Name:	Form:

‘The only one who can tell you “You can’t win”, is you, and you don’t have to listen.’

Dame Jessica Ennis Hill

Hill is a British retired track and field athlete. She is a 2012 Olympic Champion, three time World Champion and 2010 European Champion.

Lees Brook Academy

Year 10 Knowledge Organiser:
Spring Term 1 – 2024
8TH January – 17th February

CONTENTS

Instructions for using your Knowledge Organiser

Every school day you should be studying **2** subjects from your knowledge organiser for homework.

The timetable on the next page tells you which subjects you should be studying on which days (it doesn't matter if you have that subject on that day or not, you should follow the timetable).

You are to use your yellow homework book to show the work you have done. Each evening you should start a new page and put the date clearly at the top.

You need to bring your KO and exercise book with you **EVERYDAY** to the academy.

Your parents should sign off your homework every evening using the grid in your KO on pages 4 and 5.

Your KO and exercise book will be checked by your class teacher. Failure to show homework will result in an after school detention that day. Completion of your homework means you will receive a positive point.

You will also be tested in your lessons on knowledge from the organisers.

On a Friday, you will read one piece of **Principal's Reading**, following them in order. You then answer the questions in your yellow homework book.

Self-testing

You can use your KOs and book in a number of different ways but you **should not just copy** from the Knowledge Organiser into your book. Use the ***'How to self-test with the Knowledge Organiser'*** booklet to help you. It can also be found here:

https://www.leesbrook.co.uk/learning/knowledge-organisers/

Below are some possible tasks you could do in your workbooks, **no matter which task you do you should always check and correct your work in a different coloured pen.**

- Ask someone to write questions for you
- Write your own challenging questions and then leave it overnight to answer them the next day
- Create mind maps
- Create flashcards
- Put the key words into new sentences
- Look, cover, write and check
- Mnemonics
- Draw a comic strip of a timeline
- Use the 'clock' template to divide the information into smaller sections. Then test yourself on different sections
- Give yourself spelling tests
- Definition tests
- Draw diagrams of processes
- Draw images and annotate/label them with extra information
- Create fact files
- Create flowcharts

Presentation

You should take pride in how you present your work:

- Each page should be clearly dated at the top left hand side with Subject 1 written in the middle.
- Half way down the page a line should divide it in two with Subject 2 written above the dividing line.
- Each half of the page should be neatly filled with evidence of self-testing. There should be an appropriate amount of work.
- Failure to show pride in your presentation or wasting space on your page with large writing or starting a number of lines down will result in a **negative point.**

Year 10 Knowledge Organiser Schedule: Spring Term 1

You are expected to study the subject(s) shown on your timetable each day.
Each day use a page of your exercise booklet to evidence your work.

Timetable for weeks beginning: 08/01/2024 22/01/2024 05/02/2024		**Subject 1**	**Subject 2**
	Monday	English	**A**
	Tuesday	Maths	**B**
	Wednesday	Science	RE
	Thursday	English	Maths
	Friday	Science	Sparx Maths

For weeks Beginning: 15/01/2024 29/01/2024 12/02/2024		**Subject 1**	**Subject 2**
	Monday	English	Century Tech—Science
	Tuesday	Maths	**C**
	Wednesday	Science	Sparx Maths
	Thursday	English	Maths
	Friday	Science	Century Tech—English

To know which of your options subjects you should study look for your class code (you can find this on your main academy timetable) in the table below. Once you identify your subjects write them onto your homework timetable above. E.g. if you are in **10A/Cn** you would write **Construction** in the box with the **A.**

Option A	Options B	Options C
10A/Cn1	10B/Ar1	10C/Ar1
10A/Co1	10B/Co1	10C/Cn1
10A/Dg1	10B/Da1	10C/Eg1
10A/Fd1	10B/Eg1	10C/Fd1
10A/Gg1	10B/Fr1	10C/Fm1
10A/Gg2	10B/Gg1	10C/Gg1
10A/Hb1	10B/Gg2	10C/Hc1
10A/Hi1	10B/Gm1	10C/Hi1
10A/Mu1	10B/Hi1	10C/Ic1
10A/Vs1		
10A/Vs2		

How do I self-quiz?

How to use...Flashcards

1. On one side of the flash card, write the word or question.
2. On the other side, write the definition for the word, or answer to the question.
3. Once you have completed your set of cards, put them in a pile. Then for each card, see if you can remember the definition or answer to the question. Tick or cross when you get it right or wrong.
4. When you get the card right, place it in the 'correct' pile. When you get it wrong, place it in the 'wrong' pile. Repeat until all cards are in the 'correct' pile.

You can also use the Leitner Method:

https://www.youtube.com/watch?v=C20EvKtdJwQ

How to use… Look, Cover, Write, Check and Correct

1. Write your key words into the 'Look, Cover' column and then cover it.
2. Write out the meaning, definition or spelling in the 'Write' column.
3. Put a 'tick' or 'cross' in the 'Check' column depending on if you got the answer right.
4. If you got the answer incorrect, write the correct answer in the 'Correct' column.

Look , Cover	Write	Check	Correct
Noun	A person, place or thing.		
Algorithm	Algorithim	X	Algorithm

How to use… Mind Maps

1. Write out your topic or idea in the centre. E.g. The First World War.
2. Off of the main bubble, write out important categories to organise your ideas. E.g. causes of WWI and events in WWI
3. Then add your knowledge off of these branches. You might even be able to make connections between them.
4. Once made, then redraw as many of the connections as possible from memory. Correct any errors.

How to use… Explaining a process/ idea further

Your teacher might ask you to explain a key idea, process or event from your learning. This could be the water cycle (Geography), photosynthesis (Science) or something else. In your answer, try to use the words **because, but**, and **so.** These will help you to:

1. **Because:** helps to explain a reason, cause or why something works.
2. **But:** helps to explain a limitation or problem.
3. **So:** helps to explain what happens next in a sequence, process or event.

Check your sentences to see if your explanations or right or wrong. Correct any errors.

How to… Summarise a process/idea

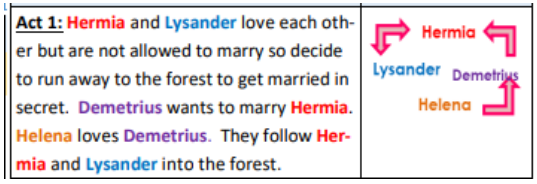
Rather than expand or explain a process, your teacher might ask you to summarise it into its key parts. E.g. summarising the plot 'A Midsummer Night's Dream' in English.

1. Read through the relevant part of your knowledge organiser as directed by your teacher.
2. Write out the (up to) 5 most important parts in your KO book, leaving a two lines in-between.
3. For each part, add **one** main idea.
4. E.g. here, the 4 key characters are picked out, and the direction of love is shown through the arrows. Check and correct any errors.

How to use… Subject Specific Tasks or Questions

Your teacher might choose to set a task that is not outlined here, and which is specific to that topic or their subject.

In this case, your teacher will outline specifically what it is you need to do, and how. This will still include you checking and correcting any errors.



Year 11 – English Literature – Macbeth – Spring 1 & 2

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Dramatic Irony (n)	When an audience knows more than the characters.
Stage Directions (n)	Instructions given to actors to guide them how to act, stand, behave, speak etc.
Structure (n)	How a play and the events are organised.
Soliloquy (n)	One character speaking to the audience.
Iambic Pentameter (n)	A line of writing that consists of ten syllables in a specific pattern of an unstressed syllable followed by a stressed syllable, or a short syllable followed by a long syllable.
Blank Verse (n)	Poetry written with regular metrical but unrhymed lines, almost always in iambic pentameter.
Tragedy (n)	A play dealing with tragic events and having an unhappy ending, especially one concerning the downfall of the main character.
Tragic Hero (n)	A tragic hero is a literary character who makes a judgment error that inevitably leads to his/her own destruction.
Rhyming Couplets (n)	A rhyming pair of successive lines of verse
Dramatic Irony (n)	When an audience knows more than the characters.

Section B: Key Concepts/Ideas/Questions

Big Questions:

1. What is regicide and how does it oppose the Divine Right of Kings?
2. Who was James I?
3. How does the play explore the supernatural?
4. How is symbolism used in the play?
5. How is masculinity presented in the play?
6. Who is Macbeth?
7. Who is Lady Macbeth and does she represent a typical women of her time?
8. Who is Banquo?
9. What is a Machiavellian villain?
10. Is Macbeth a tragic hero?
11. What is Macbeth's hamartia?
12. Who was Shakespeare?

How does Shakespeare present...

How does Shakespeare present Macbeth as a powerful character?

How does Shakespeare the issue of morality?

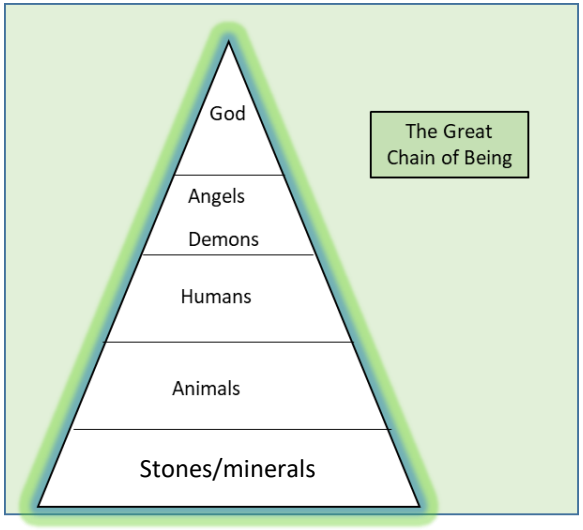
How does Shakespeare present Lady Macbeth as a powerful woman?

How does Shakespeare present the theme of morality?

How does Shakespeare present the idea of the supernatural?

How does Shakespeare present the theme of guilt?

Section C: Subject Specific



Key Themes

Ambition
Fate vs Freewill
Guilt
The Supernatural
Power
Gender
Kingship
Appearance vs Reality
Order vs Chaos
Loyalty

Concepts seen before: Soliloquy, Dramatic Irony, The Great Chain of Being, Kingship, Elizabethan context, Tragedy, Tragic Hero, Symbolism, Tyrant.

Week Beginning	TASKS **Year 10 – English – Shakespeare – Spring 1**
8/1/24	**TASK:** Create a fact file on William Shakespeare that retrieves your knowledge of the famous writer from KS2 & KS3. Include your knowledge of his plays studied so far: A Midsummer Night's Dream, Romeo & Juliet and Richard III. Include any knowledge you have of this period.
15/1/24	**TASK:** Research 'The Great Chain of Being'. Summarise what it is, when it first came into place and how it works. Draw it out in your book and explain what each part of the chain is.
22/1/24	**TASK:** Create a learning poster that summarises Jacobean society. Dual code information with images and diagrams to make it easier to remember.
29/1/24	**TASK:** Pick 10 words from the Tier 3 vocabulary list. Use the 'look, cover, write, check' method to help you understand how to spell these words and understand each definition.
05/2/24	**TASK:** Pick the remaining 5 words from the Tier 2 vocabulary and the remaining 5 words from the Tier 3 vocabulary lists. Use the 'look, cover, write, check' method to help you understand how to spell these words and understand each definition.
12/2/24	**TASK:** Answer the first three 'Big Questions' in as much detail as possible. Create a fact file for James I including his interest in the supernatural.

Year 11 – English Literature – Macbeth – Spring 1 & 2

Section A: Key vocabulary

Tier 2 Vocabulary	Definition
Gender (n)	A social construction about how the sexes are supposed behave and act.
Usurper (n)	A person who takes a position of power or importance illegally or by force.
Guilt (n)	Responsibility for having done something wrong either against the law or morally.
Ambition (n)	A strong desire to do or achieve something.
Thane (n)	A Scottish lord.
Tyrant (n)	A cruel and oppressive ruler.
Manipulation (n)	The action of influencing that aims to change behaviour or perception of others through indirect, deceptive, or underhanded tactics.
Equivocation (n)	The use of ambiguous language to conceal the truth or to avoid committing oneself.
Symbolism (n)	The use of symbols to represent ideas or qualities.
Paradox (n)	Contradictory statements.
Semantic Field (n)	Words that can be grouped thematically or connected to a subject.
Imagery (n)	Visually descriptive or figurative language.
Repentant (n)	Feeling regret or remorse.
Kingship (n)	The state or position of being a king.

Section B: Key Concepts/Ideas/Questions

James I
James I had been James VI of Scotland before he succeeded to the English throne in 1603. In focusing on Macbeth, a figure from Scottish history, Shakespeare paid homage to his king's Scottish lineage. Additionally, the witches' prophecy that Banquo will found a line of kings is a clear nod to James' family's claim to have descended from the historical Banquo. King James believed in the Divine Right of Kings: the belief that God had chosen him to rule on Earth.

Jacobean Society

Shakespeare
Shakespeare's dad was friends with one of the Gunpowder Plot conspirators; Shakespeare drank in the pub where the plot was hatched. He was very keen to show King James 1st that he was not part of the Gunpowder Plot.

The Great Chain of Being
The Great Chain of Being is the belief in a social hierarchy, planned by God, as follows: God – Angels – Demons – Humans – Beasts – Plants – Rocks. The Great Chain of Being was seen as the natural order of society. Macbeth breaks this natural order when he kills Duncan.

