Huish Episcopi Academy
The best in everyone™
Part of United Learning

Knowledge Organisers
Year 10
Autumn Term 1

Name:
Tutor Group:

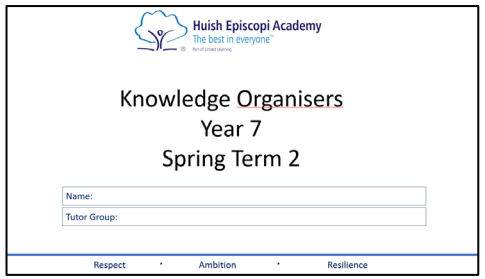
What are knowledge organisers? How will they help me?

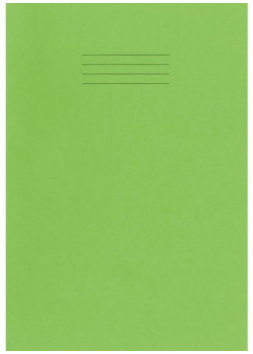
Your knowledge organisers contain all the critical knowledge you must know. This will help you revisit and revise knowledge you have learned in lessons, so that you can remember it in the long term. Research has shown that students remember 50% more when they test themselves after learning; this is why we set homework using the self-quizzing ('look, cover, write, check)' method. We have set all our knowledge organisers out into sections, so that you can see how topics are ordered. Every knowledge organiser is set out in the same format, to reduce distractions and so that you know what to expect. We have used tables to make it easier to self-quiz, with concise definitions so that they are easier to learn.

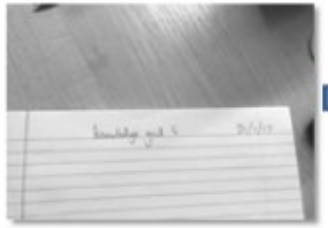
Please note:

1. You must have your knowledge organiser booklet with you every day, for every lesson.
2. You must keep your knowledge organiser booklet, even after you have finished the topic or year.

You will need…





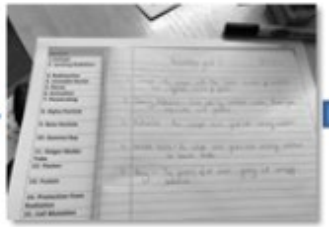


1) Write today's date and the **title** from the knowledge organiser and underline with a ruler

2) Write out the **keywords** leaving two lines between each word

3) Cover the definitions apart from the first: **read** it, **cover** it, **say** it in your head, **check** it

4) If you got it right, move on and **quiz yourself** on the rest in your head, one by one



5) Cover up **all** the definitions and write them out **from memory**

6) Check your answers using green pen
- **Tick** any definitions which are correct
- **Correct** any definitions not completely correct

Huish Episcopi Academy Year 10 English Literature Knowledge Organiser – A Christmas Carol

Context		
1	Author	Charles Dickens
2	Published	December 1843
3	Era	Victorian
4	Genre	Allegorical; ghost story; polemic; political & social commentary
5	Setting	Victorian London (& rural Britain)
6	Structure	Five stave cyclical novella
7	Dickens' construction of secular Christmas values	• Secular means 'non-religious' • Until the mid 1800s, Christmas was solely a religious festival • Dickens popularised the cultural elements we associate with Christmas today: food, decorations, music, games • Celebrates the values of goodwill, benevolence and forgiveness
8	Malthusian Theory	• Thomas Malthus was a controversial economist upon which Malthusian Theory is named • In response to concerns about over-population, Malthus suggested that the 'surplus population' (the poor) should be left to starve
9	The Poor Law	• 1834 • Passed by the government to deter poor people from claiming financial help • Forced poor people who could not depend on themselves into workhouses
10	The Supernatural	• Refers to things that are above or beyond what is natural; otherworldly • Victorian society was fascinated by ghosts and spirituality

Authorial Intent		
1	To encourage…	…his Victorian readers to acknowledge the suffering and the plights of the poor.
2	To expose…	…his readers to the injustices of the class system.
3	To refute…	…traditional, Malthusian attitudes towards the poor and expose the dangers of ignorance and want.
4	To warn…	…his readers of the terrifying consequences of forsaking philanthropy.
5	To present…	…a scathing social commentary on Victorian society and criticise the misanthropic views of his wealthy reader.
6	To celebrate…	…the contentment of close family relationships and the joys of the festive season: a time for kindness, peace and charity.

Themes		
1	Poverty	• Dickens felt strongly that Victorian society ignored the poverty of the working class and underclass. • While the rich enjoyed excess and comfort, the poor were forced to live in dreadful conditions of destitution.
2	Greed	• Dickens suggests greed is the cause of poverty. • If the avaricious rich would acknowledge the plight of the poor, the cycle of poverty could be broken.
3	Charity & Philanthropy	• Dickens perceived charity as a social & moral obligation and duty, particularly for the rich. • Sharing wealth could end the suffering of the poor and bring about a happier and more content society for all.
4	Christmas Spirit	• Dickens associates Christmas Spirit with generosity, compassion and kindness. • Characters such as the Ghost of Christmas Present & Fezziwig embody the ideals of Christmas Spirit
5	Family & Relationships	• Dickens attaches the values of Christmas Spirit with family and uses it to show the contentment that comes from relationships that allow you to demonstrate these values.
6	Redemption	• The idea of being saved from evil or sin. • The moral message of the story is that all can be redeemed, even the most misanthropic in society.

Huish Episcopi Academy Year 10 English Literature Knowledge Organiser – A Christmas Carol

Key Terminology and Vocabulary		
1	**Stave**	Chapters in the novella, but we normally associate staves with music, as if the **book** is a Christmas carol, and each chapter is part of the song.
2	**Symbolism**	The use of symbols to represent ideas or qualities.
3	**Intrusive narrator**	A narrator who interrupts the story to provide a commentary to the reader on some aspect of the story or on a more general topic.
4	**Circular structure**	Circular narratives cycle through the story one event at a time to end back where the story originated.
5	**Allegory**	A story that can be interpreted to reveal a hidden meaning, typically a moral or political one.
6	**Allegorical figures**	An **allegorical** figure is a **character** that serves two purposes: first, they are an important person in the story in their own right, and, second, they represent abstract meanings or ideas.
7	**Foreshadowing**	Foreshadowing is a literary device in which a writer gives an advance hint of what is to come later in the story.
8	**Didactic**	A type of literature that is written to inform or instruct the reader, especially in moral or political lessons.
9	**Polemic**	A strong verbal or written attack on someone or something.
10	**Malthusian**	Population growth will outstrip agricultural growth, leading to economic disaster.
11	**Purgatory**	A place or state of suffering inhabited by the souls of sinners.
12	**Misanthropic**	Having or showing a dislike of other people; unsociable.
13	**Philanthropic**	Seeking to promote the welfare of others; generous and benevolent.
14	**Avaricious**	Having or showing an extreme greed for wealth or material gain.
15	**Benevolent**	Well-meaning and kindly.
16	**Solitude**	The state or situation of being alone.
17	**Resolute**	Admirably purposeful, determined, and unwavering.
18	**Remorse**	Deep regret or guilt for a wrong committed.
19	**Redemption**	Being saved or saving someone from evil, sin or suffering.
20	**Capitalism**	An economic, political, and social system in which property, business, and industry are privately owned. The system is directed towards making the greatest possible profits for the owners of production.
21	**Inequality**	The difference in social status, wealth, or opportunity between people or groups.
22	**Injustice**	A situation in which there is no fairness, justice, or equality in the treatment of a person or persons.

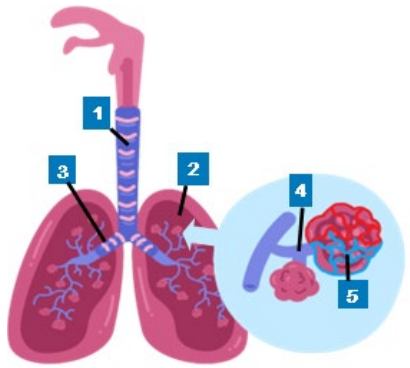
Characters & Plot		
1	Ebenezer Scrooge	• The novella's protagonist • A cold, isolated miser whose experience with the ghosts result in his redemption
2	The Cratchit Family	• Bob Cratchit is Scrooge's only employee: a poor clerk, treated cruelly by Scrooge but content with the love of his family • Tiny Tim is Bob's disabled son who rises above his own suffering to think of others
3	Fred	• Scrooge's nephew (his sister Fan's son). • The antithesis to Scrooge: excitable, generous, forgiving
5	Marley (& Ghost of)	• Scrooge's dead business partner • Appears to warn Scrooge of the errors of his ways that Marley is now in purgatory for
6	The Ghost of Christmas Past	• Allegorical of memory • Shows Scrooge is past Christmases • Symbolic of hope and enlightenment
7	Fezziwig	• Scrooge's old employer (deceased) • The antithesis to Scrooge: generous, kind employer, community man
8	Belle	• Scrooge's ex-fiancée • She broke off their engagement because of Scrooge's greed and obsession with money
9	The Ghost of Christmas Present	• Symbolises Christmas Spirit • Embodies and models generosity and kindness • Gives to those 'most in need'
10	Ignorance & Want	• Two emaciated and animalistic children • They personify the concept of Ignorance & Want • They humanise the plight of the poor
11	The Ghost of Christmas Yet to Come	• The most ominous of the spirits, sent to frighten Scrooge • This 'phantom' does not speak and is faceless to symbolise the uncertainty of the future

Huish Episcopi Academy Year 10 Science Knowledge Organiser Organisation (B2)

THE LUNGS AND GAS EXCHANGE

1	**Trachea**	Tubes through which gases move. Lined with cartilage so they do not collapse
2	**Lung**	Organ where gas exchange occurs
3	**Bronchus**	Tubes through which gases move. Lined with cartilage so they do not collapse
4	**Bronchiole**	Tubes branching off the bronchus through which gases mov. Not lined with cartilage
5	**Alveoli**	Small sacs where gas exchange occurs. They are surrounded by capillaries, have a large surface area and are only one cell thick

