e developed to positively and society.	C.	Impact on the environment	D.	Impact on people		
	dfunding			ern companies are encouraged to be and more considerate of how affect the	develope	offluence how technology is d to suit their own and owever, technological		
				tinuous improvement	developm	nents can change people's and	Elderl	у
					Technolo	ogy push		
Virtua mark	al eting and							
retail			Effic	ient working			Religio	ous Groups
Соор	eratives							
					Market P	Pull		
Fair t	rade		Poll	ution			User	centred design
					Changes	s in culture		
В.	Sustair	nability 🎧	Glol	oal warming				
							Unive	rsal Design
							Univer	sal Design:



Year 11 Food & Nutrition Term 1



What we are learning this term:

A. Proteins

B. Carbohydrates

C. Fibre & Water

D. Fats

E. Minerals

F. Vitamins

D.

Fats

Saturated Fats

Usually come from

animal sources

A.	Proteins – contain amino acids			
© X		Used for growth, repair and maintenance of the body.		
Source ?		Seeds, meat, fish, dairy, nuts and beans. Alternative: soya, mycoprotein, TVP & tofu.		
Excess		Strain on liver and kidneys. These organs process the proteins consumed.		
Deficiency		Slows growth, weak immune system, oedema, kwashiorkor, poor hair /skin / nails.		
High Biological Value Proteins		These contain ALL the essential amino acids. These come from mainly animals sources (as well as soya and quinoa).		
Low Biological Value Proteins		These are missing one or more of the essential amino acids. These come from plant sources.		
	Protein Completion: when you combine LBV proteins to get all the essential amino acids.			

B. Carboh	ydrates – used for energy	
E	Sugars – digested quickly & energy released quickly. Monosaccharides or Disaccharides	
Source ?	Fruit or added to food.	
	Starch – digested slowly & slow released of energy. Polysaccharides.	
Source ?	Potatoes, cereals. Have a lot of nutrients & fibre.	
Excess	Gets converted into fat (may lead to obesity), tooth decay, type 2 diabetes.	
Deficiency	Low blood sugar (hunger, dizziness, tiredness), body starts to use up fat & protein (weight & muscle loss).	
Glycaemic Index (GI): show how quickly carbohydrates affect blood sugar levels.		

y.	9
e a lot	Deficie
ay lead pe 2	E. Calciur
starts to	Iron
	Sodiun
	Phosph
	Fluorid
	lodine
	_

Excess	Obesity, Type 2 Diabetes, higher Cholesterol (increased risk Coronary Heart Disease).		
Deficiency	Vitamin deficiency, weight loss, less insulation / bone & organ protection.		
E. Minera	als		
Calcium	Strong bones & teeth, healthy nerves & muscles, blood clotting		
Iron	Forms part of haemoglobin in red blood cells		
Sodium	Controls body's water content, helps nerves / muscle function		
Phosphorus	Healthy bones & teeth		
Fluoride	Helps strengthen teeth &		

prevent tooth decay

Helps make some hormones

Needed for energy, vitamins,

Unsaturated Fats

vegetable sources.

Mostly from

insulation (warmth) and

protecting your bones & organs, making cholesterol.

F.	Vitar	nins
W T		Mic the
at S	oluble	Vitam

Micronutrients which help the body to function.

itamins

Found in fatty food. Stored in fat tissue if not used up.

Α	For good eyesight, healthy immune system / skin
D	Helps absorb minerals (especially calcium)
E	For healthy skin, eyes & immune system
К	Helps heal wounds, keeps immune system / bones healthy

Water Soluble Vitamins

Vitamins that dissolve in water & lost through urine – need to take daily! They are also lost when fruit and vegetables are exposed to air.

В	Keep the nervous system healthy
B1, B2 & B3	Help with energy release
B9 & B12	Help make red bloody cells.
С	Protects body from infection, heals wounds

Antioxidants

Vitamins A, C & E are antioxidants which may protect cells from free radicals chemicals you encounter every day.

C.	Fibre & Water			
Fibre		Water		
Helps with digestion Prevents constipation Found in fruit, pulses, nuts, veg, wholegrain foods		 Helps get rid of waste & digest food Controls body temperature 6-8 glasses of water a day More during a hot day or exercising 		



Year 11 Food & Nutrition Term 1



							_	
What we a	Vhat we are learning this term:							
A. Proteii	ns B. Carbohydrates C. Fibre	e & Water D	. Fats E. Minerals F. '	Vitamins				
A. Prote	eins – contain amino acids	B. Carbohy	ydrates – used for energy	D. Fats		F. Vitar	mins	
			Sugars					
Source ?		Source ?		Saturated Fats	Unsaturated Fats	Fat Soluble	Vitamins	
Excess Deficiency			Starch	Excess		D		
Θ		Source ?		Deficiency		К		
High Biological Value Proteins		Excess		E. Minerals		Water Solub	le Vitamins	
Low Biological Value Proteins		Deficiency		Iron		В		
Protein Com	ppletion:	Glycaemic Inde	l x (GI): .	Sodium		B1, B2 & B3 B9 & B12		
C.	Fibre & Water] Bhaanhairia		20 0 2 12		
Fibre		Water		Phosphorus Fluoride		С		
• -		• -				Antioxidants		
• -				lodine				
		l				1		



Year 11 Engineering Term 1 (Unit 2)



What we are learning this term:

- A Client briefs and building specifications
- B. Product analysis
- Design generation and analysis
- D. Planning production

A. Client briefs and building specifications

As an engineer you may be given a **brief** of what the customer wants from their product. The steps to analyze this are:

- Highlight the **key information**, what are they actually asking
- 2. Consolidate the information into a bullet point list
- Rank the list in terms of importance, most important first. Make those points the focus of your design.