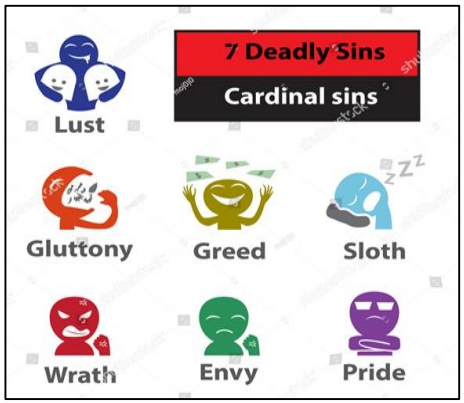
The Supernatural
King James was terrified of witches in real life. He felt they had tried to kill him and his family and was a key part of witch hunts and trials, as it was against the law to be a witch. He later published *Daemonologie* in 1597. Charges of witchcraft continued in Great Britain, with Scotland in particular experiencing a number of witch hunt crazes throughout the 17th century.

Gender
Women were expected to be subservient, quiet and homebound, with their primary ambitions entirely confined to marriage, childbirth and homemaking; social status and economic class played into what degree these expectations manifested. Women during this time could also not perform on stage.

The Gunpowder Plot
In 1604, English Catholics attempted to assassinate King James in the famous Gunpowder Plot. The play is a piece of political propaganda, warning English audiences that regicide leads to eternal damnation.

Characters

- Macbeth
- Lady Macbeth
- Duncan
- Malcom
- Donalbain
- Banquo
- Macduff
- Lady Macduff
- Fleance
- Three witches



Section C: Subject Specific

The play 'Macbeth' is a tragedy that tells the story of a soldier whose overriding ambition and thirst for power cause him to abandon his morals and bring about the near destruction of the kingdom he seeks to rule. Shakespeare wrote the play during the reign of James I, in 1606, and acts as a political propaganda that warns about the dangers of trying to overthrow a king.

Plot Summary

Three witches tell the Scottish general Macbeth that he will be King of Scotland. Encouraged by his wife, Macbeth kills the king, becomes the new king, and kills more people out of paranoia. Civil war erupts to overthrow Macbeth, resulting in more death.

Concepts seen before: Soliloquy, Dramatic Irony, The Great Chain of Being, Kingship, Elizabethan context, Tragedy, Tragic Hero, Symbolism

Week Beginning	TASKS **Year 10 – English – Shakespeare – Spring 1**
8/1/24	**TASK:** Create a fact file on William Shakespeare that retrieves your knowledge of the famous writer from KS2 & KS3. Include your knowledge of his plays studied so far: A Midsummer Night's Dream, Romeo & Juliet and Richard III. Include any knowledge you have of this period.
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12/2/24	**TASK:** Answer the first three 'Big Questions' in as much detail as possible. Create a fact file for James I including his interest in the supernatural.

10 (F) – Mathematics – Geometry – Spring 1

Section A: Key vocabulary

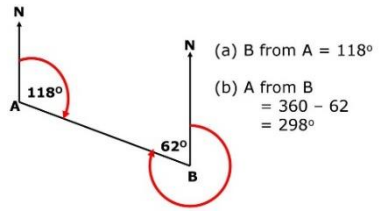
Tier 3 Vocabulary	Definition
Cardinal direction (n)	The directions of north, south, east, west.
Parallel (adj)	Straight lines always the same distance apart and never touch. They have the same gradient.
Perpendicular (adj)	Where two lines meet at 90°
Circumference (n)	The length around the outside of the circle –the perimeter.
Tier 2 Vocabulary	**Definition**
Angle (n)	The amount of turn between two lines around their common point.
Bearing (n)	The angle in degrees measured clockwise from North.
Scale (n)	The ratio of the length of a drawing to the length of the real thing.
Area (n)	The size of the 2D surface.
Direction (n)	The line our course something is going.
Magnitude (n)	The magnitude of a vector is its length.
Scalar (n)	A single number used to represent the multiplier when working with vectors.
Resultant (n)	The vector that is the sum of two or more other vectors

Section B: Key Concepts/Ideas/Questions

Understand and Represent Bearings

A bearing is always measured **clockwise** from North.
It is always given as three figures.

Example 1: Find the bearing of;
(a) B from A (b) A from B



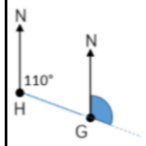
(a) B from A = 118°

(b) A from B
= 360 – 62
= 298°

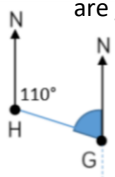
The sentence . . . "Bearing of ___ from ___" is really important in identifying the bearing being represented.

Bearings with Angle Rules

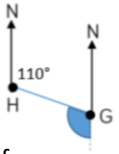
Because two North lines are **parallel** . . .



They form **corresponding** angels and therefore, are the same size.



They form **co-interior** angles and add up to 180°



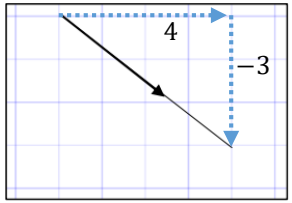
They form **alternate** angels and therefore, are the same size.

Understand and Represent Vectors

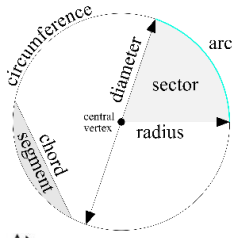
Column vectors have been seen in translations to describe the movement of one image

Movement along the x-axis → $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$

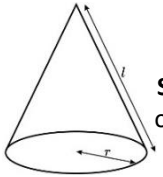
Movement along the y-axis



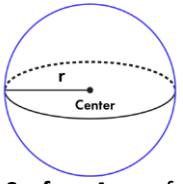
Section C: Subject Specific



Formula to remember
Area of a circle $= \pi r^2$
Circumference of a circle $= \pi d$ *or* $2\pi r$



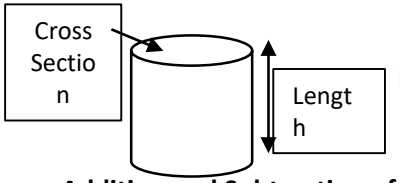
Curved **Surface Area** of a Cone $= \pi r l$



Surface Area of a Sphere $= 4\pi r^2$

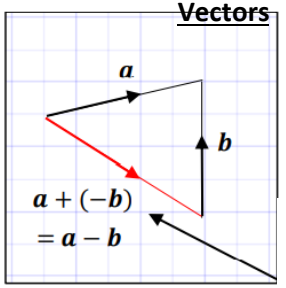
The **volume** of a cone is one third of the volume of a cylinder with the same height and diameter.

Volume of a Sphere $= \frac{4}{3}\pi r^3$



Volume of a prism = area of cross section × length

Addition and Subtraction of Vectors

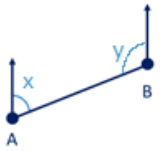
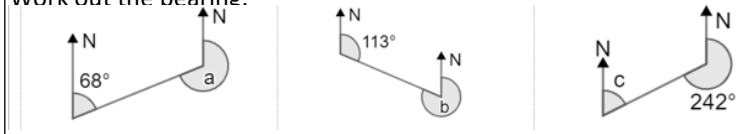
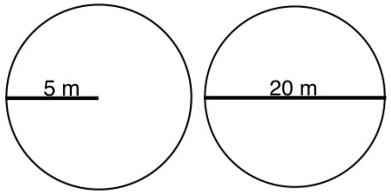
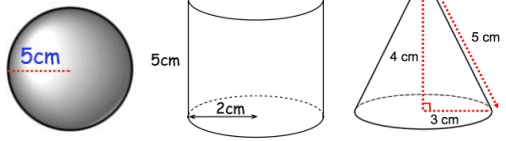


$a = \begin{pmatrix} 5 \\ 1 \end{pmatrix}$ $b = \begin{pmatrix} 0 \\ 4 \end{pmatrix}$

$a + (-b) = \begin{pmatrix} 5 + (-0) \\ 1 + (-4) \end{pmatrix}$
$= \begin{pmatrix} 5 \\ -3 \end{pmatrix}$

The resultant is $a - b$ because the vector is in the opposite direction to b which needs a scalar of -1.

Concepts seen before: Cardinal directions, angle rules, scale drawings, parts of a circle, area of a circle, circumference of a circle, translations

Week Beginning	TASKS Year: 10 F Subject: Mathematics Topic: Geometry Term: Spring 1	
08/01/2024	Read, cover, write and check. Accurately copy the words you are learning. Then read the definitions, cover them up, write down what you can remember and then check what you have written. **Cardinal direction, parallel, perpendicular, bearing, direction and angle.** CH: Draw a picture or example to go with your definitions.	Read the section on bearings. Use it to complete this sentence. *A bearing is written as t___ figures and is an angle measured from N_____ in a c_____ direction.* Copy it out 10 times.
15/01/2024	Make five different copies of this diagrams with valid values of x and y. Explain the connection between x and y. 	Work out the bearing. 
22/01/2024	Write down the formulae for the area and circumference of circle. State the radius, diameter, circumference and area of the following circles. 	Find the area and circumference of the following circles. a. Radius = 3cm, b. Radius = 4cm c. Radius = 5cm, d. Diameter = 12cm e. Diameter = 14cm, f. Diameter = 15cm.
29/01/2024	Find the volume and surface areas of the following solids. 	Draw an example of each of the following and find the surface area and volume. a. Triangular prism, cuboid, cylinder, sphere, and cone. Note: a triangular prism and a cuboid are examples of prisms.
05/02/2024	Read, cover, write and check. Accurately copy the words you are learning. Then read the definitions, cover them up, write down what you can remember and then check what you have written. **Circumference, scale, direction, magnitude, scalar, and resultant.** CH: Draw a picture or example to go with your definitions.	Sketch the following vectors and describe them in words. $\mathbf{a} = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$ $\mathbf{b} = \begin{pmatrix} 1 \\ -5 \end{pmatrix}$
12/02/2024	Work out the following: Example $\begin{pmatrix} 7 \\ 9 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix} = \begin{pmatrix} 9 \\ 12 \end{pmatrix}$ a. $\begin{pmatrix} 3 \\ 5 \end{pmatrix} + \begin{pmatrix} 2 \\ 3 \end{pmatrix}$ b. $\begin{pmatrix} 4 \\ 2 \end{pmatrix} + \begin{pmatrix} -2 \\ 3 \end{pmatrix}$ c. $\begin{pmatrix} -5 \\ 8 \end{pmatrix} + \begin{pmatrix} -2 \\ -7 \end{pmatrix}$	Find the resultant vector a) $\boldsymbol{c} + \boldsymbol{d}$ b) $\boldsymbol{d} - \boldsymbol{c}$ c) $4\boldsymbol{c}$ d) $2\boldsymbol{c} + \boldsymbol{d}$ $\mathbf{c} = \begin{pmatrix} -7 \\ 3 \end{pmatrix}$ $\mathbf{d} = \begin{pmatrix} 4 \\ 8 \end{pmatrix}$

Year 10 – Maths Higher – Geometry – Spring 1

Section A: Key vocabulary

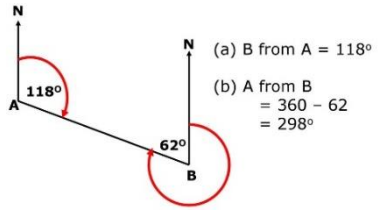
Tier 3 Vocabulary	Definition
Tangent (n)	A straight line touching the curve at a single point
Chord (n)	A straight line joining two points on the circumference of a circle
Arc (n)	A piece of the circumference
Sector (n)	A slice of a circle, the outside lines are two radii and an arc
Cardinal Direction (n)	The directions North, South, East, West
Bearing (n)	The angle in degrees measures clockwise from north
Magnitude (n)	The magnitude of a vector is its length
Tier 2 Vocabulary	**Definition**
Intersection (n)	The place where two or more objects meet.
Surface (n)	The outside faces or layers of a 3D (three dimensional) shape
Prism (n)	A 3D shape with a congruent polygon cross section throughout its length
Sphere (n)	A round 3D shape with one face
Sketch (n)	A rough drawing representing the key features
Construct (n)	To accurately draw using a compass, protractor and a ruler
Scale (n)	The ratio of the length of a drawing to the length in real life

Section B: Key Concepts/Ideas/Questions

Understand and Represent Bearings

A bearing is always measured **clockwise** from North.
It is always given as three figures.

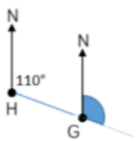
Example 1: Find the bearing of;
(a) B from A (b) A from B



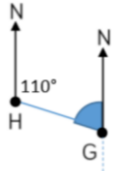
The sentence . . . "Bearing of ___ from ___" is really important in identifying the bearing being represented.

Bearings with Angle Rules

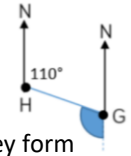
Because two North lines are **parallel** . . .



They form **corresponding** angels and therefore, are the same size.



They form **co-interior** angles and add up to 180°



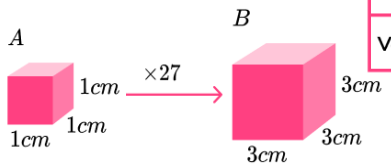
They form **alternate** angels and therefore, are the same size.