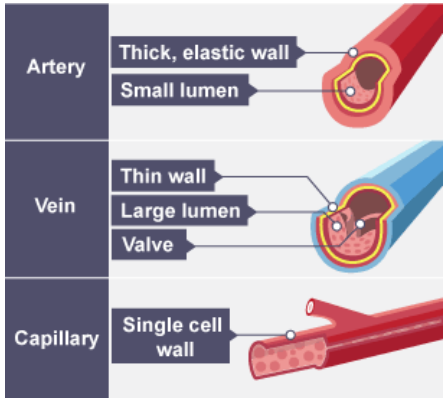
THE LUNGS



BLOOD AND VESSELS

1	**Red blood cells**	Transports oxygen in the blood.
2	**White blood cells**	Cells in the blood that fight infection caused by pathogens.
3	**Platelets**	Fragments of cells that cause clotting of blood at a wound.
4	**Plasma**	The liquid part of the blood, with dissolved substances like glucose, proteins, ions and carbon dioxide
5	**Artery**	Transports blood away from the heart, thick and elastic walls
6	**Vein**	Carries blood to the heart, valves prevent backflow
7	**Capillary**	One cell thick for quick diffusion between blood and cells

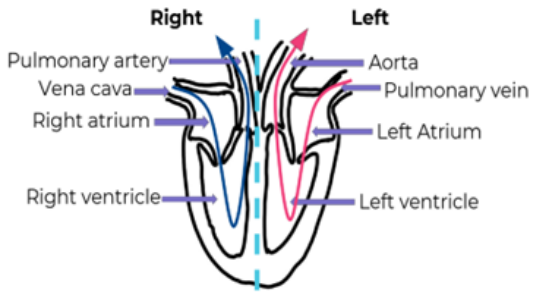
BLOOD VESSELS



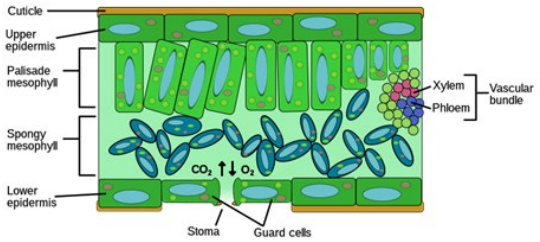
THE HEART AND CARDIOVASCULAR DISEASE

1	**Vena cava**	Major vein carrying blood back to the heart from the body
2	**Right atrium**	Smaller chamber of the heart which fills with blood from the vena cava
3	**Right ventricle**	Large chamber pumps blood to the lungs
4	**Pulmonary artery**	Artery carrying blood from the heart to the lungs
5	**Left atrium**	Small chamber that fills with blood from the lungs
6	**Left ventricle**	Large chamber that pumps blood around the body
7	**Aorta**	Major artery carrying blood away from the heart to the body
8	**Stent**	Wire mesh opens a blocked artery
9	**Statin (drug)**	Reduces cholesterol
10	**Heart transplant**	Replacement heart from a donor
11	**Artificial heart**	Man-made heart used while waiting for a transplant

THE HEART



LEAF CROSS SECTION



TRANSPORT IN PLANTS

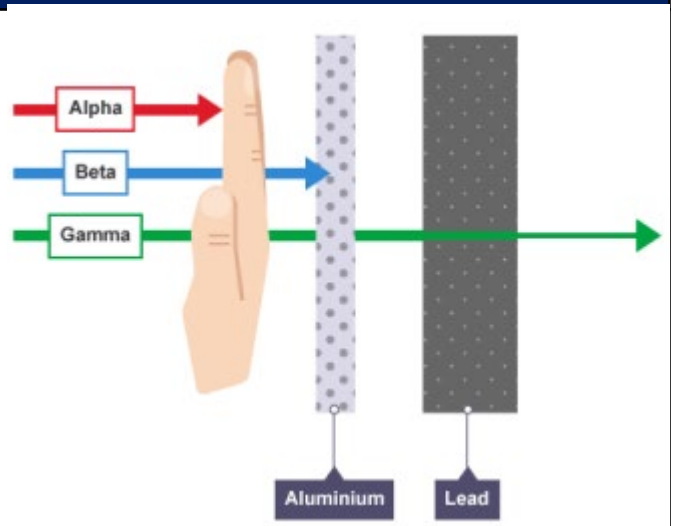
1	**Waxy cuticle**	Physical barrier to infection that prevents water loss
2	**Epidermis**	Type of plant tissue that covers the surface of a plant allowing light through
3	**Palisade mesophyll**	Tightly packed cells in leaf where photosynthesis takes place. Contains many chloroplasts
4	**Spongy mesophyll**	Tissue in the leaf with air spaces between cells – specialised for gas exchange
5	**Stomata**	Opening that allows CO_2 water vapour and O_2 to diffuse in and out of the leaf
6	**Guard cells**	Cells that open and close stomata to allow gas exchange to enter the leaf for photosynthesis

Huish Episcopi Academy Year 10 PHYSICS Knowledge Organiser Atomic Structure (P4)

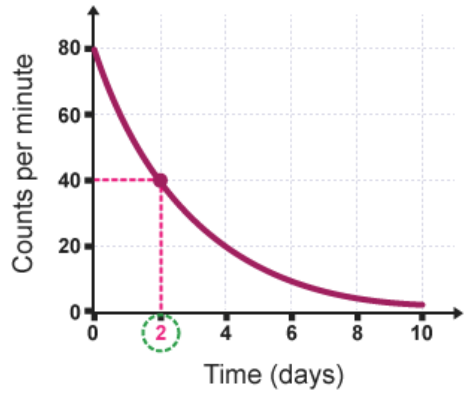
RADIATION

1	**Activity**	The rate at which a source of unstable nuclei decays
2	**Alpha particle**	A particle consisting of 2 protons and 2 neutrons emitted from the nucleus
3	**Beta particle**	A fast-moving electron emitted from the nucleus when a neutron changes into a proton and an electron
4	**Contamination**	The presence of radioactive atoms in or on a surface
5	**Count rate**	The number of decays recorded each second by a detector such as a Geiger-Muller tube
6	**Gamma**	A high energy electromagnetic wave emitted alongside either alpha or beta particles
7	**Half life**	The time taken for half of the atoms in a sample to decay, or for the activity of the sample to fall by half
8	**Irradiation**	Exposure to alpha, beta or gamma radiation
9	**Isotope**	Atoms with the same number of protons but different number of neutrons
10	**Radioactive**	A substance that gives out radiation

PENETRATING POWER



HALF LIFE



ATOMIC STRUCTURE

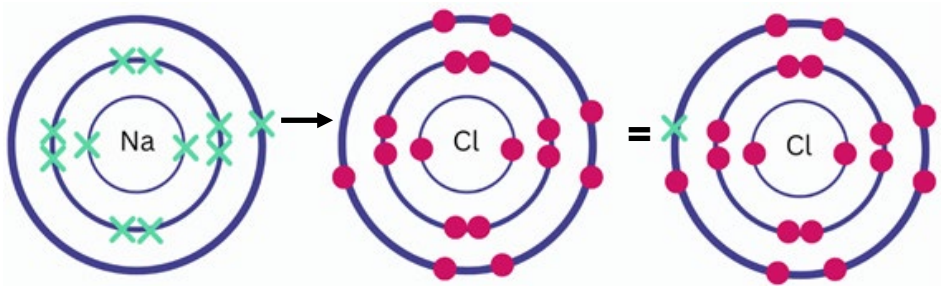
1	**Atom**	A neutral particle consisting of protons, neutrons and electrons. Number of protons = no. of electrons
2	**Mass number**	Total of number of protons and neutrons in the nucleus of an atom
3	**Atomic number**	Number of protons in the nucleus of an atom; determines the identity of the element
4	**Atomic radius**	Distance from the centre of an atom's nucleus to the electrons (approx. 10^{-10}m or 0.1nm)
5	**Nanometre**	$1x10^{-9}$m = 0.001µm = 0.000 001mm = 0.000 000 001m
6	**Nucleus**	The positively charged centre of an atom made of protons and neutrons. Approximately 10 000 times smaller than the atom (approx.10^{-14}m)
7	**Subatomic**	Smaller than the size of an atom

Huish Episcopi Academy Year 10 CHEMISTRY Knowledge Organiser Bonding (C2)

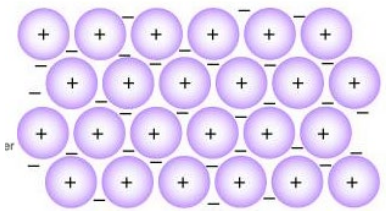
BONDING

1	**Compound**	Two or more different types of atom chemically bonded together
2	**Molecule**	Two or more non metal atoms chemically bonded together. They can be the same or different
3	**Ionic bond**	Between a metal and non-metal. Involves the transfer of electrons
4	**Covalent bond**	Between non-metals only. Involves the sharing of electrons
5	**Ion**	Charged particle. Metals form positive ions, non-metals form negative ions
6	**Metallic bond**	Between metal ions. Neat rows of positive metal ions surrounded by a sea of delocalised electrons.
7	**Alloy**	Combination of two or more metallic elements. Harder than a pure metal. Different sized atoms distort the layers meaning they cannot slide
8	**Simple covalent structures**	Low melting and boiling point as have weak intermolecular forces so don't take much energy to overcome these forces.
9	**Molten**	Melted
10	**Aqueous**	Dissolved in water (aq)
11	**Intermolecular Forces**	Weak attractive forces between molecules
12	**Electrostatic forces of attraction**	Forces of attraction between two oppositely charged ions