Specifications: Documents listing the specific properties a design should have. These are most useful when given as quantitative information, as you can more easily check if you have completed it. Quantitive information - can be measured/counted i.e number of wheels on a car, how much it weighs.

Qualitative information - opinions based/ descriptive i.e how beautiful something is

B. Product analysis



is for Aesthetics



is for Cost



is for Customer



is for **Environment**



is for **Size**



is for Safety



is for Function



is for Material



Aesthetics means what does the product look like? What is the: Colour? Shape? Texture? Pattern? Appearance? Feel?



Cost means how much does the product cost to buy? How much does it: Cost to buy? Cost to make? How much do the different materials cost? Is it good value?



Customer means who will buy or use your product? Who will buy your product? Who will use your product? What is their: Age? Gender?

What are their: Likes? Dislikes? Needs? Preferences?



Environment means will the product affect the environment? Is the product: Recyclable? Reuseable? Repairable? Sustainable? Environmentally friendly? Bad for the environment?

6R's of Design: Recycle / Reuse / Repair / Rethink / Reduce / Refuse



Size means how big or small is the product? What is the size of the product in millimeters (mm)? Is this the same size as similar products? Is it comfortable to use? Does it fit? Would it be improved if it was bigger or smaller?



Safety means how safe is the product when it is used? Will it be safe for the customer to use? Could they hurt themselves? What's the correct and safest way to use the product? What are the risks?



Function means how does the product work? What is the products job and role? What is it needed for? How well

does it work? How could it be improved? Why is it used this way?



Notes on

material/

Material means what is the product made out of? What materials is the product made from? Why were these materials used? Would a different material be better? How was the product made? What manufacturing techniques were used?

Calculate area/volume of material used

of whole products can be made from it

Research what stock is used and what price a unit

Calculate how many whole products can be made

Divide the cost of the unit of stock by the number

C. Design generation and analysis

material, or

process with

something else.

Replace a part,

ideas, or functions together in new ways - or find a new element you can merge

something to better suit a new purpose. context



Enlarge, reduce,

change the

shape, or alter

attributes, Can

a small change

have a big

effect?

Rather than changing the thing itself. consider changing the context it exists Remove elements. simplify, or pare down to essentials. Is less more?

re-order vour priorities. invert cause and effect, and turn it all unside-down

Flip the script,

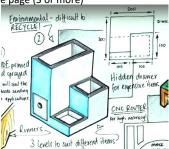
Is part of a range of ideas on the page (3 or more)

production Environmental - difficult to choices and RECYCLE! why IDF, primed d sprayed Hidden drawer will seal the for expensive itens teeds sanding · application CNC ROUTER

Notes link designs to the brief and specification

Very clear drawings, use of rendering to show depth

C. Design generation example



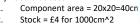
Worked example Calculate the cost of the 20x20cm component if it is

Made from a sheet of 100x100cm plywood that cost £4.

D. Planning production

Calculating the cost of a product:

from that unit of stock



- 3. 1000 / 40 = 25

of stock is

£4 / 25 = 400p/25 = 16p

Strengths

- key features that match the design brief

-Key features that match the specification - Things that the target market would like

Weaknesses

- Limitations of the idea
- Things the target market might not like
- Points on the specification it did not meet

SWOT evaluation for new design ideas

Opportunities

- The ways in which the design could be improved
- New ideas or technology that could change the way the product could be used

Threats

- Other products in the market that are similar
- Extra resources needed to make it
- Extra money / time/ skills needed to make it



Year 11 Engineering Term 1 (Unit 2)



What we are learning this term:

- A. Client briefs and building specifications
- B. Product analysis
- C. Design generation and analysis
- D. Planning production

Strengths

A. Client briefs and building specifications

Analyse this brief. Show you can: Highlight the **key information, bullet point list** the info, **Rank** the list.

A company which sells products online is creating a new range of designs. Create a concept for a pendant light. The light must be low cost to manufacture so suitable processes and materials should be considered. To keep transportation costs down, the light must be lightweight. The dimensions of the light must not exceed 45cm in any direction.

Ranked Bullet points:

C. Design generation and analysis

Use the SWOT tool to analyse the design of the existing lampshade.

Strengths	Wedniesses
Opportunities	Threats

Weaknesses

Draw below how you would **adapt** the design to be more lightweight or attractive

B. Product analysis

A C

M



Analyse this collapsible plywood shade using ACCESSFM

5

S

E

D. Planning production

Calculating the cost of a product:

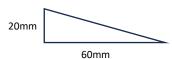
- Calculate area/volume of material used
- Research what stock is used and what price a unit of stock is
- Calculate how many whole products can be made from that unit of stock
- Divide the cost of the unit of stock by the number of whole products can be made from it

Pactice questions:

What is the cost of the 100x100mm component if it is made from 1000x1000mm plywood that costs £4?