Addition and Subtraction of Vectors

$a = \begin{pmatrix}5\\1\end{pmatrix}$ $b = \begin{pmatrix}-0\\4\end{pmatrix}$ $a + (-b) = \begin{pmatrix}5+(-0)\\1+(-4)\end{pmatrix} = \begin{pmatrix}5\\-3\end{pmatrix}$

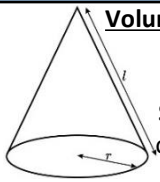
Area and Volume Scale Factor

	A	B	Scale factor
Length	1	3	**3**
Area	1	9	**3^2**
Volume	1	27	**3^3**

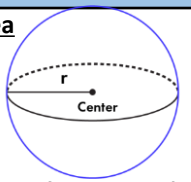


Section C: Subject Specific

Volume and Surface Area



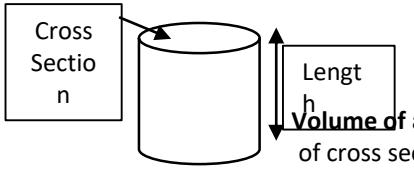
Curved **Surface Area** of a Cone $= \pi rl$



Surface Area of a Sphere $= 4\pi r^2$

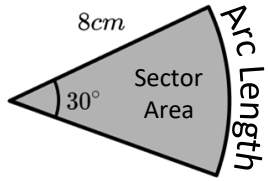
The **volume** of a cone is one third of the volume of a cylinder with the same height and diameter.

Volume of a Sphere $= \frac{4}{3}\pi r^3$



Volume of a prism = area of cross section × length

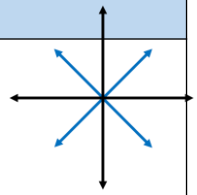
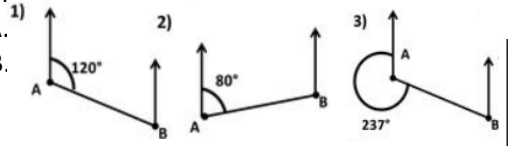
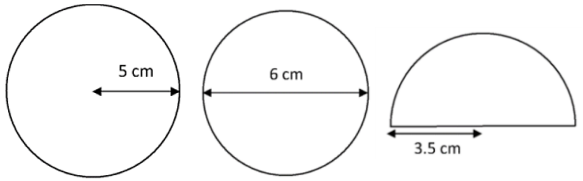
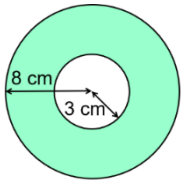
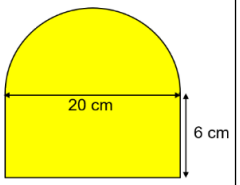
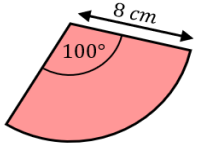
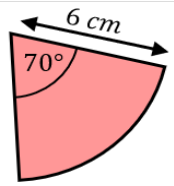
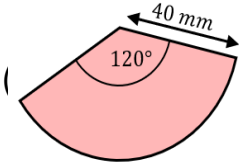
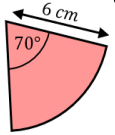
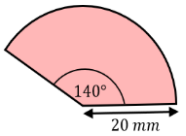
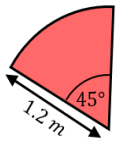
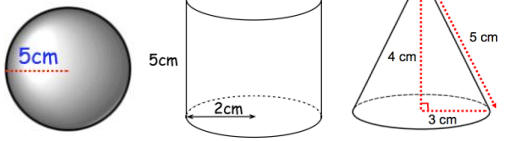
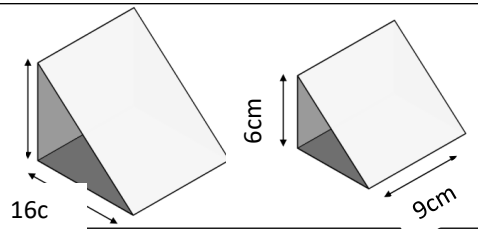
Arc Length and Sector Area



To find **sector area**, we use the area of the full circle and then find the proportion that we need.
In the example, we would find the full circle using the following: $8^2\pi = 64\pi$
$(A = \pi \times radius^2)$
We then find the fraction we want. We want 30 degrees out of the total 360 degrees $\frac{30}{360}$.
So to find this proportion, we multiply the 64π by $\frac{30}{360}$.
$\frac{30}{360} \times 64\pi = 16.76cm^2$ **(2dp).**

Arc length is the same but with the circumference.
The circumference would be 16π
$(C = \pi \times$diameter$)$.
Then find the proportion of the circumference you actually want, $\frac{30}{360}$.
$\frac{30}{360} \times 16\pi = 4.19cm$ (2dp).

Concepts seen before: Cardinal directions, angle rules, scale drawings, parts of a circle, area of a circle, circumference of a circle, translations.

Week Beginning	TASKS Year: 10 Subject: Maths Higher Topic: Geometry Term: Spring 1	
08/01/2024	Give these directions of travel as three figure bearings (a) North (b) East (c) South-east (d) South-west (e) West (f) South (g) North-east (h) North-west	Copy the diagram and complete with all the compass directions and the three figure bearing fore each direction. 
15/01/2024	For each questions below find: a. The bearing of B from A. b. The bearing of A from B. 	Draw out the following problem. You will need to use Pythagoras' Theorem when trying to find the distance. $a^2 + b^2 = c^2$. A town J is 20km from a lorry station, K on a bearing 065°. Another town, T is 8km from K on a bearing of 155°.Calculate to the nearest kilometer, the distance of T from J.
22/01/2024	Find the area and circumference/ perimeter of each of the following shapes, remember your units. 	Find the areas of these shapes, leaving your answer in terms of π. (a)  (b) 
29/01/2024	Find the area. (a)  (b  (	Find the arc length (a)  (b  (c) 
05/02/2024	Find the volume and surface areas of the following solids. 	Two mathematically similar wooden door wedges are shown. Find the volume of the smaller door wedge. 
12/02/2024	Work out the following: Example $\begin{pmatrix}7\\9\end{pmatrix}+\begin{pmatrix}2\\3\end{pmatrix}=\begin{pmatrix}9\\12\end{pmatrix}$ a. $\begin{pmatrix}3\\5\end{pmatrix}+\begin{pmatrix}2\\3\end{pmatrix}$ b. $\begin{pmatrix}4\\2\end{pmatrix}+\begin{pmatrix}-2\\3\end{pmatrix}$ c. $\begin{pmatrix}-5\\8\end{pmatrix}+\begin{pmatrix}-2\\-7\end{pmatrix}$	$\boldsymbol{a}=\begin{pmatrix}8\\0\end{pmatrix}$ $\boldsymbol{b}=\begin{pmatrix}-2\\-5\end{pmatrix}$ $\boldsymbol{c}=\begin{pmatrix}\\7\end{pmatrix}$ Find (i) $\boldsymbol{a}+\boldsymbol{b}+\boldsymbol{c}$ (ii) $\boldsymbol{a}+\boldsymbol{b}-\boldsymbol{c}$ (iii) $\boldsymbol{a}-\boldsymbol{b}-\boldsymbol{c}$ (iv) $4\boldsymbol{c}$ (v) $2\boldsymbol{b}-\boldsymbol{a}$

Combined Science - Energy Changes and Electrolysis

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Anion (n)	Negatively charged ion.
Anode (n)	Positive electrode.
Cathode (n)	Negative electrode.
Cation (n)	Positively charged ion.
Oxidation (n)	Adding oxygen to an element. Also, the loss of electrons.
Reduction (n)	Removing oxygen from a compound. Also, the gain of electrons.
Activation energy (n)	Minimum amount of energy needed for a reaction to happen
Endothermic (n)	Reaction that takes in energy from the surroundings
Exothermic (n)	Reaction that gives out energy to the surroundings

Tier 2 Vocabulary	Definition
Inert (a)	Unreactive.
Final (a)	At the end
Initial (a)	At the beginning.
Insulate (v)	Keep the heat in.

Section B: Energy Changes

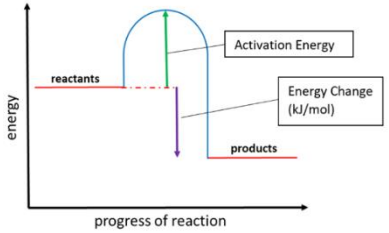
Some chemical reactions **release energy** into their surroundings – these are called **exothermic reactions.**

Examples of exothermic reactions include **burning.**

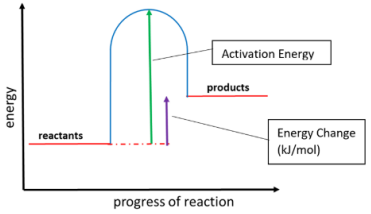
Some chemical reactions **take in energy** from their surroundings – these are called **endothermic reactions.**

Examples of endothermic reactions include **cool packs for sports injuries.**

The **reaction profile** for an **exothermic reaction** has the energy level of the **products below** the energy level of the **reactants.**



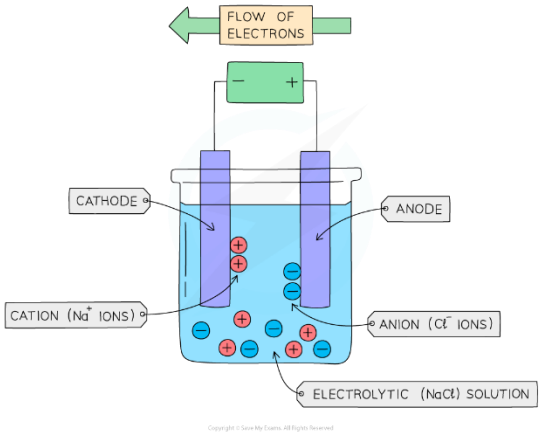
Endothermic reaction profiles are the opposite.



Section C: Electrolysis

Electrolysis is using electricity to separate chemical compounds into elements.

The chemical compound being separated must be either **molten** (liquid) or **aqueous** (dissolved in water).



In the molten or aqueous compound there are **ions** that can move and conduct electricity.

- The **positive ion** is called the **cation** (it's PAWSitive)
- The **negative ion** is called the **anion**.

Metal or graphite rods called **electrodes** attract the ions to them.

- The **positive anode** attracts **negative anions**, which **lose electrons**.
- The **negative cathode** attracts **positive cations**, which **gain electrons**.

Previously seen concepts:
Energy
Electricity

Week Beginning	TASKS Year: 10 Subject: Science Term: Spring 1
8/1/24 - Wednesday	**Energy Changes:** Sketch a diagram which explain an endothermic and exothermic reaction. Add some examples (Section B)
8/1/24 - Friday	**Energy Changes:** Create flash cards to learn 6 words from the key vocabulary (section A) for the Energy changes topic Write the key word on one side and the definition on the opposite side. Test yourself until you know the definition of each word by memory. (Section A)
14/1/24 – Wednesday	**Energy changes:** Describe and explain the difference between the reaction profile for an exothermic reaction and an endothermic reaction. (Section B)
14/1/24 – Friday	**Energy Changes:** Write a set of practical instructions for someone to follow if they were trying to investigate if substances were exothermic or endothermic, include a table of results that they could use. (Section B)
22/1/24 – Wednesday	**Energy Changes:** Draw a reaction profile graph for an exothermic reaction. Add labels and link to an example (Section B)
22/1/24 – Friday	**Energy Changes:** Draw a reaction profile graph for an endothermic reaction. Add labels and link to an example (Section B)
29/1/24 – Wednesday	**Chemical Changes:** Create flash cards to learn 6 words from the key vocabulary (section A) for the Electrolysis topic Write the key word on one side and the definition on the opposite side. Test yourself until you know the definition of each word by memory. (Section A)
29/1/24 – Friday	**Chemical Changes:** Explain why different metals need different methods of extraction. (Section C)
5/2/24 – Wednesday	**Chemical Changes:** Using the key words describe what is happening during electrolysis. (Section C)
5/2/24 – Friday	**Chemical Changes:** Write a reactivity series from most reactive to least reactive (Section C)
12/2/24 - Wednesday	**Chemical Changes**: 1.Name the three products made when you electrolyse sodium chloride solution. Describe the positive testes for the gases named 2. You can also electrolyse molten sodium chloride. Compare the products formed with those from the electrolysis of sodium chloride solution. Explain the differences. (Section C)
12/2/24 -Friday	**Chemical Changes:** Write a set of practical instructions for the Electrolysis required practical. Include a sketch of labelled equipment (Section C)

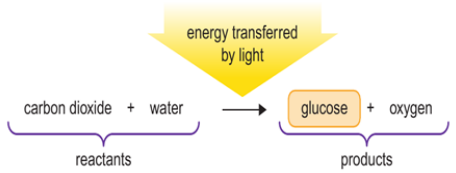
Year 10 – Science - B4: Bioenergetics – Spring Term 1

Section A: Key Vocabulary

Tier 3	Definition
Aerobic respiration (n)	An exothermic reaction in which glucose is broken down using oxygen to produce carbon dioxide and water and release energy for the cells.
Anaerobic respiration (n)	An exothermic reaction in which glucose is broken down in the absence of oxygen to produce lactic acid in animals and ethanol and carbon dioxide in plants and yeast. A small amount of energy is transferred for the cells
Chlorophyll (n)	The green pigment contained in the chloroplasts
Chloroplasts (n)	The organelles in which photosynthesis takes place.
Metabolism (n)	The sum of all the reactions taking place in a cell or the body of an organism.
Mitochondria (n)	The site of aerobic cellular respiration in a cell.
Photosynthesis (n)	The process by which plants make food using carbon dioxide, water, and light.
Endothermic (a)	A reaction that requires a transfer of energy from the environment
Tier 2	**Definition**
Limiting factors (n)	Limit the rate of a reaction.
Oxygen debt (n)	The extra oxygen that must be taken into the body after exercise has stopped to complete the aerobic respiration of lactic acid