ION FORMATION



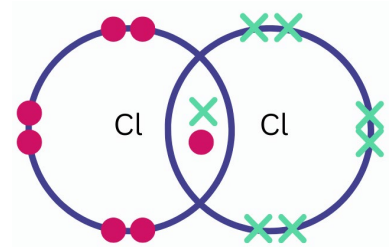
METALLIC BOND



GIANT STRUCTURES

1	**Giant covalent structures**	High melting and boiling point as has strong covalent bonds between many atoms which take a lot of energy to break
2	**Diamond**	4 bonds between each carbon atom Does not conduct electricity
3	**Graphite**	3 bonds between each carbon atom Conducts electricity as has free electrons Soft as layers can slide
4	**Giant ionic lattice**	High melting and boiling point due to strong electrostatic forces between many ions, so takes a lot of energy to overcome forces.
5	**Polymer**	Made of many repeating units. Large molecules with strong covalent bonds linking monomers. Strong intermolecular forces so solid at room temperature
6	**Graphene**	Single layer of graphite. Useful in electronics and composites
7	**Fullerenes**	Molecules of carbon atoms with hollow shapes

COVALENT BOND



DIAMOND

Huish Episcopi Academy Year 10 Religious Studies Knowledge Organiser Unit 1 Christianity

1. Key Vocabulary/terms

Atonement	Belief that Jesus' death on the cross healed the rift between humans and God.
Ascension	Jesus left this world to return to the father in heaven.
Eschatology	Refers to beliefs about the 'last things': death, judgement, heaven and hell.
Evangelism	Preaching the Christian Gospel with the intention of converting others to the Christian faith.
Evolution	
Heaven	To be in the presence of God for eternity.
Hell	To be without God.
Incarnation	God became flesh/human in the person of Jesus Christ.
Just	Bringing about what is right and fair.
Omnipotent	All powerful.
Omniscient	All knowing.
Omnibenevolent	All loving; all good.
Resurrection	To rise from the dead (spirit returning to same body).
Salvation	To be saved from sin.
Sin	A thought or action that separates humans from God.
Theodicy	An argument put forward to defend God.
Transcendent	Outside of time and space.
Trinity	The belief that the one God can be experienced though the Father, the Son and the Holy Spirit.
The Word	Another term for God the Son or Jesus. The Word existed from the beginning and was involved in creation.

2. Interpretations

Literal/fundamentalist	Things happen or have happened exactly as described.
Modern/progressive	A willingness to question tradition and interpret Biblical teachings through a current lens. Interpretation is required to understand old teachings.

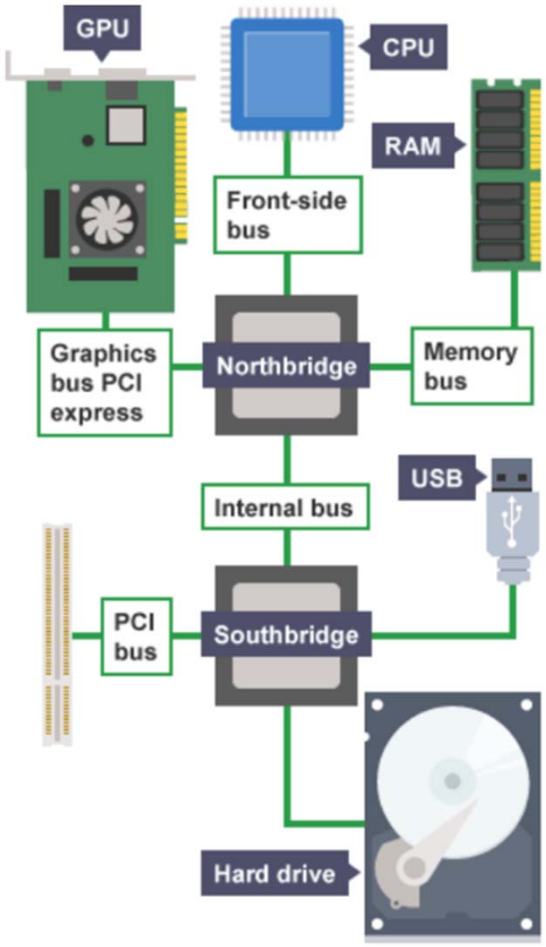
3. Quotations

Monotheism	"We believe in one God" Nicene Creed
Creation	"In the beginning, God created the heavens and the earth" Genesis "In the beginning was the Word, and the Word was with God, and the Word was God". John
Incarnation	"She was found to be pregnant through the Holy Spitit" Matthew "The Word became flesh and made his dwelling among us"
Crucifixion	"father into your hands I commit my spirit".
Resurrection	"and if Christ has not been raised, our preaching is useless" St Paul. "While he was blessing them, he left them and was taken up into heaven " Luke "He ascended into heaven and is seated at the right hand of the Father" Apostles Creed.
Judgement	" For I was hungry and you gave me something to eat" Matthew "I am the way, the truth and the life. No one comes to the Father except through me" John
Salvation	"It is by grace you have been saved" St Paul "Faith by itself, if it is not accompanied by action, is dead" James

Year 10 **GCSE Computer Science** Knowledge Organiser

KEY VOCABULARY	
CPU	*Central Processing Unit.* - The "brain" of the computer
CU	*Control Unit.* - Part of the CPU that manages the functions of all other parts of the CPU
Decoder	Part of the CU which decodes the binary instructions fetched from memory
RAM	*Random Access Memory* - The main volatile memory into which programs are loaded from the hard drive
MAR	*Memory Address Register* - Small fast memory used to store the RAM address of the next instruction
MDR	*Memory Data Register* - Small, fast memory used to store the information collected from the RAM before processing
PC	*Program Counter* - Keeps track of the current instruction number of the program
Accumulator	Small, fast memory, used to keep track of the data currently being processed
ALU	*Arithmetic and Logic Unit* - Does the basic mathematics and comparisons during processing
Bus	A physical connection between two elements of a computer system that allows the transfer of data.
Cache	Incredibly fast, but very expensive volatile memory using in the CPU
Bridge (North / South)	Junctions on a motherboard where the bus connections are controlled and routed. Northbridge deals with core functions, whilst the Southbridge deals with the peripherals, input and output devices and Secondary Storage.
von Neumann Architecture	The method used by all modern computers to allow the programming of a machine to be changed depending on the required function.
Fetch / Decode / Execute Cycle	Basis of the von Neumann architecture – the repeated process where instructions are fetched from RAM, decoded into tasks and data, then carried out.
Clock Speed	The number of FDE cycles that a CPU can carry out per second. Measured in Ghz (1 Ghz = 10^9 cycles per second or 1,000,000,000hz)
Cores	Some processors have multiple CPUs which can work in parallel, sequentially or can multitask. Dual and Quad cores are common in modern PCs

An example of a typical PC's innards.



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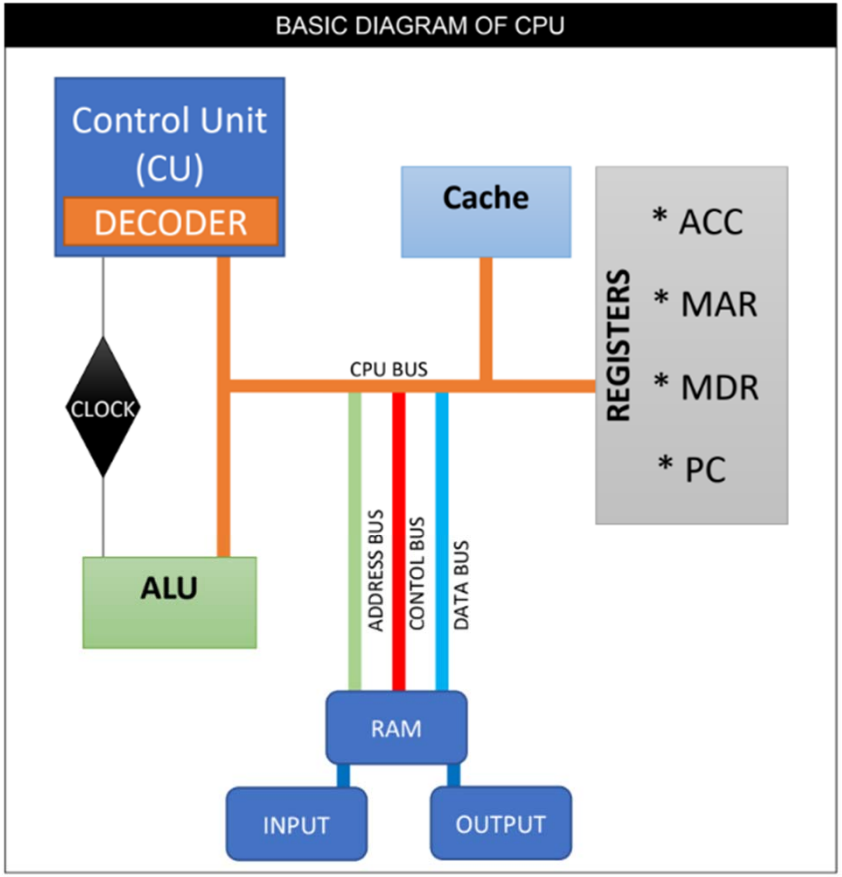
1.1 Systems Architecture

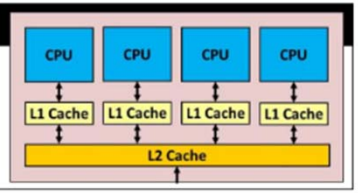
Year 10 **GCSE Computer Science** Knowledge Organiser

BASIC DIAGRAM OF CPU

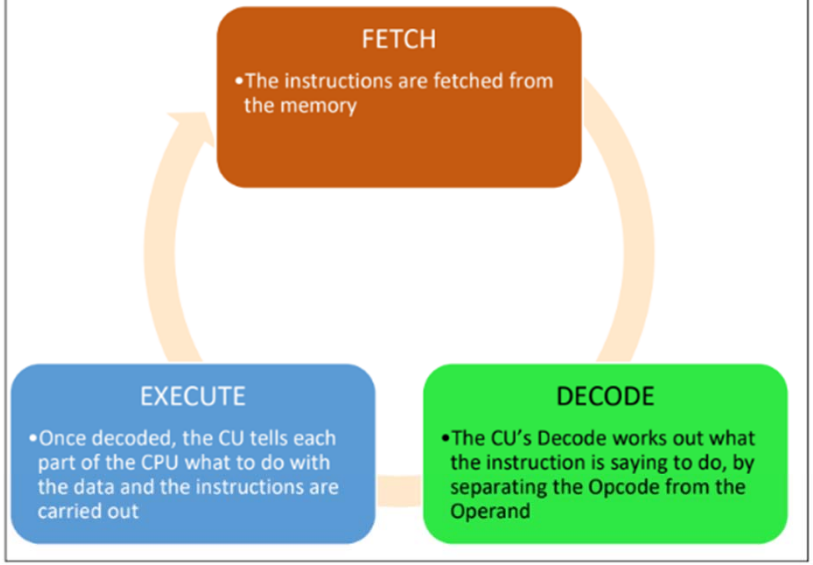


Multi Core Processing

Some processors have multiple CPU cores on one chip. They all have their own Level 1 cache, but share Level 2 cache, allowing them to collaborate quickly on large tasks.