2. What is the cost of this component if it is made from 1000x1000mm plywood that costs £4?



Year 10 BTEC Health and Social Care- Component 2: Health and Social Care Services and Values.								
What we are learning:		B What are	the different types of health care services?	C.	What are the different types of social care			
C. What are the diff	Ferent types of health care services? Ferent types of social care services? Ferent types of social care services?	Primary Care	Primary care is the first point of contact a patient is likely to have with the NHS – you can refer yourself to primary care providers. Primary care providers include	Childre and you	ung support on a temporary or permanent			
A. Key words fo	r this Unit		pharmacists, Registered GPs/doctors, walk-in centres, accident and emergency departments (A&E), dentists and Opticians.		ill; they have family problems, they			
Primary care	First point of contact when seeking health care				have behavioural issues or additional needs. Types of support for children and			
NHS	National Health Service – Tax funded health care in the UK.	Secondary Care	Secondary care is specialist treatment or care. A primary care provider will refer a patient for secondary care if they feel it is		young people include foster care, residential care and youth work.			
Secondary care	Specialist health treatment and/or care		necessary for the patient to receive further advice, tests or treatment. • Secondary care providers include	Childre adults specific	with support with specific needs including			
Tertiary care	Advanced specialist health treatment and/or care.		cardiologists (heart), gynaecologists (female reproduction), paediatrics (children), obstetrics (childbirth and	needs	impairments and long-term health issues.			
Allied health professionals	Professionals who are involved in patient care from diagnosis to recover	Tartiana Ossa	midwifery), psychiatry (mental health) and dermatology (skin).		Types of support for children and adults with specific needs include residential care, respite care and domiciliary care.			
Clinical support staff	Support allied health professionals with the treatment and care of patients.	Tertiary Care	Tertiary Care is advanced specialist treatment or care. A secondary care provider will refer a patient for tertiary care for long-term treatment and/or care. Tertial care properties included private care.	Older Adults	Older adults may need support with a range needs including arthritis, cardiovascular disease, dementia and			
Foster care	A stable family home where care is provided on either a short or long-term basis.		Tertiary care areas include spinal, cardiac (heart), cancer care, chronic pain, burns and neonatal (premature and ill new born babies).		depression. Types of support for older adults include residential care, carers and personal assistants.			
Residential care	Accommodation and care for a number of children, young people or adults living together in one building.	Allied Health Professionals	Allied health professionals work in a range of specialities They support patients through all stages of care – from diagnosis to recovery. To work with the public they	Informa Social	3 1			
Respite care	Short-term care which provides relief for family member who are carers.		must register with the Health and Care Professions Council (HCPC). • Allied health professionals include art therapists, dieticians, paramedics,		Informal carers include a spouse or partner, children, friends and neighbours. Informal carers do practical			
Domiciliary care	Care received in the person's own home.		physiotherapists, speech and language therapists and radiographers.		household duties, shopping, laundry, walk the dog and help with personal care.			
Sensory impairment	Difficulties with senses, most commonly vision and hearing.	Clinical Support Staff	Clinical support staff work within a range of departments under the guidance of allied health professionals. They are		care.			
Braille	Raised lettering to help visually impaired.		trained in their roles but are not required to register with the HCPC.		\bigcirc			
Occupational therapist	Offers support to develop independence for daily living activities.		Clinical support staff include theatre support workers, prosthetic technicians, dietetic assistant, phlebotomist (collects blood samples), hearing aid dispensers and materiils support workers.					

and maternity support workers.

What we are learning:	В	B What are the different types of health care services?				are the different types of social care
 A. Key words B. What are the different types of health care services C. What are the different types of social care services D. What barriers are there to accessing care services 	?	Care		Childre and you	ung	es?
A. Key words for this Unit				people		
Primary care						
NHS	Second	ary Care				
Secondary care				Childre adults v specific	with	
Tertiary care				needs		
Allied health professionals						
Clinical support staff	Tertiary	Care		Older Adults		
Foster care						
Residential care	Allied H Profess			Informa Social		
Respite care						
Domiciliary care						
Sensory impairment	Clinical Staff	Support				
Braille						
Occupational therapist						