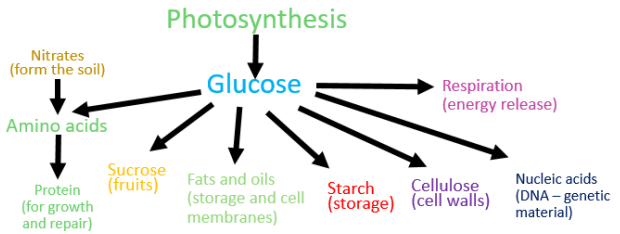
Section B: Important Ideas / Concepts / Questions

Photosynthesis



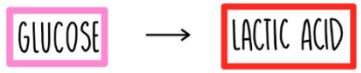
B a summary of photosynthesis

Uses of Glucose

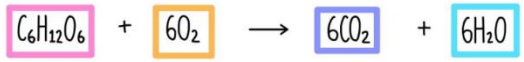


Respiration

Aerobic respiration:



Anaerobic respiration:



Section C: Subject Specific

Factors that affect photosynthesis

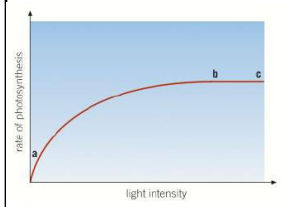


Figure 1 *Investigating the effect of light intensity on the rate of photosynthesis*

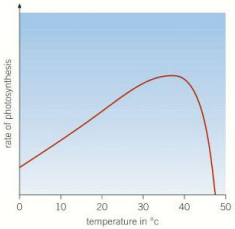


Figure 2 *The effect of increasing temperature on the rate of photosynthesis*

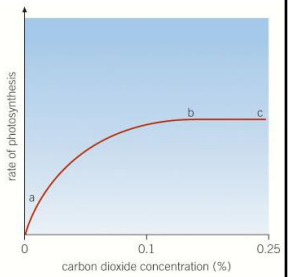
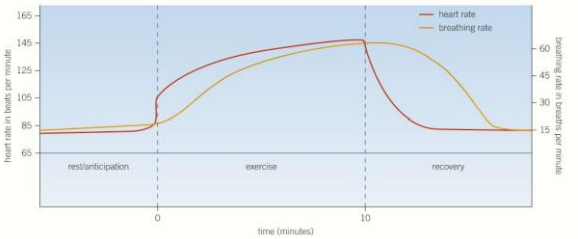


Figure 3 *The effect of increasing carbon dioxide concentration on the rate of photosynthesis*

The changes measured in the heart and breathing rate before, during and after a period of exercise



Concepts you have seen before:
Cells, tissues, organs and systems
Breathing and respiration
Plant growth

Year 10 – Science - C3: Quantitative Chemistry – Spring Term 1

Section A: Key Vocabulary

Tier 3	Definition
Avogadro's constant (n.)	The number of atoms, molecules, or ions in 1 mole of any substance (6.02×10^{23}).
Concentration (n.)	The mass of a substance dissolved in a given volume of liquid.
Limiting reactant (n.)	The reactant that gets used up first in a chemical reaction.
Relative atomic mass A_r (n.)	The average mass of the atoms of an element compared with carbon-12 (which is given a mass of exactly 12).
Relative formula mass M_r (n.)	The total of the relative atomic masses, added up in the ratio shown in the chemical formula of a substance.

Tier 2	Definition
Deduce (v.)	Arrive at (a fact or conclusion) by reasoning
Conservation (n.)	Preserve or keep a resource or quantity the same
Calculate (v.)	Determine or work out the quantity of something mathematically
Amount (n.)	The quantity of something, especially the total of something in number or value

Section B: Important Ideas / Concepts / Questions

Calculating relative formula mass (M_r)

1. Using the molecular formula, work out how many atoms of each element are present in the molecule.
   e.g. Na_2CO_3 = 2 x Na atoms, 1 x C atom and 3 x O atoms
2. Find the relative atomic mass (A_r) of each element using the periodic table ***e.g. Na = 23, C = 12, O = 16***
3. Add together the relative atomic masses of all the atoms in the formula
   e.g. Na_2CO_3 = (2 x 23) + 12 + (3 x 16) = 106

Calculating concentrations

$$\text{concentration (g/dm}^3) = \frac{\text{mass (g)}}{\text{volume (cm}^3)} \text{ x } 1000$$

e.g. Calculating the concentration of 50 g of sodium hydroxide (NaOH) dissolved in 200 cm^3 of water
(50/ 200) x 1000 = 0.25 x 1000 = 250 g/dm^3

Calculating Moles (Higher only)

Moles = mass ÷ M_r (or A_r for atoms)

e.g. for 212g of Na_2CO_3 , 212 g ÷ 106 = 2 moles

The equation can be rearranged to give mass
mass = moles x M_r

e.g. for 5 moles of Na_2CO_3 , 5 x 106 = 530g

Section C: Combining Concepts

Using symbol equations to calculate reacting masses (higher only)

A solution contains 100g of sodium hydroxide. Calculate the mass of sodium sulfate produced in the following reaction:

$2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O$

1. Moles of NaOH can be calculated using its mass (100g) and M_r (40)
   100 g ÷ 40 = 2.5 moles

2. From the symbol equation, we can see 2 moles of NaOH make 1 mole of Na_2SO_4
   (a molar ratio of 2:1)

Using the molar ratio, 2.5 moles of NaOH would make 1.25 moles of Na_2SO_4

3. The moles of Na_2SO_4 can finally be multiplied by its M_r to give the mass.
   1.25 moles x 142 = 117.5 g

These steps are summarised in the table below by following the order of the arrow

Substance	NaOH	Na_2SO_4
Mass	100g	**177.5g** =
M_r	40	142 **x**
Moles	2.5	2.5 ÷ 2 = 1.25
Molar ratio	2 **÷2**	1

Concepts you have seen before:
Periodic table and reactivity
Materials

P6 Waves

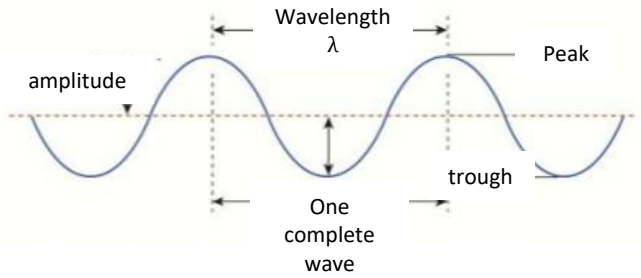
Section A: Key Vocabulary

Tier 3	Definition
Seismic waves	Shock waves that travel through the Earth and across its surface as a result of an earthquake
Longitudinal waves	Waves in which the vibrations are parallel to the direction of energy transfer
Amplitude	The height of a wave crest or trough of a transverse wave from the rest position.
Reflection	The change of direction of a light ray or wave at a boundary when the ray or wave stays in the incident medium
Refraction	The change of direction of a light ray when it passes across a boundary between two transparent substances
Transverse wave	wave where the vibration is perpendicular to the direction of energy transfer
Frequency	The number of wave crests passing a fixed point every second
Wavelength	The distance from one wave crest to the next.
Tier 2	**Definition**
Normal	Straight line through a surface or boundary perpendicular to the surface or boundary

Concepts you have seen before:
Sound waves
Reflection

Section B: Important Ideas / Concepts / Questions

Transverse waves

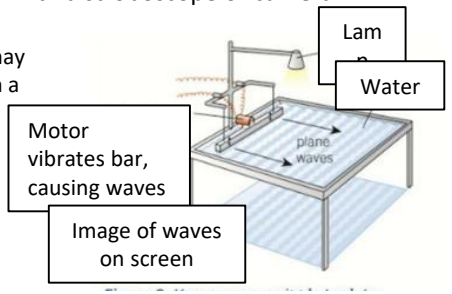


$wave\ speed, v = frequency, f\ x\ wavelength\ \lambda$
(metres per second, m/s) (hertz, Hz) (metres, m)

Ripple tank

You can measure wavelength with a ruler in the tank but you need to freeze them with a stroboscope or camera.

Frequency can be counted but you may need to film it with a timer and slow it down.
Use: V = fλ



Using a ripple tank to measure the velocity of waves

Section C: Diagrams

Reflection and refraction

Figure 1 Reflection of plane waves

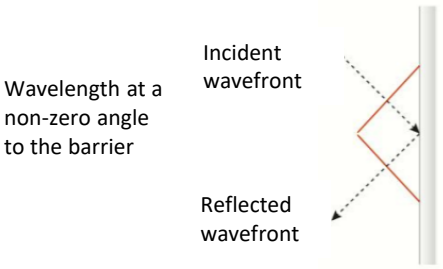
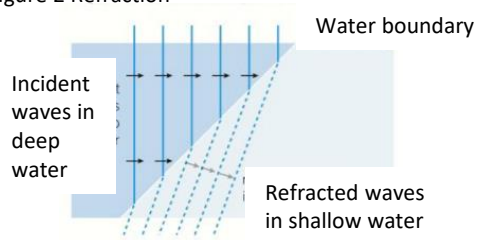
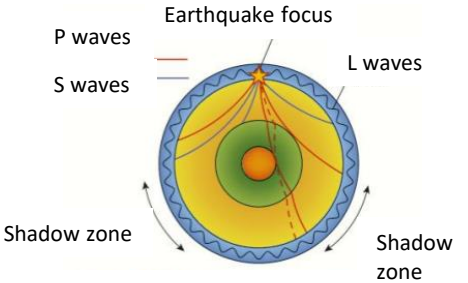


Figure 2 Refraction



Seismic waves



Refraction of seismic waves

Week Beginning	TASKS Year: 10 Subject: Science Term: Spring 1
8/1/24 - Wednesday	Triple Biology: Make flash cards to learn ten words from the key vocabulary for the Bioenergetics topic. Write the key word on one side and the definition on the opposite side. Test yourself until you know the definition of each word by memory. Stick theses in your knowledge organiser book so they can be reused for revision.
8/1/24 - Friday	Triple Chemistry: Follow the method used to calculate the relative formula mass of Na_2CO_3. Then use that same method to calculate the relative formula mass of $MgCl_2$ and $H2SO_4$
14/1/24 – Wednesday	Triple Physics: Create a set of flash cards for the Waves Tier 3 vocabulary that have the word on one side and a diagram, with words, to show your understanding of the term on the reverse.
14/1/24 – Friday	Triple Biology: Photosynthesis can be affected by different factors, Describe an experiment including the equipment needed to investigate the effect of light of photosynthesis.
22/1/24 – Wednesday	Triple Chemistry: Follow the method used to calculate the number of moles in 212 g of Na_2CO_3. Then use that same method to calculate the number of moles in 50 g of $MgCl_2$ and 3.2 g of K_2O.
22/1/24 – Friday	Triple Physics: Use the equation Section B to calculate a) the wave speed of a sound wave in wood with a frequency of 50 Hz and wavelength of 80 m. b) the wavelength of a water wave moving at 0.021 m/s and at a frequency of 1.4 Hz. c) the frequency of a wave that travels at 6100 m/s and has a wavelength of 0.5 m d) CH – the frequency of a radio wave that travels at 3×10^8 m/s from Earth to the ISS with a wavelength of 1.5×10^{-2} m.

Week Beginning	TASKS Year: 10 Subject: Science Term: Spring 1
29/1/24 – Wednesday	Triple Biology: Using the graph showing the changes measured in the heart and breathing rate before, during an dafter a period of exercise, describe the effect of exercise on the heart rate and breathing rate of a fit person. Describe how you think the graph would differ if it was for an unfit person.
29/1/24 – Friday	Triple Chemistry: Follow the method used to calculate the concentration of a solution with 50 g of NaOH in 200 cm^3 of water. Then use that same method to calculate the concentration of solution with 75 g of NaOH in 200 cm^3 of water, and a solution with 50 g of NaOH in 500 cm^3 of water. Describe what happens to concentration when you increase the mass of solute. Describe what happens to concentration when you increase the volume of water.
5/2/24 – Wednesday	Triple Physics: Describe a method that could be used to determine the speed of waves in a solid and on the surface of water. You should include the names of apparatus that will be used and the measurements that will be taken.
5/2/24 – Friday	Triple Biology: Compare and contrast aerobic and anaerobic respiration.
12/2/24 -Wednesday	Triple Chemistry: Follow the method used to calculate the mass of sodium sulfate produced from the reaction of 100 g of sodium hydroxide. Then use that same method to calculate the mass of sodium sulfate produced if 80 g of sodium hydroxide was reacted instead. Use the same method to calculate the mass of sodium hydroxide required to produce 200 g of sodium sulfate.
12/2/24 -Friday	Triple Physics: Create a short story board to illustrate how sound waves can be used to detect hidden structures such as archaeological dig sites or the bottom of deep oceans.

Notes Page

Year 10 – Religious Studies– Marriage and the Family (Christianity) – Spring 1

Section A: Key vocabulary	
Tier 2 Vocabulary	**Definition**
Love (n/v)	An intense feeling of deep affection.
Relationship (n)	The way in which two or more people or things are connected.
Family (n)	A group of one or more parents and their children living together as a unit.
Monogamy (n)	Staying faithful and having sex with one person only.
Consensual (a)	An agreement between people.
Tier 3 Vocabulary	**Definition**
Cohabitation (n)	Living in a sexual relationship with someone without being married.
Vows (n)	Promises made between the couple getting married with God as a witness.
Adultery (n)	When someone who is married has a sexual relationship with someone to whom they are not married.
Procreation (n)	The reason for sex is to have children.
Annulment (n)	Stating that a marriage no longer exists.