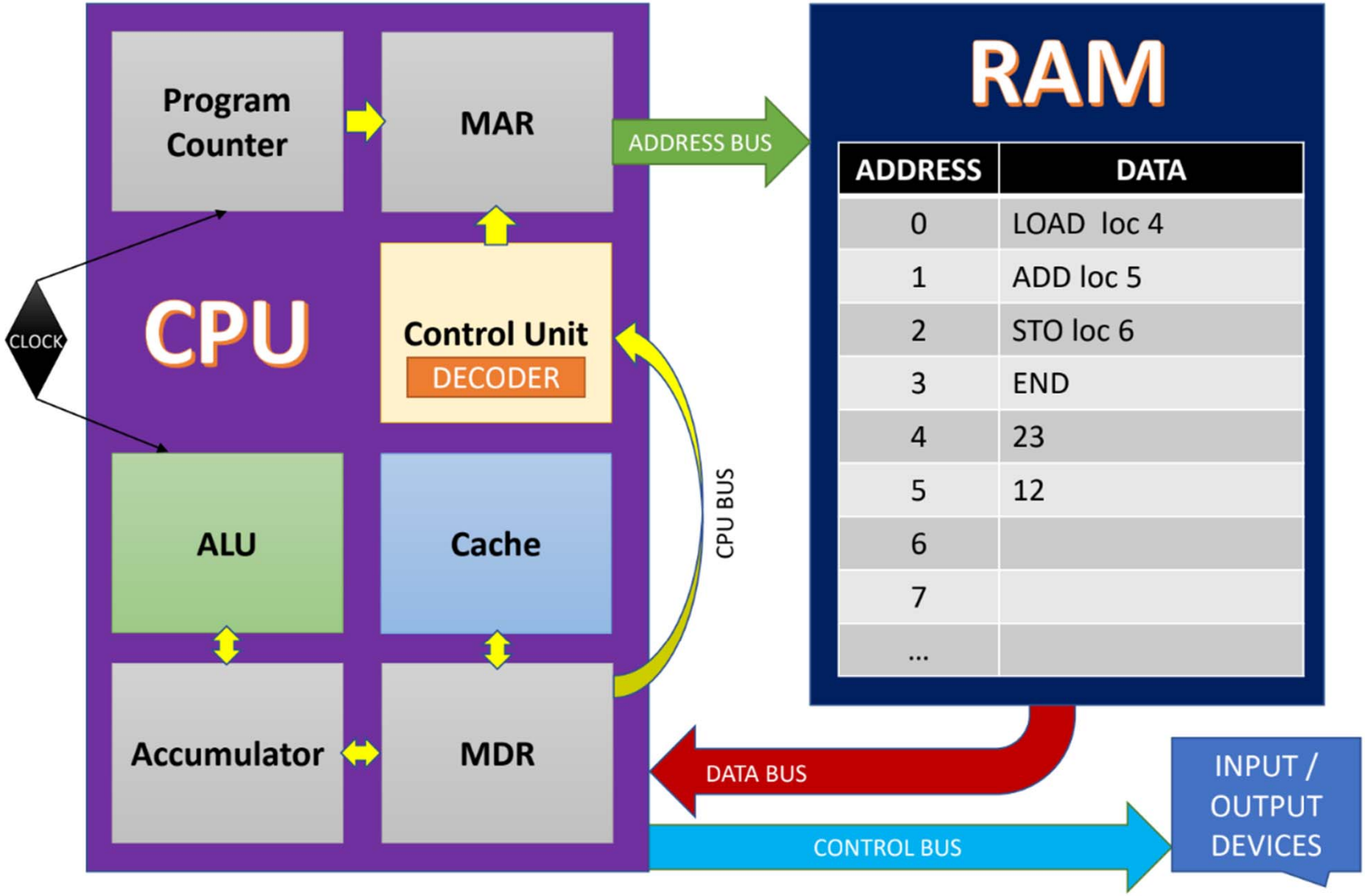


The FETCH – DECODE – EXECUTE cycle



KEY VOCABULARY

Machine Code	A program, stored in binary, that the CPU undertakes the FDE cycle on. All programs must be in machine code to work
Instruction	A single line of machine code, containing the command and data location on which it is to be executed. Stored in binary
Opcode	The first part of the instruction, is the command
Operand	The second part of the instruction is the data on which to carry out the command. This may be actual data stored in binary form, or a memory location reference of where to find the data


Program Counter
MAR
ADDRESS BUS
RAM
ADDRESS
DATA
0
LOAD loc 4
1
ADD loc 5
2
STO loc 6
3
END
4
23
5
12
6
7
...
CPU
CLOCK
Control Unit
DECODER
CPU BUS
ALU
Cache
Accumulator
MDR
DATA BUS
CONTROL BUS
INPUT / OUTPUT DEVICES

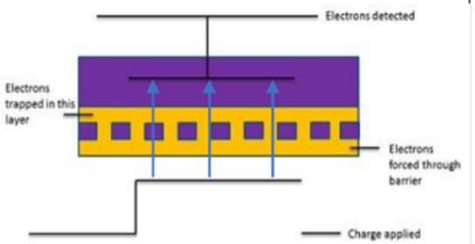
KEY VOCABULARY	
Volatile	Memory which requires constant electrical charge. If the power is turned off, then the data is lost
Non-volatile	Memory which can retain its data when the power is turned off
RAM	*Random Access Memory*
ROM	*Read-Only Memory*
Cache	Very fast memory, on, or very close to the CPU
Virtual Memory	A section of the HDD which can be used as RAM for very memory intensive processes
Flash Memory	A type of dynamic (changeable) ROM
Boot Process	The instructions needed to start the computer and to initialize the operating system.
POST	*Power On Startup Test* A series of checks done on the hardware of the computer to ensure the machine can run.

PRIMARY STORAGE - MEMORY

RAM is *volatile* memory, which stores data in a single transistor and capacitor. This means it needs a constantly recycled charge to hold its data. If the power is turned off, it cannot refresh the data and it is lost. This is known as *DYNAMIC* memory. The computer uses RAM to store the current program or data being used.

ROM is non-volatile. The data is hardcoded onto the chip by the manufacturer, and cannot be overwritten by the user. Because it holds its information even when the power is turned off, this makes ROM ideal for storing the instructions needed to get the computer started up – the *BOOT PROCESS, and POST.*

Flash Memory is a new(ish) type of ROM chip which holds its data when there is no power making it *non-volatile* but that can be rewritten easily by the user. By using a relatively large electric current, electrons can be *forced* through a barrier and into the *storage layer.* The pattern of electrons can be read as data without affecting the data.

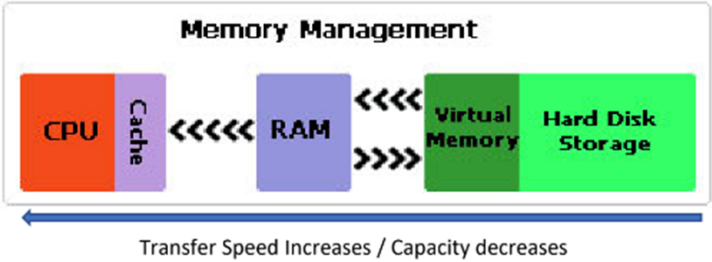


VIRTUAL MEMORY

To increase the speed and efficiency of RAM, most machines allocate a small portion of the Hard Disk to *VIRTUAL MEMORY.* The contents of the RAM are moved between the slower Virtual Memory and RAM as and when they are needed.

Using / Increasing Virtual Memory does not improve the speed of the computer, but rather using Virtual Memory increases the threshold at which a computer locks, by increasing the usable memory, and preventing deadlock due to filling the available primary memory.

PRIMARY MEMORY			
TYPE	*VOLATILE?*	*DYNAMIC?*	*RELATIVE SPEED*
Cache	YES	YES	Very Fast
RAM	YES	YES	Fast
ROM	NO	NO	Slow
Flash	NO	YES	Slow
Virtual	YES	YES	Very Slow



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1.2 Memory and Storage

Huish Episcopi Academy Year 10 Drama Knowledge Organiser Term 1

UNIT 1: Introduction to Drama – Section A		
Section A	Lighting Design Terminology	
1	Wash	A broad spread of light covering a large area of the stage
2	Floodlight	The light that provides a wide, even spread of light
3	Blackout	A sudden or gradual complete extinguishing of all stage lights
4	Cue	A signal for a lighting change, often timed with specific moments in the performance
5	Gobo	A stencil placed in front of a light source to control the shape of the emitted light
6	Gel	A coloured plastic film placed in front of a light to change the colour of the beam
7	Crossfade	A transition where one set of lights gradually dims while another set simultaneously brightens
8	Fade	A gradual increase or decrease in the intensity of light
9	Profile Spot	A type of spotlight that produces a sharp, focused beam of light
10	Follow Spot	A powerful, movable spotlight that "follows" an actor as they move around the stage
Section B	Performance Skills	
1	Projection	How loud or quiet your voice is
2	Pitch	How high or low your voice is
3	Pace	The speed at which an actor delivers their lines or performs their actions
4	Emphasis	The stress or importance placed on certain words or phrases in dialogue
5	Tone	The emotion shown in your voice
6	Gesture	Movements of the hands, arms, or body that express ideas or emotions
7	Eye Contact	Looking directly into another character's eyes, or avoiding this
8	Facial Expression	Movements of the facial muscles to convey emotions and reactions
9	Posture	The way an actor holds and positions their body
10	Body Language	The non-verbal communication conveyed through an actor's movements