D. What barriers are there to accessing care services? **Physical Barriers** Difficulty accessing care due to mobility and/or disability. Obstacles include uneven and rough pavements and services, narrow doorways, no lift and transport. Access could be improved by planning journeys in advance and reporting any problems to the council. **Sensory Barriers** Sensory impairments can be a barrier to accessing care. • A person with poor vision may need glasses or documents in large print. Profound sight problems may benefit from Braille. • A person with a hearing impairment may benefit from a hearing aid or sign language interpreter. Social, Cultural and Social, cultural and psychological barriers may leave people feeling nervous about accessing support. **Psychological** These can include: religion/cultural barriers, negative experience, self-diagnosis, substance misuse, opening hours. Care services can give individuals opportunities to share their concerns, offer different gender practitioners, facilities to **Barriers** worship and show respect and understanding. **Language Barriers** • Language can be a barrier to accessing care services because individuals and care providers may struggle to understand each other. Support for individuals could include translated documents, translators and interpreters and support from family members. Geographical Individuals may struggle to reach care services because public transport may not run regularly, specialist treatments may require long distance travel and travel can be expensive. **Barriers** • Support could include being provided with direct travel or having travel costs reimbursed. • If an individual has a learning disability is can cause difficulty in them accessing care services. **Intellectual Barriers** Support might include a learning disability nurse, speech and language therapist or occupational therapist. · As the population ages and more disorders are being successfully treated, there is a huge strain on health and social care **Resource Barriers** resources – at times it might seem that not everyone can access what they need. • There are huge staff shortages which puts strain on people that work in the health and social care sector. **Financial Barriers** • Seeing a GP or using emergency services are free but some services, such as optical and dental care, often involve some payment. • This can be difficult for people if they are from a low-income household as they may not feel they can afford to access the care they need.

D.	What ba	rriers are there to accessing care services?
Physical	Barriers	
Sensory	Barriers	
Social, C Psycholo Barriers		
Languag	e Barriers サ レ 人	
Geograp Barriers		
Intellect	ual Barriers	
Resource	e Barriers	
Financia	Barriers £	

What we are learning:

- E. Define the key wordsF. What are the care values and how can they be implemented?

E.	Define the key	y words		
Self-re	espect	Valuing yourself		
Perso appro	n centred ach	Planning care around the wants and needs of a service user		
Empo	werment	Supporting people to take control of their lives and futures by involving them decisions on their care and treatment		
Confid	dentiality	Not passing on information or discussing a private conversation to anyone		
Dignit	у	Being respected and treated with care		
Safeguarding		Policies to ensure children and vulnerable adults are protected from harm, abuse and neglect		
Discrimination		Treating a person or group of people unfairly or less well than others		
Compassionate		Feeling or showing sympathy and concern for others		
Competence		The ability to do something successfully and efficiently		
Conse	equences	A result or effect, typically one that is unwelcome or unpleasant		
Revie	w	Involves assessing or inspecting something with the intention of making change if necessary		
Empa	thy	Being able to understand and share feelings and views of another person.		
Insom	nnia	Difficulties in sleeping		

F.	What are the care values and how can they be implemented?
Empowering and promoting independence	 Empowerment is when an individual feels in control of their own life and have a say in what happens to them. Some people might need help with empowerment because of their age, circumstances or confidence e.g. elderly people, children, adult with learning disabilities. You can promote empowerment and independence by involving individuals, where possible, in making choices about their treatment.
Respect for othe	 You can show respect for the individual by respecting their privacy, needs, beliefs and identity. Show respect by being patient when someone takes longer to perform simple tasks due to their age, disability or injury. Do not leave personal files around for others to see or discuss your patients' case with friends. Gain permission before entering a room, provide private place for personal conversations.
Maintaining confidentiality	 It is a person's right by law to have information about them kept confidential. Care workers and not allowed to talk about one service user to another, or someone who is not involved in helping them get better. This involves not having those private conversations in public places where other can overhear. Paper and electronic files are to be kept confidential and only shared with care workers which are involved in the treatment of the patient.
Preserving dignit	 Preserving the dignity of individuals to help them maintain self-worth, privacy and self-respect. You do this by involving the person in their own care; helping them go to the bathroom; giving the person time they need, checking what they would like to be called; closing door or curtain when they are changing; making sure their clothes are clean; dealing with embarrassing situations sensitively and professionally.
Effective communication	 In health and social care it is important to communicate effectively with service used in order to build trusting relationships. These can be lost of the care worker appears not to care or listen. Recognising different communication needs and trying to overcome them shows that cares respect the individual e.g. when visually impaired providing a leaflet in braille; if can't speak English well, have a translator organised beforehand. Show you value the person through showing empathy, asking questions, not judging, smiling, using their name, giving appropriate eye contact, open body language, giving time to process.
Safeguarding an of care	 Health and social care workers have a legal duty to protect service users from harm, neglect or abuse. They must recognise the signs and symptoms of abuse so they can protect people. Signs of abuse include low self-esteem, STDs, unexplained injuries or bruises, insomnia, change in appetite, change of personality, self-harming, fear of being alone etc. What to do: report the abuse, never promise to keep the abuse secret, make it clear that you will have to tell someone e.g. your supervisor or the police. DUTY OF CARE Care workers must work in ways that never put individuals at any risk or harms. They need to know their responsibilities, procedures, deliver care as the care plan states and always report and record any concerns about the service user even if they appear minor.
Promoting anti- discriminatory pr	Discrimination can be obvious but sometimes it can be subtle and hidden, and The Equality Act 2010 makes it illegal to discriminate against people because of their e.g. age, gender, race, disability, religion, sexual orientation, marital status etc. You can promote anti-discriminatory practice by: having patience with someone who doesn't speak English well; communicating in a way that the person will understand; showing tolerance towards people who have different beliefs and values from you; challenging unkind behaviour.