Section B: Key Concepts/Ideas/Questions

What do Christians believe about marriage?

- It is a part of God's plan for creation: "That is why a man leaves his father and mother, and is united with his wife and they become one flesh." (Genesis 2:24)
- It is life-long: "Till death us do part." (Marriage vows)
- It provides a support for husband and wife: "For better, for worse…"

What do Humanists believe about marriage?

- Humanists believe that you don't have to be married before you live with someone or have children, "Marriage is not an essential feature of a good relationship."

What do different denominations (types) of Christian believe about divorce?

- Roman Catholics believe that divorce is wrong because:
- - Marriage is a sacrament, once God has given his blessing, He cannot take it away;
- - It goes against Jesus' teaching: "What God has joined together let no man separate." (Matthew 19:6)
- - People took vows, "For better, for worse" – they should try to sort out their problems, not just end the marriage because the marriage is not working out smoothly;
- Protestants believe that whilst divorce is not desirable, Jesus preached forgiveness.

Concepts seen before:
Y7 Christian beliefs – ethics/living

Section C: Subject Specific

All Christians believe that adultery is wrong as it breaks the wedding vows to be faithful to each other, as it says in the Ten Commandments: "You shall not commit adultery."
Many Christians (Roman Catholics and Evangelicals)
believe that sex should only happen within marriage, therefore sex before marriage is also wrong, "flee from sexual immorality…" (1 Corinthians 6:18)

What is the purpose of sex according to Christianity?

- To create children – this should be within marriage.
- To strengthen the love between a man and a woman, who have made a lifelong commitment to one another.

What do Humanists believe about sexual relationships?

Humanists do not disagree with sex before marriage BUT premarital sex is only acceptable within certain limits:

- A sexual partner should be single or at least separated from a previous partner – cheating on someone is wrong.

What about same sex relationships?

- The Roman Catholic Church encourage people who are attracted to the same sex to remain within the Church, but not to have any active sexual relationships.
- 'You shall not lie with a male as with a woman." (Leviticus 18:22)

Week Beginning	TASKS **Year 10 – Religious Studies– Marriage and the Family (Christianity) – Spring 1**
08/01/2024	Learn the **Tier 2** and **Tier 3 vocabulary**. Use the 'look, cover, write check' method to help you.
22/01/2024	1. Describe differences between **Christian** and **Humanist** beliefs about marriage. 2. What is your opinion about marriage, does your opinion align with one of these beliefs?
05/02/2024	Christians often refer to the quote '**For better, for worse'** in reference to marriage. 1. Describe what you understand by this 2. Explain why **Roman Catholics** use this as a reference point for stating that divorce is wrong

Year 10 – History– Rise of Nazi Germany – Spring 1

Section 1: Key Vocabulary	
Tier 3	**Definition**
Wall Street Crash (n)	The American banking system collapsed causing an international economic catastrophe.
Gestapo (n)	Part of the SS and Nazi Germany's secret police force.
Enabling Act (n)	Allowed the Nazis to make their own laws without consulting the Reichstag.
Der Fuhrer (n)	Supreme leader, the title adopted by Adolf Hitler.
Concentration Camp (n)	Camps in which people were held under harsh conditions and without the freedoms of the rest of society.
Tier 2	**Definition**
Radical (n)	Very different or extreme idea or approach.
Propaganda (n)	Systematic spreading of ideas and information to influence people's thinking and actions.
Cabinet (n)	A committee of senior politicians responsible for controlling government policy.
Coalition (n)	When two or more political parties combine to gain a majority.
Dictator (n)	Ruler with total control over a country.
Proportional Representation (n)	The percentage of votes is the same as the percentage of representation in parliament.

Section 2: Important Ideas

Who voted for the Nazi Party?

Farmers: People bought less food which forced farmers to lower prices. Nazis promised higher prices for crops.

Women: Nazis supported family life, good morals and self-discipline. Some women agreed with Hitler when he said, 'our youth have been exposed to a flood of muck and filth…'. The Nazis promised to look after the youth.

Middle Class: Small business owners, banks, doctors voted in large numbers. Nazis promised to increase wages and instil law and order.

Soldiers and young: Hitler was a soldier who fought in WWI. Young people wanted to be a part of the new future for Germany building new homes, joining the army and building motorways.

Upper classes and factory owners: Did not support all values of the Nazi Party. Hitler promised they could run factories, and commission new weapons and battleships.

Ideas/ key words you have seen before:
Trade Unions, autocracy, election, democracy, dictatorship, Reichstag, chancellor and president.

Section 3: Chronology	
1929	Wall Street Crash. Great Depression begins.
1930	Nazi Party seats increase from 12 to 107
July 1932	Nazi Party seats increase to 230.
July 1932	Chancellor Bruning resigns and replaced by Papen.
Jan 1933	Hitler appointed as Chancellor of Germany.
Feb 1933	Reichstag catches fire and is burnt down. Communist Ven der Lubbe was arrested.
March 1933	'Protection of the People and State' decree banned communists from taking part in elections. 4,000 communists arrested.
March 1933	Enabling Act passed
April 1933	The Gestapo are formed and the first concentration camp at Dachau is opened.
May 1933	All trade unions are banned..
July 1933	All other political parties are banned. Passed 'Law Against the Formation of New Parties' which stated that anyone trying to run a party would go to prison for three years.
June 1934	**Night of the Long Knives**. Hitler purges the party of all those who might overthrow him.
Aug 1934	President Hindenburg dies, Hitler becomes Der Fuhrer.

Week Beginning	TASKS Year 10— History —Democracy to Dictatorship: Germany and Growth of Democracy—Spring 1
Option A and B 08/01/2024 Option C 15/01/2024	**Key Words Summary** **1) Write out** the following key words in your knowledge book: **Wall Street Crash, Gestapo, Enabling Act, Der Fuhrer, Concentration Camp, Radical, Propaganda and Cabinet**. 2) Now **write a summary** of each definition alongside each word. Your summary definition must be no more than 3 words per key word. 3) Now **check your summary** definitions. Have you included words such as 'the, is, a, of'? If so, an you replace them with more meaningful key words
Option A and B 22/01/2024 Option C 29/01/2024	**Timeline** 1) **Draw a table** for 'Look, Cover, Write, Check and Correct' as on your 'How do I self-quiz?' page. 2) In the 'Look, Cover' column, **write out** the dates from the timeline for Germany and the Growth of Democracy. 3) **Write out, from memory**, what you think happened on those dates. Then check them against the timeline on the knowledge organiser. Put a 'tick' or a 'cross'. 4) If you got the answer wrong, **write in the correct answer** in the 'Correct' column.
Option A and B 05/02/2024 Option C 12/02/2024	**Mind map** 1. Write out "Who voted for the Nazi Party" in a bubble in the centre of your section. 2. Off of the main bubble, write out important categories to organise your ideas. E.g. Article 48 3. Then add your knowledge off of these branches. You might even be able to make connections between them.
Further tasks to develop your knowledge and understanding of this unit	1. Using the timeline starting from 'March 1933', **write a paragraph explaining how the Nazi Party was able to eliminate all opposition to their Party rule.**
Further tasks to develop your knowledge and understanding of this unit	1. **Explain how the Nazi Party's ideas were designed to appeal to different groups within society**. In your paragraph, focus on why these different groups would have responded positively do the Nazis propositions.

Year 10 – Geography– Tectonics – Spring 1

Section A: Key vocabulary

Tier 2	Definition
Tectonic hazards (n)	Caused by movement of the tectonic plates (volcanoes and earthquakes).
Earthquake (n)	A sudden or violent movement within the Earth's crust followed by a series of smaller shocks.
Volcanoes (n)	An opening in the Earth's crust from which lava, ash and gases erupt
Vulnerability (n)	A measure of someone's inability to cope with, or recover from, a disaster.
Capacity to cope (n)	The ability of people to manage adverse conditions, risk or disasters
Tier 3	**Definition**
Primary effects (n)	The initial impact of a natural hazard on people and property. Caused directly by the event.
Secondary effects (n)	The after-effects that occur as indirect impacts of natural events, sometimes on a longer timescale.
Immediate responses (n)	The reaction of people as the disaster happens and in the immediate aftermath
Long term responses (n)	Later reactions that occur in the weeks, months and years after the event
Hazard risk (n)	The probability or chance that a natural hazard may take place

Concepts seen before: Physical Geography
Y8 Tectonics
Y9 Threatened Places

Section B: Key Concepts/Ideas/Questions

Plate margins

Destructive margins:

- Composite volcanoes.
- Earthquakes.

1. Convection currents move two plates towards each other.
2. The oceanic plate is denser and so subducts under the less dense continental plate.
3. Due to friction, and heat in the mantle, the oceanic plate melts.
4. Pressure builds up. Magma is eventually released.
5. An explosive eruption forms a composite volcano

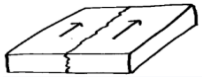
Constructive margins

- Shield volcanoes.
- Earthquakes.

1. Convection currents move two plates away from each other.
2. Magma from the mantle rises through the gap.
3. The lava is very runny so travels a long distance before cooling. Over many eruptions, a shield volcano is formed.

Conservative margins

Earthquakes.



1. Convection currents move the plates side by side.
2. Friction builds up causing tension.
3. Eventually the tension will be released as waves of energy which is an earthquake.

There are no volcanoes at this margin

Section C: Subject Specific

Managing Volcanic Eruptions

Warning signs:

- Small earthquakes are caused as magma rises up.
- Temperatures around the volcano rise as activity increases.
- When the volcano is close to erupting it releases gases.

Monitoring techniques:

- Seismometers are used to detect earthquakes.
- Thermal imaging and satellite can be used to detect heat around a volcano.
- Gas samples may be taken, and chemical sensors used to measure sulphur levels

Preparation:

- Creating an exclusion zone around the volcano.
- Having an emergency supply of basic materials such as food.
- Being ready and able to evacuate residents.
- Trained emergency services and a good communication system.

Earthquake Management

Predicting:

- Satellite surveying (tracks changes in the earth's surface)
- Radon gas sensor
- Seismometer and seismic records
- Water table level 9water levels fluctuate before an earthquake).

Protection

You can't stop earthquakes, so earthquake-prone regions follow these three methods to reduce potential damage:

- Building earthquake resistant buildings
- Raising public awareness
- Improving earthquake prediction

Week Beginning	TASKS Year: 10 Subject: Geography Topic: Tectonics Term: Spring 1
Option A and B 08/01/2024 Option C 15/01/2024	Learn the **Tier 2** and **Tier 3 vocabulary**. Use the 'look, cover, write check' method to help you.
Option A and B 22/01/2024 Option C 29/01/2024	1. Describe and explain the differences between **destructive**, **constructive** and **co**nservative plate margins 2. Compare the three margins, which is the most dangerous, explain your answer
Option A and B 05/02/2024 Option C 12/02/2024	1. Read how **warning signs**, **monitoring techniques** and **preparation** can help a country to prepare for a volcanic eruption 2. Rank the strategies from best to worst 3. Why is it difficult for Low Income Countries (poor countries) to be fully prepared for an eruption?
Further tasks to develop your knowledge and understanding of this unit	1. Read how **predicting** and **prevention** can help a country to prepare for an earthquake 2. Explain why is it easier for High Income Countries (rich countries) to be fully prepared for an earthquake?
Further tasks to develop your knowledge and understanding of this unit	1. Explain how each of the following methods **Monitoring**, **Prediction**, **Planning**, **Preparation** can reduce the impacts of a tectonic hazard

Year 10 – French – Spring Term 1 – Les fêtes

Tier 1: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Je prends mon petit déjeuner	I take / eat my breakfast
Je peux me détendre un peu	I can relax a bit
Je sors avec mes copains	I go out with my friends
J'ai mis un blouson bleu	I put on a blue blouse
Il était de marque	It was designer
Ma fête préférée est le 14 juillet	My favourite festival is the 14th July
D'habitude je le fête en famille	Usually, I celebrate with my family
Pour célébrer, ma mère va acheter des cadeaux	To celebrate, my mum is going to buy some presents
J'aime manger de la dinde	I like to eat turkey
D'abord on prepare la bûche de nöel	Firstly, we prepare the yule log
Ça sera savoureux	That will be tasty
Tier 2 Vocabulary	**Definition**
Near future tense	Using the verb "aller" followed by an infinitive to say what you are going to do
Partitive article	Saying "some". In French this follows verbs such as "manger" and "boire" and changes depending if the noun is masculine, feminine of plural.
Direct object pronoun	This replaces the noun in the phrase. E.g I like "it" – je l'aime

Tier 3 – Core text		
Les jours d'école je dois me lever tôt mais	1	**On school days** I have to get up early but
je ne prends jamais de petit-dejeuner.	2	**I never have** any breakfast.
Je quitte la maison à sept heures et demie.	3	I leave the house at half past seven.
Samedi dernier je suis allé au magasin de vêtements pour acheter **un nouveau pantalon.**	4	Last Saturday I went to the clothes shop to buy **some new trousers**.
J'ai essayé **un pantalon de marque**	5	I tried on **a pair of designer trousers**
mais il était trop petit.	6	but they were too small.
Finalement j'ai acheté un pantalon vert foncé qui était parfait.	7	Finally I bought a pair of dark green trousers which were perfect.
Ma fête préférée est Noël car	8	My favourite festival is Christmas because
j'adore décorer le sapin de Noël avec ma mère et	9	I love decorating the Christmas tree with my Mum and
je reçois toujours beaucoup de cadeaux.	10	**I always receive** lots of presents.
Cependant je n'aime pas le repas de Noël.	11	However, I don't like the Christmas dinner.
Pour célébrer mon prochain anniversaire ma soeur va préparer **un énorme gâteau au chocolat.**	12	To celebrate my next birthday my sister is going to make **an enormous chocolate cake.**
Moi, je vais aller au supermarché où	13	Me, I am going to go to the supermarket where
je vais acheter du poulet épicé.	14	I am going to buy spicy chicken.
On va le manger avec du riz.	15	**We are going to eat it** with rice.
Ce sera vraiment savoureux!	16	It will be really tasty!