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

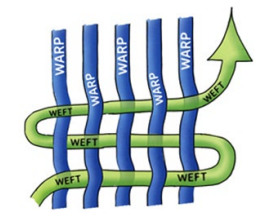
1. Mock NEA		
1	Skills based projects	In year 10 students in Product Design & Textiles undertake a series of skills-based projects. The projects are effectively a series of mini coursework tasks. This prepares students for the coursework element of the course in year 11 which is worth 50% of the final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

Huish Episcopi Academy GCSE Textiles Knowledge Organiser Core knowledge topic 1

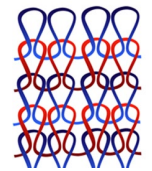
1.Fibres and fabrics

1	Fibres and fabrics	Textiles are also called **fabrics** and can be **natural or synthetic** There are three main ways of turning fibres into fabrics
2	Weaving	Fabric made of **warp & weft yarns** going under & over each other to create a non-stretchy fabric
3	Knitted	Fabric made of **yarn looped together** to create a stretchy fabric
4	Non-Woven	**Non-woven fabrics** are made from **webs of fibres** held together e.g. by heat, glue or by tangling the fibres under pressure
5	Blended Fabrics	**Blended fabrics** are made by spinning different fibres together to make a new yarn which can give you better properties. **Cotton and polyester** is one of the most common blended fibre, it has the advantages of cotton e.g. strong, durable, soft & comfortable and the polyester means it has the added properties of drying more quickly and be more resistant to creases.

Woven fabric



Knitted fabric



Non woven fabric

2. Natural fibres

1	Natural fibres	Natural fibres come from plants and animals and are renewable and biodegradable			
	Fibre	**Appearance**	**Properties**	**Used in these fabrics**	**Uses**
2	Cotton	Smooth	Strong, durable, absorbent, cool to wear, creases, shrinks easily, flammable, withstands high temperatures	Denim, corduroy , calico	T.shirts, underwear, pyjamas, shirts, socks, towels, jeans
3	Wool	Soft or coarse	Warm, absorbent, crease resistant, low flammability, can shrink when washed, slow drying	Knitted fabrics, Tweed, felt	Jumpers, carpets, blankets, coats, suits, upholstery
4	Silk	Very smooth and glossy	Smooth, lightweight, lustrous surface, weak when wet, creases easily	Organza, chiffon, satin	Dresses, ties, underwear, upholstery, furnishings

3. Synthetic Fibres

1	Synthetic Fibres	Synthetic fibres are made from fossil fuels and chemicals and aren't biodegradable or from sustainable sources			
	Fibre	**Appearance**	**Properties**	**Used in these fabrics**	**Uses**
2	Elastane	Soft	Smooth, strong, very stretchy, springs back into shape, crease resistant, flammable	Lycra	Blended with other fibres for use in swimwear, sportswear, leggings, underwear
3	Polyester	Smooth	Strong, durable, crease resistant, low flammability, not absorbent	Fleece	Sportswear, clothing, bedding, raincoats, medical textiles
4	Polyamide	Can have many different finishes	Strong, hard wearing, crease resistant, not absorbent, easily damaged by sun	Nylon	Clothing, rope, swimwear, sportswear, tights

4. Textiles- tools and equipment

1	Fabric shears	Have long sharp blades to cut fabric more easily and neatly
2	Pinking shears	To cut fabric with a zig zag edge, help to prevent fabric fraying
3	Pins	Used to hold fabric together before stitching
4	Needles	Used for hand stitching, available in many different sizes for different types of fabrics and thread.
5	Measuring and marking	Pattern masters and flexible tape measures help to measure. Tailors chalk is used to mark fabric
6	Irons	Heat, pressure, and steam are used to press out creases in fabric and seams
7	Sewing machine	Speeds up sewing and produces neat, even stiches for a high-quality finish
8	Overlocker	Use to finish the edges of fabric to stop them from fraying, by trimming and closing the edge of the fabric with a casing
9	CAM – Computer aided manufacture	CAM has lots of different uses in the textiles industry, from embroidery, knitting, cutting and automated machines
10	Stock form	Stock form – Fabric is sold in standard widths e.g. 90cm/ 115cm and 150cm

5. Components and fastenings

1	Zips	Zips can be plastic or metal; some zips are fixed, and some are open-ended e.g. on jackets
2	Velcro	Comes in two half's, one with loops and on with hooks, Its hardwearing and safe on children's products
3	Toggles and buttons	Can be made from plastic, metal or wood. They are sewn on and require a buttonhole or loop to fasten
4	Press studs / poppers	Used to fasten an item that can needs to be opened and closed quickly. e.g. baby grow

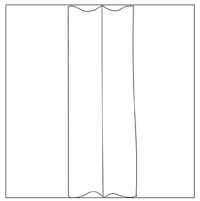
6. Seams

1	Seams are held together with stitches they need to hold fabric securely and be strong enough to stand up to the strains of the product. The common seams are Plain seam, French seam and a Flat fell seam.

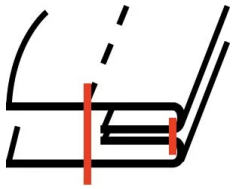
7. Joining and shaping fabric

1	Piping	Piping can be used on seams to add decoration or to strengthen a product, it stands out from the seam adding definition
2	Quilting	Quilting uses wadding between two layers of fabric which is then stitched in a pattern. Quilting adds warmth to a product e.g. bodywarmer.
3	Gathering and pleating	Gathering and pleating use excess material to create detail, a better fit or shape to a product

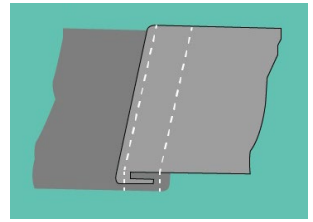
Plain (flat) seam



French seam

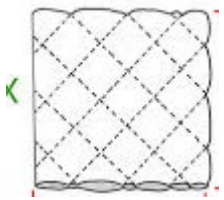


Flat fell seam

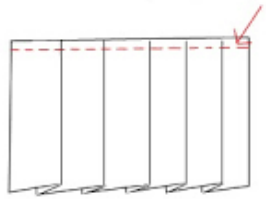


Piping

Quilting



Gathering and Pleating



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

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

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

1. Hardwoods

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

2. Softwoods

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

3. Natural timber availability

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

4. Finishes for hardwoods and softwoods

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

5. Manufactured board

1	Man-made	Like MDF, plywood and chipboard are all manufactured boards		
2	Man-made boards	Are made from wood fibres, normally collected from recycled wooden materials, bonded together with resins to form sheets.		
	Material	**Appearance**	**Properties**	**Uses**
3	MDF	Light brown, it has no grain.	MDF is easy to work.	It is popular for interior DIY furniture.
4	Chipboard	Is made from small 'chips' of timber bonded together	It is a strong material which will withstand pressure	Kitchen worktops can be made using chipboard with an additional veneer applied
5	Plywood	Plywood has a variety of facing layers so its appearance changes	It is made from layers of wood, bonded together at an angle of 90 degrees to increase strength and rigidity.	Sometimes, the facing layers can be high quality, e.g. birch, to provide a better aesthetic finish.

6. Finishes for manufactured boards

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

Huish Episcopi Academy - Year 10 Food Preparation & Nutrition Knowledge Organiser: Unit.1 PROTEIN

1. Protein	
What actually is Protein?	Protein is a Macronutrient. Protein is made up of small building blocks called amino acids. There are approximately 20 of these molecules.
Essential Amino Acids	These are amino acids that cannot be made by the body, they must come from food.
No-essential amino acids	These are amino acids that can be made by the body and are always available.
Protein Functions for the body	We need protein for body repair, growth maintenance of cells / tissues e.g. hormones, hair, skin, nails, muscle, blood.
HBV	Higher Biological Value is protein that contains all 10 essential amino acids (e.g.) Meat & Meat Products, Eggs, Soya Beans, Quinoa, Fish, Milk
LBV	Lower Biological Value is protein that lacks one or more essential amino acid (e.g) Cereals, peas, butter, seeds, nuts, peanut butter, vegetables
Protein Complementation	Is combining LBV protein foods to form a HBV protein to form a protein meal.(e.g) Baked beans on toast, peas and rice, houmous with pitta bread.
Protein Deficiency Symptoms	Kwashiorkor – Efficiently poor growth rates, retaining water in their body tissues, and suffer hair loss and persistent infections.
Protein Excess Symptoms	Can be harmful to kidneys and liver due to breaking protein down. Protein not used will be stored as fat leading to weight gain.

2. Primary & Secondary Processing	
Primary Processing	Refers to the process of changing raw food materials into food that can be eaten immediately or processed further into other food products.
Secondary Processing	Refers to the process of changing primary food products into other types of products.
Qualities to look for when buying fresh fish	Firm flesh, clear shiny eyes not sunken, red gills, fresh smell, scales attached not flaking off, moist not slimy skin, bright natural colour, fish should be pearly white colour, shellfish – shells clean, intact not damaged and closed

3. Method of transferring heat to food and the scientific procedure		Example of cooking method
Conduction	Is when heat travels through solid materials such as metals and food.	Frying (Sausages) Roasting
Convection	is when heat travels through air or water	Boiling/Simmering/Poaching (Egg)
Radiation	Is when heat rays directly heat and cook food.	Grilling (Bacon) BBQ

4. Gluten	Definition
Kneading	Technique used to stretch gluten when making bread dough
Glutenin Gliadin	Two proteins which form Gluten when water is added to a dough
Physical properties that bread can be described as.	Elasticity (springs back) Plasticity (can be stretched and shaped)

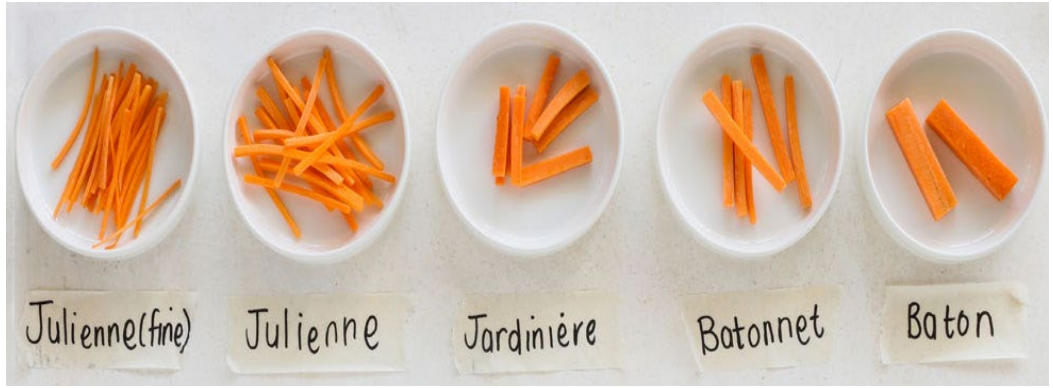
5. Scientific Terminology	Definition
Denature	Is when protein changes shape, either when heated, agitated, or in acidic conditions.
Denaturing	May be a permanent change to a protein, which occurs when protein is heated and there is a change in its chemical structure or it maybe temporary. e.g when egg white foam stands and collapse back to its liquid state.
Coagulation	Is a change in the structure of protein, when proteins set, brought about by heat or acids. This change is irreversible.