What we are learning:			F.	What a	re the care values and how can they be implemented?
F. \	E. Define the key words What are the care values and how can they be implemented?		Empowering and promoting independence		
E.	Define the ke	y words			
Self-r	espect		Respect for other	ers	
appro					
Empo	owerment		Maintaining confidentiality	<u> </u>	
Confi	dentiality			9	
Digni	ty		Preserving dign	ity	
Safe	guarding		Effective.		
Discr	imination		Effective communication		
Comp	passionate				
Com	petence		Safeguarding all of care	nd duty	
Cons	equences)	
Revie	ew				
Empa	athy		Promoting anti- discriminatory p	ractice	
Inson	nnia		(2	

What we are le	earning:	H Iden	tifying own strengths and areas for improvement against the care values	
	ly care values in a compassionate way. own strengths and areas for improvement against ues	Working together	 All care works have the responsibility to uphold care values. If everyone works together, doing their 'bit', service users and colleagues alike will all be able to have positive experiences. Put any feelings aside, some clients can show anger or aggressions towards you, continues to work in a way that respects each of the care values. 	
way?	apply care values in a compassionate		 Staff training: Staff training keeps everyone updated. Even if they also ready had care values training it is important to have it again and remind them of their importance. 	
Show empathy and care by: Being patient Showing sensitivity Understanding Actively listening Having a positive outlook Being encouraging Having genuine concern for other people.		Making mistakes	 Everyone sometimes make mistakes. It is crucial that staff own up to mistakes that they have made, not matter how small. This is part of the duty of care to safeguard individuals, it demonstrates respect. You need to be honest about your mistake, do not pretend it never happened and do not blame someone else. You can: Tell your supervisor, admit it and apologise Be honest and accurate about what happened, 	
Care workers can check themselves against the 'Six C's of Compassionate Care' checklist to make sure they are applying care values with compassion.			 Suggest ways to avoid it happening again Earn back the trust of the person involved Prove you can do the job Do no be too hard on yourself; seek help and guidance from others. 	
Care	Helps to improve an individual's health and wellbeing. Care should be tailored to each person's needs and circumstances	Reviewing own applications of	One way to improve skills is to look carefully at the areas you are good at, what you are able to do well and things that you find difficult. Knowing your strengths will allow you to take on task with ease and make you	
Compassion	Shows the care worker understands what the individual is experiencing. Being empathetic to their situation shows care and value to the individual	care values	Receiving •	 feel confident that you are doing a good job. Knowing your weaknesses and what needs improving will help you work on them and develop. It is important to be open with yourself and others in order to progress further and be better at your job.
Competence	Shows that care workers can safeguard and protect individuals from harm			 Regularly review your strengths and weaknesses because they change overtime The purpose of feedback is to let you know what you are doing well and the
Communicati on	How to adapt to individuals and their circumstances to ensure important information is given and shared- keeping the individual at the heart of everything that is done	feedback	 areas you need to improve. This can be formal- like reports and following an observation at work and Informal- like chatting to colleagues at break time. Both types encourage you to feel pleased with what you have done well and motivate you to improve in weaker areas, perhaps even provide a way forward. Remember: when giving and receiving feedback, positives must be noted so that 	
Courage	Protecting individuals by speaking up if you think something is wrong; being brave enough to own up if you have made a mistake.		you know what you are doing well and continue to do so. Negatives are hard to uncomfortable to hear, but do not take them personally, you need them to get better at your job and feel more confident.	
Commitment	Carrying out your duties to care for others to the best of your ability.	Using feedback	 Create yourself a SMART action plan to set yourself Specific, Measurable, Achievable, Realistic and Time-related targets or goals to help plan for your improvements 	

What v	ve are learnin	g:	Н	Identi	fying own strengths and areas for improvement against the care values
G. How to apply care values in a compassionate way. H. Identifying own strengths and areas for improvement against the care values			Working toge	ther	
G	way?	care values in a compassionate			
			Making mista	kes	
Care			Reviewing ov applications of care values	vn of	
Compa	assion		care values		
Compe	etence		Receiving		
Comm on	unicati		feedback		
Coura	ge				
			Using feedba	ck	
Comm	itment				



Year 11 Cambridge National- Contemporary issues in sport-Term 1









What we are learning this term:

- The different user groups who may participate in sport
- The barriers which affect participation В.
- The solution to these barriers
- Factors affecting the popularity of a sport D. Current trends in the popularity of sport
- Growth of new and emerging sports
- **Key question from Assessment** objectives?