Concepts seen before: near future tense. Reflexive verbs in routines. Adjectives with endings for m/f/pl. Partitive articles

Week Beginning	TASKS Year: 10 Subject: French Topic: les fetes Term: Spring 1
08/01/24	Look, cover, write and check the vocabulary in Tier 1 – from “Je prends mon petit déjeuner” up to “that will be tasty”. Show in your book that you have written them out and checked them in red pen.
22/01/24	Using the Tier three core text, re-write lines 1-8 making at least one change per line. You can use the vocabulary from “Tier 1” to do this or you can use vocabulary you have used in class / prior knowledge.
05/02/24	Using the Tier three core text, re-write lines 9-16 making at least one change per line. You can use the vocabulary from “Tier 1” to do this or you can use vocabulary you have used in class / prior knowledge.

Year 10 – German – Spring term 1 – Menschliche Beziehungen

Tier 1: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Sie hat Sommersprossen	she has freckles
Abenteuerlustig	Adventurous
Ich verstehe mich	I get on with
Er sieht gut aus	He looks good
darf nie eifersüchtig sein	never be jealous
ich musste zu Hause helfen	I had to help at home
ich konnte abends helfen	I could help in the evenings
die Braut und Bräutigam	the bride and groom
einladen	to invite
stattfinden	to take place
vorbereiten	to prepare
eine Zeitverschwendung	A waste of time
die Ehe ist mir wichtig	Marriage is important to me
mein Handy	my mobile phone
ich darf abends ausgehen	I am allowed to go out in the evenings
Tier 2 Vocabulary	**Definition**
imperfect tense	Used to say what you used to do in the past
separable verbs	A verb with a prefix – such as to prepare. Vor-bereiten. The prefix moves to the end of the clause in the present tense

Tier 3 – Core text		
Ein guter Freund ist sympatisch	1	A good friend is kind
und hat immer Zeit für mich.	2	and has always time for me.
Ich kenne meine beste Freundin seit zehn Jahren.	3	I know my best friend since ten years.
Wir lachen oft zusammen denn wir haben die gleiche Interessen.	4	We laugh often together because we have the same interests.
Ich komme normalerweise gut mit meiner Familie aus.	5	I come normally good with my family out.
Ich habe eine tolle Beziehung mit meinem Vater, weil er mich immer ünterstützt.	6	I have a great relationship with my father, because he me always supports.
Meine Schwester ist manchmal frech und geht mir auf die Nerven	7	She is sometimes cheeky and goes me on the nerves.
Als Kind war ich sehr ruhig.	8	As child was I very quiet.
Ich dürfte nie mit Freunden einkaufen gehen	9	I wasn'tallowed never with friends shopping togo
aber ich konnte am Wochenende schwimmen gehen	10	but I could atthe weekend swimming togo
Ich werde bestimmt heiraten, weil es sehr romantisch ist.	11	I will definitely marry, because it so romantic is
Meine Hochzeit findet auf einem Insel statt,	12	My wedding takes on an island place
obwohl das eine Geldverschwendung ist.	13	although that a wasteofmoney is

Concepts seen before: word order with verbs 2nd and last. Opinion phrases. Modal verbs such as "mussen" and "durfen" Inversion of main verb

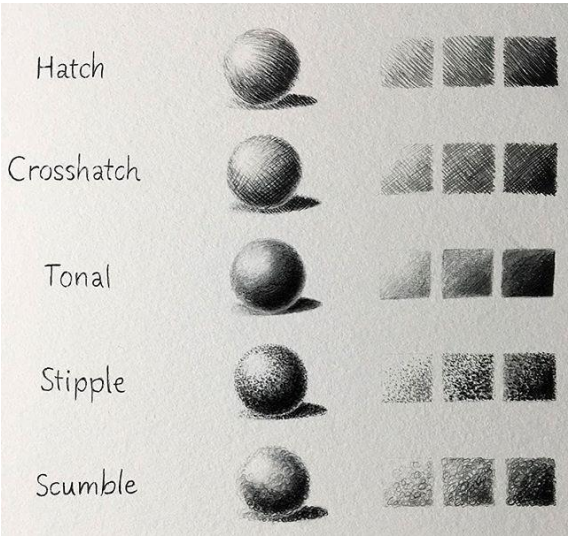
Week Beginning	TASKS Year: 10 Subject: German Topic: **Menschliche Beziehungen** Term: Spring 1
08/01/24	Look, cover, write and check the vocabulary in Tier 1 – from “ich bin” up to “definitely”. Show in your book that you have written them out and checked them in red pen.
22/01/24	Using the Tier three core text, re-write lines 1-7 making at least one change per line. You can use the vocabulary from “Tier 1” to do this or you can use vocabulary you have used in class / prior knowledge.
05/02/24	Using the Tier three core text, re-write lines 8-13 making at least one change per line. You can use the vocabulary from “Tier 1” to do this or you can use vocabulary you have used in class / prior knowledge.

10 – Art – Biro – 2.1

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Stippling (n.)	Stippling and Pointillism both incorporate a series of dots. However, stippling uses dots in one colour to create a texture, detail, or complete picture.
Scumbling (n.)	It's a technique that uses swirling lines to create texture and shading in your artwork.
Hatching (n.)	Shading with closely drawn parallel lines.
Tier 2 Vocabulary	**Definition**
Tone (n.)	The lightness and darkness of colour, including greyscale.
Biro (v.)	Biro is a brand of Ball point pen.
Realistic (n.)	Representing things in a way that is accurate and true to life

Section B: Techniques and Skills



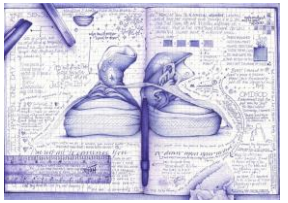
Mark Making

Mark Making is use to create varied tone, especially within Biro Artwork.

Realistic Artwork – Draw exactly what you can see.

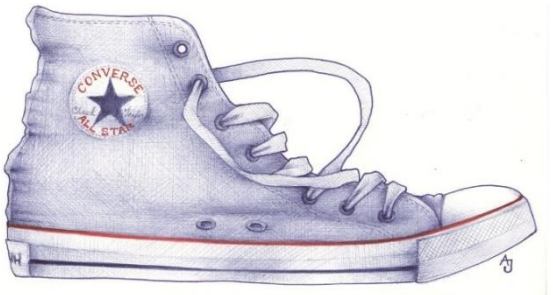
Section C: Artists

Andrea Joesph



Andrea Joseph is an artist and illustrator from South Wales now living and drawing in High Peak, Derbyshire. Her work focuses on every day subject matter, making the mundane memorable. A book illustrator by trade, she has worked in numerous children's books, cookery books and other publications. In 2013 she had a book, Andrea's book, published about her own work.

Andrea Joseph creates realistic drawings, which have accurate detail.



Concepts seen before: Tone, Colour, Realistic, Mark Making, Hatching,

Week Beginning	TASKS Year: 10 Subject: Art Topic: Biro Term: 2.1
08/01/24	Collect 5 images you could draw for your Biro Guide piece and/or showcase piece.
22/01/24	Research your own Biro artist and write down key facts and your opinions on the artists. (Section C)
05/02/24	Selection an object in your house and sketch it out, adding tone. (Section B) Your object could be a TV remote, a vase, a bottle of juice.

BTEC Dance Year 10 Component 1 Swan Song – Spring Term 1

Section A: Key vocabulary	
Tier 2	**Definition**
Explain	Set out in detail the meaning of something, with reasons. More difficult than describe or list, so it can help to give an example to show what you mean. Start by introducing the topic then give the 'how' or 'why'
Identify	Point out or choose the right one or give a list of the main features
Interpret	Define or explain the meaning of something
Tier 3	**Definition**
Political Oppression	Governments use **political repression** to govern domestic dissent, trying to defend established patterns of power and authority
Victim	A person harmed, injured, or killed as a result of a crime, accident, or other event or action.
Humiliation	The embarrassment and shame you feel when someone makes you appear stupid, or when you make a mistake in public.
Injustice	The condition of being unfair and lacking justice, or an action that is unfair.

Section B

Structure of Swansong

Swansong is divided into seven sections, described throughout these notes as follows:

Section 1 (Questions and answers)

Section 2 (Tea for Two)

Section 3 (First solo)

Section 4 (Slow trio)

Section 5 (Second solo)

Section 6 (Cane dance)

Section 7 (Third solo)

Lighting

The lighting suggests a dark, claustrophobic room with a small window, high up - reminiscent of the description of the prisoner's cell in A Man which was tomb-like with tiny windows.

Lighting differentiates between the moments when the victim is alone and when he is joined by the interrogators. In the victim's solos a shaft of light from upstage left appears and the dancer directs many of his movements towards this light source. At the end of the work the victim leaves the stage for the first time, following the shaft of light.

General Information

Swansong was choreographed by Christopher Bruce in 1987 for London Festival Ballet (now called English National Ballet).

The recorded music score was composed by Philip Chambon, commissioned by London Festival Ballet.

The design was by Christopher Bruce and the lighting was designed by David Mohr.

Swansong lasts 32 minutes and has a cast of three dancers.

Section C

Costume, Setting and Props

Without being specific, the costume design suggests the present day, or at least any time after around 1940. The victim is dressed in blue jeans and a red T-shirt, while the interrogators wear khaki coloured trousers and shirts. The fact that the interrogators are dressed alike, in 'uniform', implies they may be guards or soldiers, but they do not have any military badges.

In Section 2 (Tea for Two) the interrogators put on caps and the victim is made to wear a red clown's nose. At the end of this section one of the interrogators lights a cigarette on stage with a lighter. Individual dancers interpret even this movement differently, for instance teasing the victim by offering the cigarette in an apparently friendly manner and then withdrawing it, or blowing smoke in the victim's face and so on.

In Section 6 the interrogators bring on canes and dance with them, using them eventually as weapons to attack the victim's chair, which he or she holds as a shield. The costumes have altered slightly since Swansong was first performed, but the design concept remains the same - simple changes have been made to the neckline and shade of red of the victim's T-shirt and the trouser legs of the interrogators, giving the piece a more contemporary feel. Whether it is performed by three men, three women, or a mixed cast, the costumes are the same.

The only element of setting is a chair, which is also used as a prop. To begin with it is used simply as a seat, but as the dance progresses it becomes a psychological prop for the victim, who relates to it in various ways, from safe haven to trap. The chair is of great significance to the victim and his ever changing relationship to it reflects his state of mind. This gives resonance to the choreographer's additional perspective on the dance, as a metaphor for the life of the dancer who is torn between dancing and retiring from the stage.

Week Beginning	**Dance – Year 10 – Spring Term 1**	
08/01/24	Explain the different dance styles in Swan Song and how Bruce's background has influenced the piece.	Who Swan Song is made for: Target audience and how they receive it - giving examples
22/01/24	Identify the different roles involved in the production of Swan Song.	Give examples of practical workshop and why this was used referencing the work covered/ tasks / learning repertoire or using the same music.
05/02/24	Explain the key responsibilities these roles in Swan Song include.	Explain how a dancer will train and rehearse in this style and for this piece giving examples that they have explored practically. E.g. tasks and say why they are needed for this works process or development of skills or for performance /using the same props/ same theme/ creating a missing section in the style of/ learn some repertoire/ develop repertoire/ use the same music.

Year 10 - Music - AOS 1 Musical Form and Devices - Spring Term 1

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Binary form (n)	AB - a musical form in 2 related sections, both of which are usually repeated
Ternary form (n)	ABA - the form of a movement in which the first subject is repeated after an interposed second subject in a related key.
Rondo form (n)	A musical form that contains a principal theme (sometimes called the "refrain") which alternates with one or more contrasting themes
Minuet and trio (n)	An A-B-A form (A = minuet; B = trio) in a moderate triple meter that is often the third movement of the Classical sonata cycle.
Variation form (n)	a melody (theme) is introduced and then repeated several times with changes to create more interest and variety.
Strophic form (n)	AAA - The same music is played throughout to different lyrics
Baroque period (n)	1600-1750 (approximately)
Classical Period (n)	1750-1810 (approximately)
Romantic Period (n)	1810-1910 (approximately)

Tier 2 Vocabulary	Definition
Structure (n)	The arrangement and order of the parts or sections of the music
Form (n)	AB or ABA AAA etc.

Section B: Important Ideas / Concepts/ Questions

The Western Classical Tradition - Forms and devices are of fundamental importance in musical composition, and many of the common musical forms and devices used by composers today have their origin in the Western Classical Tradition.

The music of the Baroque, Classical and Romantic eras provides the context for a study of binary, ternary, minuet and trio rondo, variation and strophic forms as well as many types of forms and devices - this sets the scene for composing your very own composition which makes up 30% of your overall Music GCSE.

Principal features of Baroque, Classical and Romantic music will be explored in this topic.