Huish Episcopi Academy – Food & Nutrition Knowledge Organiser – Core Knowledge – Food Preparation Skills

1. Food Preparation Skills

1	Knife Skills	Bridge hold and claw grip are two techniques for holding and cutting fruit and vegetables when chopping and slicing.
2	Vegetables cuts	Julienne, Brunoise, Macedoine, Jardimiere – other examples see image below.
3	Aesthetics	The art of making food look good or attractive, for example by using garnishes on savoury dishes or decorations on sweet dishes.
4	Chopping Boards	Different coloured chopping boards are used for different preparation task

Diagram A - Vegetable Cuts

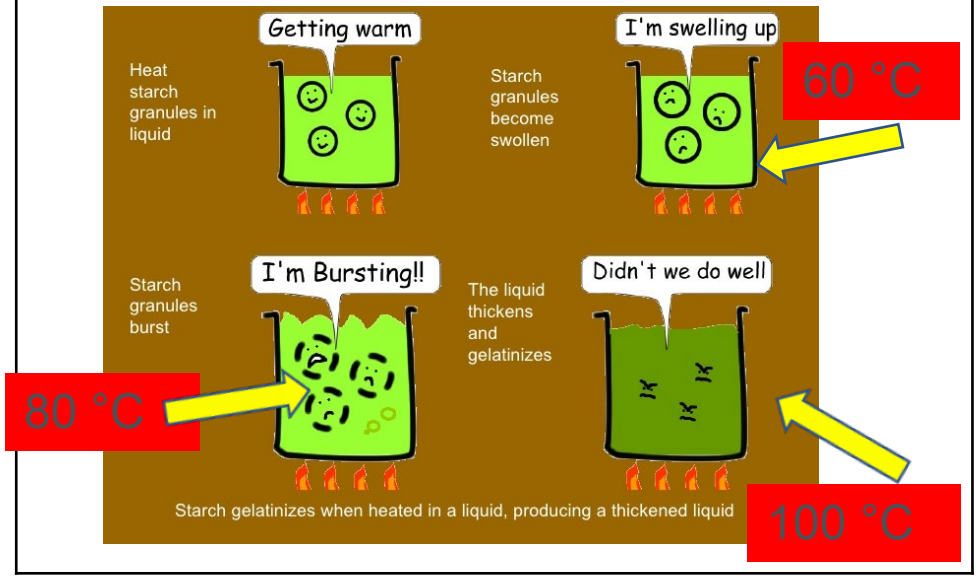


1. Food and Preparation Skills

1	Food Spoilage	Is when food loses quality and becomes inedible.
2	Water Based methods using the hob	Boiling, steaming, poaching, simmering, blanching.
3	Dry heat and fat based methods using the hob	Dry-frying, shallow frying, stir frying,
4	Using the oven	Baking, Roasting, Casseroles and tagines, Braising,
5	Using the grill	Grilling under heat, grilling over heat, barbecuing
6	Skewer	Is a long metal or wooden pin used to secure food on during cooking. It is used to hold together pieces of food.
7	Starch based sauce stages.	Take note of what happens at each temperature. Diagram C.

Diagram B – Prevent Cross Contamination

Diagram C - Vegetable Cuts



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Huish Episcopi Academy Year 10 Film Studies Knowledge Organiser Component 2 Section C Skyfall

1. GENRE	
Director	Sam Mendes
Writer	Neal Purvis and Robert Wade
Cinematographer	Roger Deakins
Music	Thomas Newman
Editor	Stewart Baird

2. THEMES	
1. Juxtaposition	Relationship between controller and controlled – between Bond and M and between M and Silva and between Silva and Bond.
2. Camera work	Key elements especially camera angles deliver clues as to who is being controlled

3. CONTEXT	
1. Social	Society is ensuring that the representation and treatment of women is improving. Two strong female characters in Eve and M with larger influence on plot. However, there is still a reflection of the Bond tradition of having women in the film for the 'male gaze'. Old Vs New, traditional Vs modern.
2. Historical	Explores the contemporary threat of cyber terrorism. Fit with the celebration of Britishness of the Olympic Games. Iconography that is familiar to fans. Make Britishness cool.
3. Cultural	Not linked to any Fleming Novel but Casino Royale and Skyfall wanted to get Bond's character 'back to Fleming'. Darker, dangerous and more emotional.
4. Political	Is MI6 relevant in today's world of globalization. Everyone is operating internationally so do we need an agency, just for the UK. MI6 and Bond are both destroyed but then rebuilt.
5. Technological	Filmed in high definition and then converted to IMAX. Film asks if technology is the cause of the problem or does it help to fix the problem. Old vs New. Gadgets are back to basics and are more realistic
6. Institutional	50th Anniversary of the Bond Film. Shows Bond being resurrected. The Bond film is an institution in its own right. Reflected in the nostalgia of the film with the old Aston Martin and the simple Walter PPK gun. Still high production values with big stars and sophisticated expensive cinematography – still making it a Bond Film (which is an institution in itself)

4. AESTHETICS	
Beauty	'Dancing silhouettes, cold blues, the warmth of fiery reds, oranges and yellows. It is beautiful' and 'a mix of real world dirtiness and beauty'.
Juxtaposition	Virtual world vs the dirty realistic world -Blue/Orange colour scheme
Doubles	Mirrors/doubles and reflections/symmetry – Connection between Silva and Bond. Mirror images of each other. How the virtual world reflects the actual world
British	'Keep Calm and Carry On'/'Cool Britannia'. Makes Britishness cool and slick
Other films	Influenced by the Nolan, the director of the Dark Knight. Made a recognisable character darker and grittier. Mendes has also taken elements of 'old' Bond and turned him into something new and darker. More realism to the aesthetic of the film. Colours are less saturated.
Film Noir	Influence of Film Noir style – lighting uses deep shadows and silhouettes. Film Noir are dark and downbeat American crime and detective films. Literally means 'black film of cinema'
Framing	Roger Deakin, the cinematographer, uses symmetry. Framing of Bond and M in the centre suggesting stable and dependable in the face of a changing chaotic world
Bond's character	More complex character of Bond. He is darker and more emotion and we should take him seriously
Nostalgia	Almost back to basics and references to older James Bond Films.

Huish Episcopi Academy Year 10 Geography Knowledge Organiser Unit 1 Natural Hazards

1. Tectonic hazards

1	Natural hazards	Natural hazards are extreme natural events that can cause loss of life
2	Tectonic hazard	Occur when the Earth's crust moves.
3	Convection current	Currents of hot mantle which rise and fall causing plates to move
4	Oceanic crust	Found underneath the oceans. It is denser than continental crust and can be subducted.
5	Continental crust	Found under land masses or continents. It is generally older than oceanic crust and is less often destroyed
6	Destructive margin	An oceanic plate and a continental plate. The plates move towards one another and this movement can cause earthquakes and volcanoes
7	Constructive margin	The plates move apart from one another. When this happens the magma from the mantle rises up
8	Conservative margin	The plates move past each other or are side by side moving at different speeds.
9	Collision margin	Two continental plates collide, neither can sink and so the land buckles upwards to form fold mountains.
10	Infrastructure	Roads, building and services which can be made earthquake resistant
11	Earthquake drills	Practicing what do to in an event of an earthquake
12	Development	The level of wealth in a country

2. Climatic hazards

1	Global atmospheric circulation	The movement of air across the planet occurs in a specific pattern
2	Tropical storm	A very powerful low-pressure weather system which results in strong winds
3	Eye	The central part of the tropical storm. Here the weather is calm
4	Eye Wall	Large towering cumulonimbus clouds surround the eye, the worst wind and rain is here
5	Extreme weather	Weather that is unusual and severe
6	Fossil fuels	Coal, gas and oil - these release carbon dioxide into the atmosphere.
7	Mitigation	Ways that human actions can reduce climate change
8	Adaptation	Ways humans can learn to live with climate change
9	Primary effect	As a direct result of the hazard
10	Secondary effect	As a result of a primary effect
11	Response	How countries react after a hazardous event
12	Frequency	How often something happens. Tropical storms are becoming more frequent
13	Monitoring	Using satellites to see where tropical storm's are forming and tracking them
14	Evidence of climate change	Tree rings, ice cores, rising global temperatures

Huish Episcopi Academy Year 10 German Knowledge Organiser – die Schule: School

Was lernst du dieses Jahr? - What are you learning this year?		
1	Geschichte	History
2	Kunst	Art
3	Erdkunde	Geography
4	Physik, Biologie, Chemie	Physics, Biology, Chemistry
5	Naturwissenschaften	Science
6	(Fremd-)Sprachen	(Foreign) Languages
7	Französisch, Deutsch	French, German
8	Informatik	ICT, Computing
9	Mittagspause	Lunch time
10	Ich habe (…) einmal pro Woche	I have (…) once per week
11	Am (Montag/Dienstag)	On (Monday/Tuesday)
12	in der (ersten/zweiten/dritten) Stunde	In the first/second/third hour (1st, 2nd, 3rd period)

Was ist dein Lieblingsfach? - What is your favourite subject?		
1	Ich lerne (nicht) gern...	I (don't) like learning...
2	, weil es (…) **ist**	Because it **is** (…) [lit: because it...**is]**
3	ganz nützlich	quite useful
4	sehr ermüdend	very tiring
5	einfach, leicht	easy
6	ein bisschen schwierig, schwer	a bit difficult, hard
7	todlangweilg	Deadly/very boring
8	der Lehrer/die Lehrerin ist streng	The teacher (m/f) is strict
9	Nächstes Jahr werde ich...lernen	Next year I will learn...