Key word	Key definition		
Ethnic minorities	A group that has different national or cultural traditions		
Disposable income	Money left over after paying all bills		
Accessibility	How easy something is to access		
Provision	Providing or supplying something		
Infrastructure	The available space and facilities to take part in sport. EG- Tennis courts		
Acceptability	How accepted and tolerated something is		
Emerging	Becoming more mainstream		
Concessions	Providing something		

What sports are growing in popularity in the UK?

cheaper for certain

groups

- Ultimate frisbee
- American Football
- Climbing
- Handball

Main assessment objectives

Learning outcome: Understand the issues which affect participation in sport

C. What are the most popular sports in the UK?		What are the most popular sports in the UK?
	Football	, Rugby, Cricket, Netball, Walking, Cycling and fishing

How the factors can impact on the popularity of sport in the UK

- Climate- Lack of snow in the UK means the opportunities for snow sports are limited
- Provision- Lack of facilities such as tennis courts limit who can access them
- Elite success- cycling success at the Olympics leads to increased participation in cycling

The user groups who may participate in sport
are

- Ethnic minorities
- Retired people/ over 50 Families with young children
- Single parents
- 5. Children
- 6. Teenagers
- Disabled people
- Unemployed/ economically disadvantaged
- 8.
- Working singles and couples

A.	The possible barriers which affect participation

- 1. Employment/time
- 2. Work restrictions
- 3. Disposable income
- Accessibility of facilities 4.
- 5. Lack of role models
- 6. Provision of activities
- 7. Awareness of activity provision
- 8. Portrayal of gender issues

G.	The possible solutions to barriers

Provision-

Programming of sessions Appropriate activity for user groups Timing of sessions

Promotion-

Targeted promotion Using role models Initiatives aimed at promoting participation

Access-

To facilities To equipment Sensible pricing and concessions

Factors affecting popularity

Participation		Football has high participation rates due to the infrastructure already in place		
Pro	vision	The available equipment and facilities required to play		
Environment/ climate		The UK weather is suitable for certain sports and not suitable for others		
Spectatorshi p		The amount of people going to watch the sport		
Media coverage		How much coverage the sport gets across various media platforms		
Elite level success		Olympic success usually increase participation		
Role models		A lack of role models can restrict participation levels		
Acceptability		Some sports are not accepted in UK culture due to the nature of the		

sport

				Year 11 Cambridge National- Contem	por	ary iss	ues in sport- Term 1		
	What we are le	earning this term:		Main assess	sme	nt obje	ctives	Factors	s affecting popularity
A. B. C. D. E. F.	The solution to the Factors affecting t	t n affect participation ese barriers the popularity of a sport the popularity of sport	С.	Learning outcome: Understand the i			ch affect participation in sport	Participation	
A.	Key question from objectives?	m Assessment					·	Provision	
Key	word	Key definition		How the factors can impact of	on th	ne popu	larity of sport in the UK		
Ethn	ic minorities		1 2 3					Environment/ climate	
Disp	osable income								
Acce	essibility		A .	The user groups who may participate in sport are		G.	The possible solutions to barriers	Spectatorshi	
Prov	ision		2 3 4 5			Provi	sion-	p	
Infra	structure		6 7 8			3 Prom	otion-	Media coverage	
Acce	eptability					1 2		Elite level	
Eme	rging					3 Acce.	ss-	success	
Con	cessions		Α.	The possible barriers which affect participation		1 2 3		Role models	
Α.	What sports are	e growing in popularity in the	1 2 3 4 5			3			
1 2 3 4			6 7 8					Acceptability	

Exploring the Elements of Music and the Functions of a Keyboard Why? - To excel in listening, analysis, composition & performance

A. MELODY

Melody is a succession of pitches in rhythm. The melody is usually the most memorable aspect of a song, the one the listener remembers and is able to perform.

	•	
KEYWORD	MEANING	
Pitch	How high or low a sound is	
Octave	A series of 8 notes e.g., C-C, D-D	
Pentatonic	A musical scale with 5 notes	
Range	The distance between the lowest and	
	highest pitched note in a melody	
Motif	A repeated theme that is memorable	
Hook/Riff	A very catchy melodic phrase	
Imitation	Repeated melody in a different	
	instrument or voice	

B. ARTICULATION

Articulation refers to the way that notes should be performed. There are many types of articulation, with each having a different effect on how the note is played.

KEYWORD	MEANING	
Staccato	Short and detached notes	
Legato	Smooth and slurred notes	
Accent	Emphasis placed on a particular note/beat	
Pizzicato	Plucked strings	
Arco	Bowed strings	
Col Legno	Hitting strings with the wood of the bow	
Glissando	Sweeping notes (think of the harp)	
Vibrato Subtly vibrating the sound by alternating		
	the pitch between two notes	

C. DYNAMICS

The dynamics of a piece is the variation in loudness between notes or phrases. Musicians use a variety of dynamics to add excitement and emotion to songs.

KEYWORD	MEANING	SYMBOL
Pianissimo	Very quiet	рр
Mezzo Piano	Moderately quiet	тр
Piano	Quiet	р
Mezzo Forte	Moderately loud	mf
Forte	Loud	f
Fortissimo	Very loud	ff
Crescendo	Gradually louder	
Diminuendo	Gradually quieter	

D. TEXTURE

playing and how many different parts there are.

KEYWORD	MEANING	
Unison	All playing or singing the same note	
Thick/Thin	Number of layers of instruments/voices	
Monophonic	A single line of musical notes	
Homophonic	Moving together in chordal fashion	
Polyphonic	Multiple layers, weaving melodic lines	
Tutti	Meaning 'everyone' or 'all together'	
Call &	Like question and answer – two parts	
Response	having a musical conversation	
Countermelody	A tune that complements the main melody	

E. STRUCTURE

Texture describes how layers of sound within a piece of music Structure is the order that different parts of the song are played interact. Texture is determined by how many instruments are in. The basic structure of a song can include an intro, verse, prechorus, chorus, and bridge.