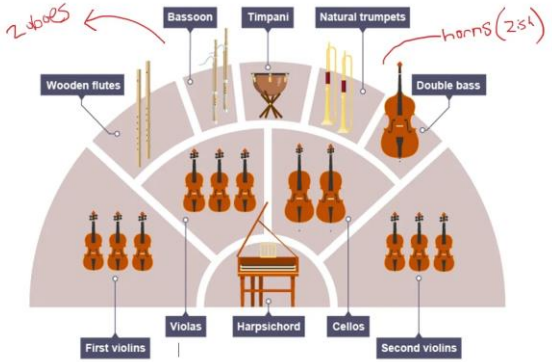
Set work: Badinerie by J.S.Bach for Flute and String Orchestra with Harpsichord (Final movement, Orchestral Suite No.2 in B minor, BWV 1067

Concepts seen before:

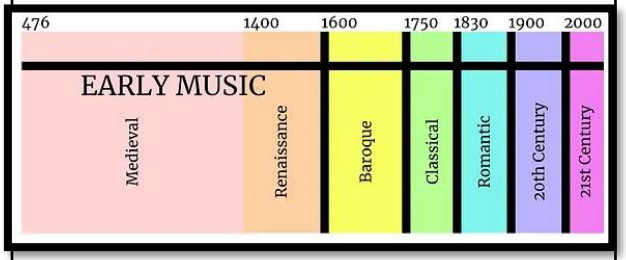
- DR P SMITH acronym and understanding of these
- The Orchestra and instrumentation
- Basic understanding of Structure and form
- Analysing music scores skill introduction

Section C: Important ideas/concepts

The Baroque Orchestra layout:



The Musical Periods Timeline:



Week Beginning	TASKS Year 10 - Music - Spring Term
08/01/24	Create revision cards for the three musical periods studied in this area of study (Baroque, Classical and Romantic eras/periods)
22/01/24	Create a poster with visual examples of musical forms, for example Ternary form ---> 
05/02/24	Listen to one of our set works 'Badinerie' by J.S.Bach for Flute and String Orchestra with Harpsichord and write as much as you can remember about it for 15 minutes – for the remaining 15 minutes upgrade in RED pen using your resources from lessons

Y10 Computer Science – Spring 1 – Systems & Programming

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Base (n)	The number of characters used in a number system.
Decimal (n)	0 to 9 number system.
Binary (n)	Number system used by computers, 0 and 1 simulates on and off (machine code).
Hexadecimal (n)	Number system that uses 0-9 then A-F. Has 16 values in total (uses nibbles of data).
Binary shift (v, n)	Moving data in columns left or right resulting in multiplying or dividing by multiples of 2.
Hard Drive (n)	This is usually the main storage on a desktop and laptop computer. It has a disk that can be magnetically changed to represent 0 and 1.
Solid State Drive (n)	This is another type of storage which is mainly used in portable types of computers as it has no moving parts.
Optical storage (n)	This is another type of storage which uses **CDs DVD and Blu-ray** to store data.
ROM (n)	This is a special memory that is non-volatile that stores the boot up program.
Volatile (n)	This is the term given to memory that **does not remember data** when there is no power.
Non-volatile (n)	This is the term given to memory and storage that **remembers data** when there is no power.

Section B:

Scales

Bit (single 0 or 1)
Nibble (4 bits)
Byte (8 bits)
Kilobyte (1,000 bytes or 1 KB)
Megabyte (1,000 KB)
Gigabyte (1,000 MB)
Terabyte (1,000 GB)
Petabyte (1,000 TB)

Place values for binary. This bit pattern is 93 in decimal. Add the columns with 1s in.

128	64	32	16	8	4	2	1
0	1	0	1	1	1	0	1

CPU - Central Processing Unit. Fetches, decodes and executes instructions using the **ALU, CU** and **registers**.

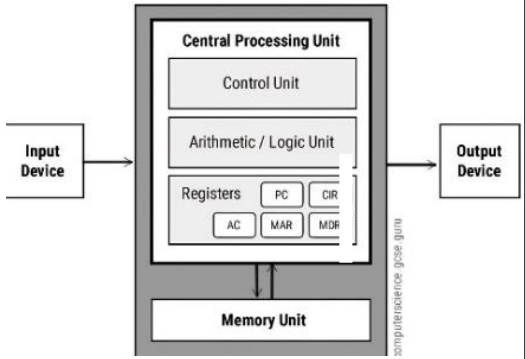
Registers include:
- MAR (Memory Address Register)
- MDR (Memory Data Register)
- Program Counter
- Accumulator

Memory - This is the volatile storage that is used for data currently being used by the computer system. There are 3 categories you need to know: **RAM, Cache and Registers**.

Previously seen concepts:
Y7 Binary and hex conversion, file sizes, basic internal components of a computing device.

Section C:

The CPU is at the heart of the **Von Neumann Architecture** as it is the part of a computing device that handles all data.



The CPU uses the Fetch Decode execute cycle with each instruction. CPU has a clock to synchronize this process. Some CPU have multiple cores meaning they have multiple CPU and therefore can handle more instructions at the same time.

Computers need secondary storage to enable the user to permanently (when the computer is off) keep files for later use. Common types of storage include:
- Optical (CD, DVD, Blu-ray)
- Magnetic (hard drives - spinning disk)
- Solid state (no moving parts stored in circuits)

When choosing storage, we need to consider these factors against use:
- Capacity, Speed , Portability, Durability, Reliability, Cost

Week Beginning	TASKS Year: 10 Subject: GCSE Computer Science Term: Spring 1
08/01/2024	Choose one area from last half term that you feel you struggled with and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.
22/01/2024	Choose one area from the KAP that you were not secure in and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.
05/02/2024	Choose one area from the KAP that you were not secure in and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.

Y10 Computer Science – Spring 1 – Networks & programming

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Decomposition (n)	Breaking a problem down into smaller parts so that you can create a solution.
Algorithm (n)	A list of instructions that will do something.
Selection (n)	A structure in programming that enables you to do different things depending on if a condition is met or not. IF
Iteration (n)	A structure in programming that enables you to repeat something. FOR, WHILE
Variable (n)	A location that is given an identifier that stores data. The data can be changed.
Assignment (n)	The process of giving data to a variable.
Abstraction (n)	Looking at a problem and ignoring the irrelevant information.
Definite iteration (n)	Lopping that you know will end. This is usually a For loop but can be a while if it is designed with a counter to track the number of loops.
Indefinite iteration (n)	Looping that you don't know when it will end as it is dependent on a condition to be met.
Condition (n)	A criteria that has to be met for something to happen, used in selection and indefinite iteration. For example a = 3.
Data type (n)	Limits what can be stored in a variable. These include: string, integer, float, Boolean, character.

Section B: Programming Commands	
Output procedure Output a string Output stored data	print() print("hello") print (age)
Input procedure Data needs storing in a variable	input("instruction") inputs default to strings
Variable declaration and assignment	age = 40 age = input("Enter age: ")
Data Types and **casting** (changing data from one type to another)	String = "hello" str() Integer = 78 int() Float = 76.5 float() Boolean = True or False

Selection
Indents matter
	if age < 13:
	  print("No account")
	else:
	  print("Yes account")

Iteration
Indents matter
	for loop in range(1:10):
	  print(2*loop)
	while age <13:
	  print("No account")

Useful website for more examples and practice: **www.w3schools.com/python/** **www.pythonsandbox.com/**	

Section C: Networks

LAN – Local Area Network cover small geographical areas. Often owned and controlled/managed by a single person or organisation.

WAN – Wide Area Network cover a wide geographic area. The Internet is the biggest example of a WAN. Often under collective or distributed ownership.

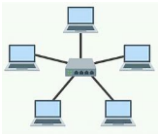
The hardware needed to connect stand-alone computers into a Local Area Network:

- Wireless access points
- Routers
- Switches
- NIC (Network Interface Controller/Card)
- Transmission media

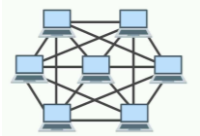
The Internet as a worldwide collection of computer networks which includes:

- DNS (Domain Name Server)
- Hosting
- The Cloud
- Web servers and clients

Star topology



Mesh Topology



Previously seen concepts:
Y7, Y8 and Y9 basics of programming through scratch and python.

Week Beginning	TASKS Year: 10 Subject: GCSE Computer Science Term: Spring 1
08/01/2024	Choose one area from last half term that you feel you struggled with and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.
22/01/2024	Choose one area from the KAP that you were not secure in and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.
05/02/2024	Choose one area from the KAP that you were not secure in and revise/develop your knowledge so that you understand it. You could develop a mind map; flash cards rewrite notes whatever technique suits you.

Year 10 – GCSE PE Anatomy and Physiology – Spring 1

Section A: Key vocabulary

Tier 3 Vocabulary	Definition
Hinge Joint (n)	Only allow flexion and extension movement like the hinge on a door
Ball and Socket Joint (n)	This joint is found at the Sholder and hip and allows Flexion, Extension, Rotation, Abduction, adduction.
Fulcrum (n)	Refers to the working Joint
Load (n)	Refers to the force (Ball,push,pull, body weight)
Effort (n)	Refers to the muscles being used
Mechanical advantage (n)	The relative efficiency of each of the lever systems is called the 'mechanical advantage'.
Tier 2 Vocabulary	**Definition**
Identify (v)	Name the key point.
Describe (v)	Recall facts, events or process in an accurate way.
Explain (v)	Make something clear or state the reasons for something happening.
Evaluate (v)	Using the information supplied to consider evidence for and against when making a judgement.

Section B: Anatomy and physiology

The Bones

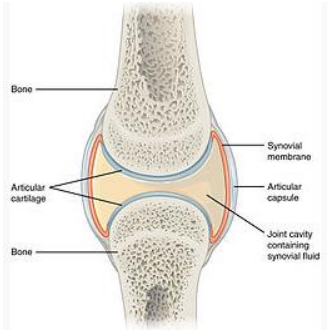
Long bones act as levers so we can move. Examples are the humerus, ulna and femur.
Short bones are important for weight bearing and to absorb shock Examples are the carpals and tarsals.
Flat bones usually protect organs. Examples are the ribs, pelvis and scapula.
Irregular bones have odd shapes and perform a range of functions. Examples are the bones of the vertebrae.

The functions of the skeleton:

Protection of vital organs
Support/shape
Blood cell production
Storage of minerals
Movement

Joints

Sholder and Hip = Ball and socket
Knee and Elbow = Hinge



What is a synovial joint made up of?

Synovial membrane
Articular capsule
Joint cavity containing synovial fluid
Articular cartilage

Section C: Effects the Media can have on Sport

Muscles

Antagonistic muscle pairs:

When we bend the elbow (flexion) the biceps contract and the triceps relax
Agonist = Biceps
Antagonist = Triceps
When we straighten the elbow (extension) the triceps contract and the biceps relax
Agonist = Triceps
Antagonist = Biceps

Other antagonistic pairs include:

Quadriceps & Hamstrings
Hip flexors & Gluteus Maximus
Gastrocnemius & Tibialis Anterior

Components of fitness

Flexibility
Cardiovascular Endurance
Strength
Power
Reaction time
Balance
Muscular Endurance
Speed
Agility
Co-ordination

Movement analysis

Levers – 1st Class 2nd Class 3rd Class
Planes – Sagittal – Transverse – Frontal
Axes – Sagittal – Transverse – Longitudinal

Concepts seen before:

Discussion in core PE about the basic bones and muscles and how we use are cardiovascular and respiratory system when performing.

Week Beginning	TASKS Year: 10 Subject: PE Topic: Anatomy and physiology Term: Spring 1
08/01/24	Create a set of Flashcards for all the keywords in Section A,B and C on Spring one Then Self-test yourself and create a learnt and 'developing knowledge' set of flashcards
22/01/24	Create a 10-question quiz based on section B, providing the answers.
05/02/24	Create a poster in the components of fitness including the fitness tests.

Year 10 – PE – Cambridge National – Spring 1

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Skills (n)	The learned combination of movements using muscles and joints so that a smooth and coordinated action is produced.
Simple Skill (n)	A skill or movement that requires little to no concentration and involves basic movement.
Complex Skill (n)	A skill or movement that requires more concentration and decision making. This can be due to it involving many body parts.
Open Skill (n)	A skill that takes place in a changing and unpredictable environment.
Closed Skill (n)	A skill or movement that takes place in a predictable environment and will stay the same at all times.
Tier 2 Vocabulary	**Definition**
Identify (v)	Name the key point.
Describe (v)	Recall facts, events or process in an accurate way.
Evaluate (v)	Using the information supplied to consider evidence for and against when making a judgement
Quantitative (v)	Data that is objective and quantified as a number.
Qualitative (v)	Data which is subjective, involving opinions.

Section B: Key Concepts/Ideas/Questions	
Whole Practice	This is when you complete a skill as a complete action without breaking it down. Whole practice works best with closed and open skills.
Part Practice	This is when you break the entire skill down in to manageable sections. You practice each part separately and is often used when teaching complex skills.
Fixed Practice	This is when you practice a skill or movement repeatedly and in the same way. This is often linked with closed skills.
Variable Practice	Is when you vary the skill in different situations. It allows for different scenarios to present itself as they would in a live game or match.
Progressive Drills	These practices get harder and harder each time they are performed. They allow a coach to move a performer on to the next level when they are ready.