Was trägst du in der Schule? - What do you wear to school?		
1	ich trage	I wear, I am wearing
2	er/sie trägt	he/she wears, he/she is wearing
3	sie tragen	They wear, they are wearing
4	einen Rock	A skirt
5	einen schwarzen Pullover	A black jumper
6	eine Jacke	a blazer
7	eine Krawatte	A tie
8	eine Hose	trousers
9	ein weißes Hemd	A white shirt
10	Ich finde meine Schuluniform...	I find my school uniform...
11	praktisch	Practical
12	Andererseits **ist** es...	On the other hand it is...**[is** it]
13	teuer und unbequem	Expensive and uncomfortable
14	alle tragen das Gleiche	Everyone's wearing the same (thing)

Was trägst du in der Schule? - What do you wear to school?		
1	Auf dem Foto sieht man...	In the photo you see...
2	Im Hintergrund sieht man...	in the background you see...
3	Gebäude	buildings
4	sie sind (draußen)	They are (outside)
5	ungefähr (fünfzehn) Jahre alt	Roughly (15) years old
6	sie sprechen miteinander	They are speaking with each other

Huish Episcopi Academy Year 10 German Knowledge Organiser – die Schule (School)

Sind Schulregel wirklich nötig? - Are school rules really necessary?		
1	man muss	You must
2	man muss nicht	You don't have to
3	man darf	You are allowed to
4	man darf nicht	you must not
5	im Gang laufen	(to) run in the corridors
6	Im Klassenzimmer trinken	(to) drink in classroom
7	im Unterricht plaudern	(to) chat in lessons
8	Hausaufgaben vergessen	(to) forget homework
9	Respekt zeigen	(to) show respect
10	mobben	(to) bully
11	Ich bin der Meinung,...	On (Monday) in (first) period
12	..., dass es sehr (un)fair **ist**	That it **is** very unfair
13	..., dass es wichtig **ist**	That it **is** very important
14	Diese Regel ist notwendig	This rule is necessary
15	altmodisch	Old-fashioned

Was machst du in der Mittagspause? - What do you do at break time?		
1	In der Pause...	In the break.../at breaktime...
2	spreche ich mit Freunden	I speak with friends (verb second)
3	esse ich... / trinke ich...	I eat/drink (verb 2nd)
4	spiele ich Fußball	I play football (verb 2nd)

Perfect tense with 'haben' (to have)		
1	Perfect tense with 'haben' as auxiliary	Used for transitive verbs (no change of location)
2	Ich habe... gegessen	I ate...
3	Ich habe...gehört	I listened to/heard...
4	Ich habe...gezeigt	I showed...
5	Ich habe...gemacht	I made/did...
6	Ich habe...gespielt	I played...
7	Ich habe... gekauft	I bought...

Perfect tense with 'sein' (to be)		
1	Perfect tense with 'sein' as auxiliary	Used for intransitive verbs (movement/change of location, and other select verbs)
2	Ich bin (nach Österreich) gefahren / gegangen	I went (to Austria)
3	Ich bin (nach Deutschland) geflogen	I flew (to Germany)
4	Ich bin (zu Hause) geblieben	I stayed (at home)

Schultage – school days		
1	es hat Spaβ gemacht	It was fun
2	Wir haben eine Klassenfahrt gemacht	We did a school trip
3	Sporttag	Sports day
4	Theaterstück	A play (drama)
5	ich / es war, wir waren	I / it was, we were
6	ich hatte, wir hatten	I had, we had
7	Skifahren	Skiing
8	Ich habe einen Austausch gemacht	I did an exchange

A Component 1 Human Lifespan Development		
1	Physical	Growth patterns and changes in mobility.
2	Intellectual	Thinking skills, memory and language.
3	Emotional	Developing identity and coping with feelings.
4	Social	Develop friendships and relationships.
5	Life stages	Phases of life: Infancy, early childhood, adolescence, early, middle, late adulthood.

B Component 1 Human Lifespan Development		
1	Life events	Something that happens to people as they move through life.
2	Characteristics	Something that is typical of people at a certain life stage.
3	Gross motor	Control and coordination of large muscles.
4	Fine motor	Control and coordination of small muscles.
5	Health and wellbeing	Events that cause changes to the body, physical or mental health or mobility.

C Component 1 Human Lifespan Development		
1	Expected	Life events that you know will happen.
2	Unexpected	Life events that happen without warning.
3	Milestones	A significant expected change in development.
4	Puberty	Process towards sexual maturity.
5	Menopause	Ceasing of menstruation.

D Component 1 Human Lifespan Development		
1	Ill health	A disease or period of sickness that affects the body or mind.
2	Divorce	Ending of a marriage.
3	Bereavement	Loss of a loved one due to their death.
4	Abstract thinking	Imagination to think outside the box.
5	Problem solving	Using logic to think through problems.

E Component 1 Human Lifespan Development		
1	Linguistics	Developing how to express yourself verbally.
2	Redundancy	Loss of job due to company re-structure.
3	Imprisonment	Loss of freedom as a result of wrong-doing.
4	Character traits	Describe a persons disposition and whether they are positive or negative.
5	Bonding	Emotional ties formed with others.

F Component 1 Human Lifespan Development		
1	Attachment	Bond formed with a person that meets needs like love, food, security, warmth etc.
2	Contentment	An emotional state when happy that needs have been met.
3	Emotional intelligence	How individuals are able to understand and manage their own emotions and relationships.
4	Disposition	How you appear and act to others – could be positive or negative.
5	Reassurance	Confidence given to accept new changes.

G Component 1 Human Lifespan Development

Choose 15 words that you feel are the most important.
Link these key words as a mind map, Explain each of your connections.
Justify your connections by giving an example.

Huish Episcopi Academy Year 10 History Knowledge Organiser – Medieval Medicine

Key Terms		
1	Anatomy	The study of the structure and organs of the body
2	Apothecary	A medicine maker
3	Astrology	Supernatural belief that the stars influence human events
4	Barber surgeon	A hairdresser who was also a surgeon and a dentist
5	Diagnose	Identification of an illness
6	Divine retribution	Punishment sent from God
7	Flagellant	Someone who hurts themselves as an apology to God
8	Galen	Ancient Greek who created their theory of opposites
9	Humourism	The belief that an imbalance of liquid in the body causes illness
10	Lazar house	A place for lepers to live
11	Leprosy	Disease of the skin believed to be punishment for sin
12	Medieval period	c500 - c1500 also called Middle Ages
13	Materia Medica	Books about herbal medicines
14	Miasma	Bad smell that caused disease
15	Omnipotent	All powerful

Key Terms		
16	Phlebotomy	Bloodletting
17	Physician	Doctor
18	Pomander	Container for sweet-smelling herbs
19	Prescribe	To advise the use of a medicine
20	Progress	A positive change
21	Purging	Removing humours from the body
22	Quarantine	Separating people to prevent transmission of disease
23	Regimen Sanitatis	Lifestyle advice to prevent illness
24	Scrofula	A disease which people believed was cured by the king's touch
25	Stewes	Public baths
26	Theriaca	A herbal medicine of 70 ingredients
27	Uroscopy	The study of urine
28	Vivisection	Dissecting a live human or animal

Key Dates		
29	1348	Black Death
30	1480	Regimen Sanitatis written

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

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

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

Key terms for use in Component 1	
Rhythm	
Syncopation	Emphasis on the off-beat (weaker beats) of the bar to create rhythmic interest
Swing	A rhythmic effect where the beat is divided into unequal parts. The first being longer, the second shorter. Commonly used in Blues and Jazz music.
Skanking	An off-beat rhythmic pattern specific to Reggae music.
Polyrhythm	Many rhythms played at the same time.
Phasing	A technique where the same part is played at slightly different intervals of time, therefore moving and out of “phase” with each other.
Melody	
Conjunct / Disjunct	The melody moves mainly in step / The melody moves mainly in leaps
Repetition	The same idea is repeated or heard several times throughout a piece
Phrasing	The shaping of the sequence of notes in a melodic passage. This may be balanced e.g. 4 bars and 4 bars or unbalanced e.g. differing values.
Improvisation	Creating music in the moment.
Ornamentation	Decorating or embellishment of the melody by adding notes or modifying rhythms
Riffs / Ostinato	Repeating music phrase / pattern.
Structure	
Verse / Chorus	A structure common in popular music
Intro / Outro	The start / The end of a piece of music
Bridge	A contrasting section that connects two different parts of a song.
Through-composed	Music that is written without repletion or a return to previous material.
12-Bar Blues	A prominent chord progression used in Blues, Jazz and Rock ‘n’ Roll music. Contains 12 bars and is based around chords I, IV and V.