KEYWORD	MEANING	
Binary	Two main sections, AB	
Ternary	Three distinct sections, ABA	
Rondo	Initial section that recurs, ABACADA	
Theme &	A melody is stated and is then repeated	
Variations	several times with changes	
Verse	Tells the main story of a song	
Chorus	A catchy part that is repeated in a song	
Bridge	A contrasting section that prepares the	
	listener for the return of the chorus	

F. HARMONY

Harmony is the blending of simultaneous sounds of different pitch. A harmony differs from a melody in the way that it stacks multiple notes on top of one another to create a sound.

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KEYWORD	MEANING	
Chord	Three or more notes played together	
Triad	Three notes: root, third, fifth	
Arpeggio	Broken chord: notes are sounded individually	
Perfect	Two chords at the end of a passage that sound	
Cadence	as though the music has come to an end	
Imperfect	Two chords at the end of a passage that make	
Cadence	the music sound unfinished	
Modulation	The change from one tonality to another	
Dissonance	Two or more clashing notes	

Question	Answer	Question	Answer
Identify this musical symbol		What is a Motif?	
What does this symbol mean?		What does pizzicato mean?	
What does Homophonic mean? p		What does Fortissimo mean?	
How many sections are there in a Binary form piece of music?	1 2 3 4	Draw the symbol for Fortissimo	
What sections are in a Ternary Form piece of music?	AB ABA ABACA	Identify this musical symbol	
Identify this musical symbol		What does the above symbol mean?	
What does this symbol mean?		Put these dynamic markings in order from quietest to loudest: p ff f mp pp mf	
What is the definition for a hook/riff?		What is an accent? The symbol is >	
How many beats is this note worth?		What's the musical term for notes that are played short and detatched?	
What is the musical term for notes that are played smooth and slurred?		What does Pentatonic mean?	
What is an Octave?		What texture has multiple layers and weaving melodic lines?	

G. **INSTRUMENTS KEYWORD MEANING** Strings Violin, Viola, Cello, Double Bass, Harp Trumpet, French Horn, **Brass** Trombone, Tuba Woodwind Piccolo, Flute, Clarinet, Oboe, Bassoon Percussion Timpani, Xylophone, Glockenspiel, Maracas Highest female singing voice Soprano A lower female singing Alto

Rhythm involves time—the duration of musical sounds. Rhythm can exist without melody, as in the drumbeats of music, but melody cannot exist without rhythm.

H. RHYTHM

KEYWORD	MEANING	SYMBOL
Semiquaver	1/4 beat	
Quaver	½ beat	
Pair of Quavers	1 beat	J
Crotchet	1 beat	
Minim	2 beats	a
Dotted Minim	3 beats	0.
Semibreve	4 beats	0
Breve	8 beats	

Timbre refers to the quality of a sound made by a particular voice or musical instrument. It is what makes a musical note sound different from another one.

ADJECTIVE	INSTRUMENT	ADJECTIVE	INSTRUMENT
Sweet	Flute	Hollow	Xylophone
Nasal	Oboe	Booming	Bass Drum
Tinkly	Glockenspiel	Muted	French Horn
Pounding	Timpani	Dull	Viola
Brassy	Trumpet	Breathy	Saxophone
Mellow	Clarinet	Shrill	Piccolo
Rich	Cello	Pure	Violin
Crashing	Cymbals	Rattly	Maracas
Dark	Double Bass	Reedy	Bassoon

J. <u>TEMPO</u>

Tenor

Bass

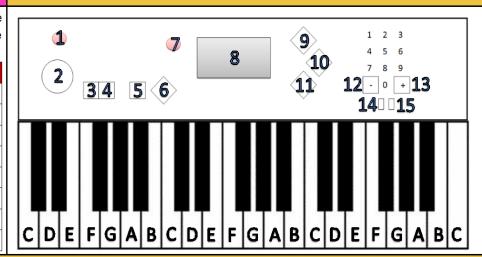
Tempo means the speed at which a piece of music should be played. As with many other musical terms, Italian words are used to describe different tempos of music.

voice
Standard male singing voice

Low male singing voice

used to describe different tempos of music.			
KEYWORD	ORD MEANING		
Presto	Very fast	168-200ьрт	
Allegro	Fast	120-168Ьрт	
Moderato	Moderate	108-120ьрт	
Andante	Walking pace	76-108Ьрт	
Adagio	Slow	66-76 b pm	
Largo	Very slow	40-66Ьрт	
Accelerando	Gradually faster	accel.	
Rallentando Gradually slower		rall.	