Memory Topic Terms		
1	Capacity	A measure of how much information can be stored.
2	Cognition	All mental processes that are as a result of our senses E.g thinking, planning, problem solving, perception.
3	Context	The surroundings for an event, thought or memory which enable these things to be more fully understood and may act as a cue to recall. E.g The room we are are in is part of our context.
4	Culture	The way of life, especially the customs, beliefs and behaviours of a particular community of people at a particular time. (E.g. language, dress, religion, music)
5	Duration	How long information can be stored in the memory.
6	Effort after meaning	Making sense of something unfamiliar by changing it into more familiar terms. (Linked to Bartlett's Theory)
7	Encoding	Information taken into the memory is changed into a form that can be stored and later recalled.
8	Episodic Memory	Recollections of personal experiences or events (may include feelings as well as recall of what took place).v
9	Expectation	Beliefs or feelings about what it is that we will experience. Expectation can affect our memories.
10	False memories	Remembering something that has never happened but feels as if it did ***(NOTE – this is different from a reconstructed memory)***

Memory Topic Terms		
11	Long Term Memory Store (LTM)	Memory store that has a very large capacity and holds information for a lengthy period of time.
12	Primacy effect	When more of the **first** information received is remembered than later information.
13	Recency effect	When more of the **last** information received is recalled than earlier information.
14	Recall	To bring information or past experiences back into one's mind (similar to 'retrieval').
15	Recognition	By retrieving a memory, you are able to identify something or someone, previously known to you in some way.
16	Reconstructive memory	Changing or filling in gaps in our recollection of experiences or information so that it makes more sense to us.
17	Semantic memory	Recollections of **general knowledge (facts / meanings)** rather than personal experiences or events.
18	Sensory Store	Memory store for information received from the senses. Has a very large capacity but holds information for a very short period of time.
19	Serial position effect	The tendency for the recall of words at both the beginning and end of a list to be better than the recall of those in the middle.
20	Short Term Memory (STM)	Memory store that has a capacity of approximately seven pieces of information and in which information is held for a limited period of time (about 30 seconds)
21	Storage	Holding information in the memory system for use at some point in the future.

Research Methods Terms		
1	Alternative hypothesis	A prediction that a relationship between two variables will be found. It is the "alternative" to the "null hypothesis"
2	Bar chart	A type of graph that is used to display data that has separate categories. Numerical values are represented by the height or length of lines or rectangles. (There is a gap between bars).
3	Case study	An in-depth investigation of an individual, group, organisation or specific situation.
4	Categories of behaviour	Clearly defined, specific actions that can be observed and recorded as examples of the target behaviour during an observation. E.g. "kicking" is a category of aggressive behaviour.
5	Conditions	To investigate the effect of an independent variable (IV) on the dependent variable (DV), participants take part in different trials/situations called conditions. Participants in each situation will experience a different part of the IV.
6	Correlational relationship	A connection or association between variables. This does not mean there is also cause and effect. When two variables are correlated, it only means that as one variable changes, so does the other.
7	Counterbalancing	Used in **repeated measures** design to limit order effects. Half of the participants take part in the conditions in one order (A followed by B) while the other half take part in them in the opposite order (B followed by A).
8	Dependent variable (DV)	The thing that will be measured by a researcher to see if changing the IV has had any effect.
9	Ecological validity	The results of the investigation can be said to apply to real-life behaviour; they are an accurate account of behaviour in the real world.
10	Ethical issues	Concerns about what is morally right and best for participants when researchers are carrying out research. The British Psychological Society (BPS) provide guidelines for researchers.
11	Experimental design	How the participants are organised. E.g Independent Groups / Repeated Measures
12	Extraneous variable (EV)	A variable that is not the IV but that might affect the DV. If EVs are not controlled, the researcher cannot be certain what caused any change that occurs in the DV.
13	Field experiment	An experiment that is carried out in a natural/real life environment.
14	Frequency table	A type of table that is used to display data to show how often something occurs.

15	Histogram	A type of graph which represents the frequency of groups of continuous data (E.g. ages 11-18 in a school) There are no gaps between the bars and they are arranged in numerical order.
16	Inter-observer reliability	The extent to which the record sheets of two or more people carrying out an observation, match one another.
17	Laboratory experiment	An experiment that is carried out in an unnatural, controlled environment.
18	Natural experiment	Research carried out into the effect that a change (IV) has upon something (DV). However, the change has not been arranged by a researcher. E.g. the effects of lockdown on learning.
19	Normal distribution	A symmetrical arrangement of data in which the majority of values are grouped in the centre (looks like a bell shape).The mean, median and mode all fall in the centre of the curve.
20	Null hypothesis	A prediction that there is **no** relationship between variables.
21	Observation study	An investigative method where researchers collect data about people's behaviour by watching them and recording what they see.
22	Qualitative data	Data that is descriptive and non-numerical, eg verbal or written answers to interview questions.
23	Quantitative data	Data that is numerical, such as totals or tallies of observed behaviour categories.
24	Questionnaire	A set of questions about a topic that is given to participants in order to gather information/data.

25	Randomisation	Using chance (eg tossing a coin) to decide order in an investigation.
26	Random sample	People who are members of the target population who all have the same probability of being selected.
27	Range	The difference between the smallest and largest values in a set of data.
28	Ratio	The relationship between two or more amounts; shows how big or small one is when compared to another. E.g if there are 10 girls and 5 boys in a class the ration of girls to boys is 2:1
29	Sample	A small group of people taken from the target population and who are used by the researchers in their investigation.
30	Standard form (scientific notation)	A way of writing very big or very small numbers by expressing them as a multiple of powers of 10.
31	Standardised procedures	When carrying out a study, the same method and set of instructions are used for all of the participants in a condition.
32	Stratified sample	People are selected in similar amounts from a number of subgroups within the target population (E.g. age / sex / postcodes)
33	Target population	The large group of people the researcher wants to study and from which the sample is selected.

Huish Episcopi Academy Year 10 BTEC Sports Studies Knowledge Organiser Component 1: Preparing Participants to Take Part in Sport and Physical Activity

UNIT NUMBER.1a Types of Sport and Physical Activity		
1	Sports	Competitive activities involving physical exertion, rules, regulations, and a National Governing Body.
2	Examples	Football, basketball, tennis, swimming.
3	Team Sports	Sports where individuals play as part of a team against another team.
4	Examples	Soccer, rugby, volleyball, cricket.
5	Individual Sports	Sports where participants compete individually.
6	Examples	Tennis, golf, swimming, track and field events.

UNIT NUMBER.1b Benefits of Taking Part in Sports		
1	Physical Fitness	Enhances overall health and fitness levels.
2	Social Interaction	Opportunity to meet new people.
3	Leadership Skills	Develops the ability to lead and inspire others.
4	Teamwork Skills	Learns to work effectively within a team.
5	Resilience and Confidence	Builds mental toughness and self-assurance through competition.

UNIT NUMBER.2a Outdoor Activities		
1	OAA	Activities carried out in natural or recreation areas that are adventurous.
2	Examples	Hiking, climbing, kayaking, camping.

UNIT NUMBER.2b Benefits of Taking Part in Outdoor Activities		
1	Positive Risk Taking	Encourages responsible risk-taking behaviors.
2	Improved Confidence and Self-Esteem	Boosts personal confidence through achievements.
3	Social Interaction	Opportunity to meet and interact with new people.
4	Skill Development	Learning new skills such as navigation, survival techniques.
5	Stress Relief	Provides a break from everyday life stresses and reduces screen time.

Huish Episcopi Academy Year 10 BTEC Sports Studies Knowledge Organiser Component 1: Preparing Participants to Take Part in Sport and Physical Activity

UNIT NUMBER.3a Physical Fitness Activities		
1	Physical Fitness	Activities aimed at increasing physical fitness.
2	Examples	Running, cycling, weightlifting, yoga.

UNIT NUMBER.3b Benefits of Taking Part in Sports		
1	Social Interaction	Opportunity to meet new people.
2	Goal Setting	Helps in setting and achieving fitness goals.
3	Improved Confidence	Boosts self-confidence through physical achievements.
4	Body Composition	Improves body composition and muscle tone.
5	Physical Health	Enhances overall physical health and wellness.

UNIT NUMBER.4a Provision of Sport and Physical Activity		
1	Public Sector	Provided by local authorities and schools.
2	Examples	Community sports centres, school sports programs.
3	Private Sector	Provided by profit-oriented organizations.
4	Examples	Private gyms, sports clubs.
5	Voluntary Sector	Provided by volunteers with a shared interest in the sport or activity.
6	Examples	Local sports clubs, community-run events.

UNIT NUMBER.4b Characteristics

	Public Sector	Private Sector	Voluntary Sector
Funding Source	Government-funded.	Funded through memberships and fees.	Funded through donations and fundraising.
Aims	Provide accessible and inclusive sports opportunities.	Profit-driven, often offers high-quality facilities.	Community-driven, focused on participation and enjoyment.
Quality of Provision	Varies; generally aims for inclusivity.	Generally high quality, exclusive.	Can vary widely; depends on volunteer commitment.
Accessibility	Often more accessible to the general public.	May be limited by cost.	Generally very accessible and inclusive.

UNIT NUMBER.4c Public Sector Advantages and Disadvantages		
	Advantages	Disadvantages
1	Inclusive programs catering to all age groups and abilities.	May have limited variety compared to private clubs
2	Generally provides basic and essential equipment.	Equipment may not be as high-quality or modern as in the private sector.
3	Usually low-cost or free, making it accessible to a broader population.	While low-cost, sometimes there are fewer resources, leading to potential overuse of facilities.
4	High accessibility with facilities often located in community centres and schools.	High demand can lead to crowded facilities and limited availability.

UNIT NUMBER.4d Private Sector Advantages and Disadvantages		
	Advantages	Disadvantages
1	Offers a wide range of specialised and niche sports and activities.	May focus on more profitable activities, potentially neglecting less popular sports.
2	Access to high-quality, modern, and specialized equipment.	High cost can limit access for lower-income participants.
3	Membership fees can include comprehensive packages with numerous benefits.	Higher costs and membership fees can be a barrier for many people.
4	Lower participant-to-equipment ratio, reducing wait times.	

UNIT NUMBER.4e Voluntary Sector Advantages and Disadvantages		
	Advantages	Disadvantages
1	Focus on inclusivity and participation.	May be limited by volunteer expertise and available resources.
2	Donations and local funding can enhance the range and quality.	Reliance on donations can affect availability and quality.
3	Generally very low-cost or free, supported by volunteers and donations.	May have limited hours and availability due to volunteer schedules.
4	Highly accessible to all community members.	Can be less structured than public or private sector options.