K. LAYOUT AND FUNCTIONS OF A KEYBOARD



I. TIMBRE

- 1. Power Button (on/off)
- 2. Volume
- 3. Accompaniment
- 4. Intro/Ending
- 5. Sync. Start
- 6. Start/Stop Button
- 7. Tempo Button
- 8. Screen
- 9. Song
- 10. Voice
- 11. Style
- 12. Go left on options
- 13. Go right on
- options
- 14. Dual

L. DRILL TERMS

KEYWORD	MEANING
Treble Clef	Also known as the G Clef as it starts on the G line
Bass Clef	Also known as the F Clef as it starts on the F line
Stave	5 lines, 4 spaces that music notes are written on

KEYWORD	MEANING
Quaver	A note that lasts for ½ beat
Crotchet	A note that lasts for 1 beat
Minim	A note that lasts for 2 beats

KEYWORD	MEANING
Dotted Minim	A note that lasts for 3 beats
Semibreve	A note that lasts for 4 beats
Sharp/Flat	Higher/Lower by 1 semitone

Question	Answer	Question	Answer
How many Semi-quavers are in a Crochet?		What Instrument has a Dark Timbre?	
What does Accelerando mean?		What is the definition of Allegro?	
Give the names of 4 Brass instruments		How many Quavers are in a Minim?	
How many Beats is this note?		What does Alto mean?	
What is the name the note?		What Clef is also know as the F Clef?	
What does the word Presto mean?		Identify this musical symbol	
List 3 instruments found in the Brass section of an orchestra		How many beats is this symbol?	
Solve this problem:		List 3 instruments found in the Woodwind section of an orchestra	
What note lasts for 4 beats?		What musical term is used for the highest female singing voice?	
What does Sharp/Flat mean?		What Timbre does the Violin have?	
What does the key word Andante mean?		List 3 instruments that can be found in the string section	

PERFORMING THEATRE - COMPONENT 2 - eduqas GCSE DRAMA





The Component is externally assessed by an Examiner. It counts for 20% (60 marks in total).

Jmportant Things!

• Remember: Read your text, decide on your interpretation of the character and artistic intention. Be confident – full marks can be achieved in the Component.

YOUR DRAMA:

After deciding on the play you want to perform:

• Remember: Read the whole play in order to understand the style, the playwright's intention, the period involved before analysing and interpreting your role.

Style: The style of the play - Naturalistic, Realistic, Absurd, Symbolic, Brechtian, Physical Theatre.

The Playwright's Intention: Discuss contemporary themes, e.g. mental health, family problem, anorexia, drugs. Discuss a historical theme, e.g. War and its impact on society?

Period: Historical, Political, Cultural

Research: Go online, look at Youtube clips and write rough notes.

ACTING ELEMENT:



Time:

- groups of 2 actors 5 to 10 minutes
- groups of 3 actors 7 to 12 minutes
- groups of 4 actors 9 to 14 minutes

You must: Perform two sections 10 minutes long that are key parts of the text.

You must: Perform a text that contrasts with the play you're studying for Component 3.

The play must: Be written by a different playwright, in different historical period and with different themes to the text in Component 3.

Why? To give you new experiences, and to be able to enjoy and challenge yourselves to learn and interpret different texts.

CHARACTERISATION:

Remember the criteria:

You will be marked on your physical skills, vocal skills, interaction, interpretation, communication with the audience and individual contribution.

Also remember:

Your artistic intention must be written and submitted to the examiner before or on the day of the examination.

Once you know your text, you will need to focus on your character. Remember to use a range of practice techniques that will help you develop your role and create the rounded character: The Red Chair, Role on the Wall, Improvisation, Mime Work, The Missing Scene, Emotional Memory, The Magic If.

During the rehearsal periods, develop your vocal and physical skills:

VOICE: pronunciation, emphasis, pauses, tone and tempo, accent, pitch, constructiveness, highlights.

MOVEMENT: gesture, body posture, walk, position on the stage, characters' territories.

INTERACTION: distance, proximity, back turned, eye-rolling, facial response, moving away, approaching, physical gestures.

Discuss with your group what your stage shape will be, what type of set will be needed, stage equipment and props. It is also a good idea to use sound to create a mood and atmosphere either at the beginning, between scenes or at the end. You will need to carefully consider the costume, hair and make-up suitable for your role. Remember that you need consistent rehearsals and a full dress rehearsal before your final performance.

Sentence Stems: Year 10 to Year 13



Listen and Mark

Pay close attention to others and point out important moments.

- I notice you used the word / phrase _____ , which implies _____ .
- When you said ____ , it anchored the idea that ____ .
- Did anyone notice what _____ said about ____ ? This seems important because ____ .

Defend and Unpack

Defend your perspective and explain your thought process.

- I understand your perspective on _____, but have you thought about ____?
- I actually think this because
 ____. (Furthermore, finally).
- Actually, [evidence] suggests that _____.

Introduce and Invite

Begin your contribution and encourage others to participate.

- I suggest that ____ because ____.
- ____, what is your perspective on ____, and why?
- We should discuss ____ because ____ .

Build and Support

Add to others' ideas and bolster points by giving evidence.

- Your point about ____ implies ____ , and I would like to further this by saying ____ .
- ___ supports the idea that ___ .
- Drawing upon points made by
 ___ and ___ , we can conclude
 that ___ because ___ .

Challenge and Verify

Disagree and ask others to prove or clarify information.

- You said ____ . How do you know?
- I think you said ____, which implies that you believe ____. Is that right?
- I disagree with what you said about ____ because ____.

Summarise and Map

Draw together big themes and track the discussion.

- Our main findings were ____.
- On the whole, we believe that
- Initially, we thought ____, but we eventually decided ____.