Section C: Ways to measure improvement	
Measurements / Data	Repeating a fitness test can provide data to compare to against original results.
Performance	An individual may feel improvements through game/ training performances. This might also be seen by a peer observation
Training diaries of performance	Athletes should log details of: • Competitions and achievements • Progressions and adaptations to training sessions • Personal feelings and motivation for training
Video diaries	Performers can be asked a series of reflective questions by coaches or self assess
Completion of proficiency awards	By completion the next stage of an award scheme this shows improvement to the next level.

Concepts you have seen before:

- **What is a skill?**
- **Why are skills important?**
- **How Practice affects performance.**

Week Beginning	TASKS Year: 10 Subject: Cambridge National in Sport Studies Term: Spring
08/01/24	Review any improvements made from week 1 & 2 in your training programme using the methods that you have identified. Make any adjustments to your training programme after evaluating this.
22/01/24	Review any improvements made from week 3 & 4 in your training programme using the methods that you have identified. Make any adjustments to your training programme after evaluating this.
05/02/24	Review any improvements made from week 5 & 6 in your training programme using the methods that you have identified. Make any adjustments to your training programme after evaluating this.

Graphic Design – 1.2 Visual language of graphic design,

1.3 Graphic Design Principles & 2.1 Types of graphic design work

Section A: key vocabulary	
Vocab	**Definition**
Colour (n)	Is used to show a mood, theme or feeling. 1 of the 6 key components.
Typography (n)	Is the art of arranging letters and text in a way that makes the copy legible, clear, and visually appealing to the reader. 1 of the 6 key components.
Composition (n)	Also referred to as layout, artwork, design and means the placement or arrangement of visual elements on a blank page. 1 of the 6 key components.
Line (n)	Used in graphic design to separate or enhance information. 1 of the 6 key components.
Tone (n)	Refers to lightness and darkness in, it can help make something stand out. There are many techniques to create tone. 1 of the 6 key components.
Imagery (n)	A visual representation of something, imagery can be created in many different ways. 1 of the 6 key components.

Section B: Graphic Design Principles	
Hierarchy (n)	the way in which certain elements of a design are given prominence over another: o dominance o priority
Alignment (n)	the way in which text and other design elements are placed on a page to create an ordered appearance with visual connections
Balance (n)	the way in which design elements are presented throughout a design layout: o symmetrical o asymmetrical o radical
Contrast (n)	the way in which design elements are placed in opposition with each other: o dark and light o thick and thin o large and small o traditional and contemporary
Rhythm (n)	the way in which elements within a design are repeated: o fluid o progressive
Proximity (n)	the way in which certain elements of a design are given prominence over another.
Colour & Space (n)	considering the choice of colour selection for the text and background in a design and the space left between the design elements

Section C: Types of Graphic Design work:

Visual identity:
- o logo
- o brand identity
- o style guides

Packaging design for:
- o food o drinks
- o storage o products

Marketing and advertising:
- o leaflets & flyers
- o magazine & newspaper advertisements
- o posters, banners, billboards
- o infographics
- o vehicle wraps
- o brochures
- o in-store signage & point of sale

Publication:
- o magazines o newspapers
- o catalogues

Environmental:
- o exhibitions o murals
- o event & conference space
- o museum display

Illustration:
- o graphic novels o album & book
- o infographics o technical illustrations o fashion & textiles

Concepts you have seen before:
The 6 key components and language you are seeing has been covered briefly in previous lessons. It is now you need to use and embed this language in annotations and responses to exam questions.

Week Beginning	TASKS: Graphic Design – 1.2 Visual language of graphic design, 1.3 Graphic Design Principles & 2.1 Types of graphic design work
08/01/2024	Using the Graphic Design Principles analyse an existing magazine cover. Explaining how the principles have been used.
22/01/2024	Create 6 possible exam questions that cover all 6 key components, with answers.
05/02/2024	Create flashcards on the vocabulary you most struggle with. You must create at least 4. Include definition and how it could be used in a sentence.

Year 10 – Engineering – Spring Term 1

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Lathe (V)	A manufacturing machine typically used to turn the diameter of a cylindrical component to a diameter
Brazing (N)	Brazing is the process of joining two metals together
SI Units (N)	The SI system (**International System of Units**)
Turning (N)	During the turning process, a cutting tool removes material from the outer diameter of a rotating work piece.
Pascals Principle	Transfer of fluid from a small cylinder to a larger cylinder to multiply force.
Tier 2 Vocabulary	**Definition**
Geometric shapes (N)	A materials ability to be easily bent or stretched without breaking
Tolerance (N)	How much **inaccuracy** we are willing to accept
Quality Control (N)	A process used to ensure the quality of a product.
Metric	Measurements such as Millimetre, Centimetre, Metre
Imperial	Measurements such as inches, feet, yards

Section B: Key Concepts/Ideas/Questions

Tolerance

Tolerance is what we use to explain how much **inaccuracy** we are willing to accept on a finished product. It is written as a +/- value.

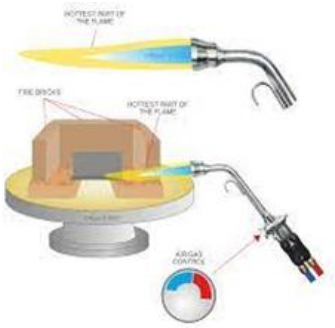
If the nut was required to be an external measurement of 10mm and the tolerance set to +/- 0.5mm the final external measurement could fall between 10.5mm and 9.5mm without being rejected.

Any measurement outside this range and the nut would be rejected.

This rejection has financial implications for any engineering company

Section C: Subject Specific

Brazing process:
Brazing works by melting a 'filler' metal onto the area to be joined. On cooling, the two pieces of metal are fixed in place – a bit like glue. The filler metal has a lower melting point than the metal being joined.



Concepts seen before: Drawing skills, material categories, practical skills / tools

Week Beginning	TASKS Year 8 Design Engineering
1	Create a risk assessment for the Brazing process. Include hazards and control measures for each stage of the process.
2	Using the key words section of the knowledge organiser, choose 5 key words you have found difficult to remember. Create a table in your book and draw a picture next to the word to help you memorise it. For example, tolerance – draw a picture related to measuring.
3	A window aperture on a house measures 1000 x 500mm. Suggest a tolerance the window should be made to, ensuring it will still fit, but isn't too small leaving gaps too big to fill with sealant.

Design & Technology

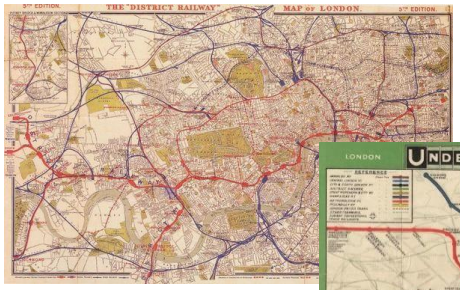
Year 10 Spring 1 - Designers

Section A: Key vocabulary	
Vocab	**Definition**
Iconic Design	An iconic design is usually a design that is 'ground-breaking' and one that sets new standards in its field.
Influential Designer	A designer that caused a change in the way others in the future designer things.
High profile	Attracts a lot of attention. Well known.
Sustainable design	Sustainable design is a design approach that seeks to minimize negative environmental, social, and economic impacts.
Innovative	Introducing new ideas; original and creative in thinking
Post-modern	A design movement that are typically characterized by a return to traditional materials and forms)

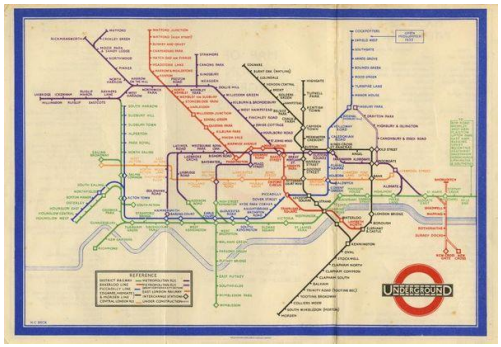
Section B: Important Ideas / Concepts/ Questions

The work of past designers helps to influence what is designed later. For example, the design of the London underground map (as we know it) was developed by Harry Beck and has been used to influence the design of many other such maps.

You will need to understand the work of present and current designers for both the exam (50% of final marks) and your NEA (50% of final mark).



Maps before Beck



Harry Beck's Map

Another example is Mary Quant the fashion designer who was the first designer to design clots aimed at 'youth'. She was responsible for designing things such as the mini shirt that we see everywhere in high street shops today

Section C: Subject Specific

Designer	Key Information
Sir Alec Issigonis (1906-1988) Car designer 	Designed the iconic Mini in the 1950s, which had the largest possible interior from such a small footprint as well as a transverse engine, making it very economical. Also designed the Morris Minor, which was the first million-selling British car.
Ettore Scottsass (1917-2007) Product designer and architect. 	Influential designer and part of the Memphis design movement, which he called the 'New International Style'. Challenged the black humourless design of products and introduced colours, textures and patterns to reinvigorate everyday designs, such as the Carlton room divider
Aldo Rossi (1931-1997) Architect and product designer 	Influential in the Post-Modern movement. He wanted to design buildings or products that would stand the test of time and he had a desire to produce buildings that tied their form into the way of life for the people using them
Norman Foster (1935-present) Architect 	Designed many high profile projects, including Wembley and the Gherkin in London. His designs include a lot of glass and steel with clear structure and coherent forms. His designs are also constructed to be sustainable and environmentally friendly.

Week Beginning (DD/MM/YYYY)	TASKS Year Group 10—GCSE DT—Designer question Spring 1	
1	Look at the picture of the three London Underground maps. Why do you think Harry Becks version has proved to be so successful ?	
2	Describe the design style of Ettore Scottsass. Use the ACCESS FM framework we have used in class to help you do this. A — Aesthetics: what does the product look like? C — Cost: what price range is it in? C — Customer: Who is the customer it is aimed at? E — Environment: Being Eco-Friendly	S — Size: what is the size of the product S — Safety: is the product safe? F — Function: What is the purpose of the product? M — Materials: what is it made of?
3	Why do you think Mary Quant was so successful with her fashion designs aimed at the 'youth' in the 1960s. Explain your answers fully.	

Year 10 – Construction – Technology in Construction – Spring Term

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Environment (N)	The surroundings or conditions in which a person, animal, or plant lives or operates.
Sustainable (N)	Able to be maintained at a certain rate or level.
Technologies (N)	The branch of knowledge dealing with engineering or applied sciences.
Specifications (N)	A detailed description of the design and materials used to make something.
Regulations (N)	A rule or directive made and maintained by an authority.
Sequenced (N)	A particular order in which related things follow each other.
Characteristics (N)	A feature or quality belonging typically to a person, place, or thing and serving to identify them.
Calculating (V)	Acting in a scheming and ruthlessly determined way.
Tier 2 Vocabulary	**Definition**
Materials (N)	The matter from which a thing is or can be made.
Building (V)	A structure with a roof and walls, such as a house or factory.
Structures (V)	A building or other object constructed from several parts.
Trades (N)	A job requiring manual skills and special training.
Health and safety (N)	Regulations and procedures intended to prevent accident or injury in workplaces or public environments.
Sector (N)	The economic sector comprising all companies involved in construction
Drawings (N)	Construction drawing is the general term used for drawings that form part of the production information that is incorporated into tender documentation and then the contract documents for the construction works
Personal protective equipment (N)	Clothing and equipment that is worn or used in order to provide protection against hazardous substances or environments.

Section B: Important Ideas / Concepts/ Questions
1.5 Building structures and forms
In this section learners will gain knowledge and understanding of the following building structures and forms: • cellular constructions • rectangular frame constructions • portal frame constructions • heritage and traditional methods
1.5.1 • load bearing walls provide the main vertical support and lateral stability for floors • external wall panels, lift shafts or staircases are used to provide stability • bridging components such as floors, roofs and beams are supported by load bearing walls • prefabricated modular construction, such as pods, may be used.
1.5.2 Learners should know that in rectangular frame constructions: • weight is carried by a skeleton or framework of columns and beams, rather than being supported by walls. Learners should be aware that: • a lightweight timber-frame is a common structure used in the construction of contemporary housing • steel and reinforced concrete frames are used in larger structures • contemporary commercial framed buildings have replaced traditional external walls with the use of metal and glass screens, or curtain walls, as exterior cladding
1.5.3 Learners should know that in portal frame constructions: • beams or rafters are supported at either end by columns • columns are secured to pad foundations using holding down bolts • the joints between the beams and columns are 'rigid' so the beam can be reduced in size and can span large distances. Learners should know the terminology of the components of a portal frame detail drawing, including: • columns on base plates • rafters • apex and knee details • eaves beam • wind bracing • cold formed sections and connections.

Section C: Subject Specific

Concepts seen before: Popular TV programmes such as Grand designs, DIY SOS, https://www.youtube.com/watch?v=49sf_LNF0z0

Week Beginning	TASKS Year: 10 Subject: Construction Topic: **Technology in construction** Term: Spring Term
08/01/24	What are load bearing walls?
22/01/24	Give examples of bridging components? This can be written or drawn.
05/02/24	What do the following words mean in relation to technical construction? 1.specifications 2.characteristics 3.sustainable Add pictures and description where necessary.

Year 10 - Food Preparation and Nutrition – Spring Term 1

Section A: Key vocabulary

Tier 3	Definition
Toxin	A poison produced by some bacteria which can cause food poisoning.
Oxidation	A chemical reaction that is the result of a food being expose to oxygen. When the oxygen is exposed to certain elements it causes a change to occur, such as apples turning brown, they turn brown.
Pathogens	Harmful bacteria that can cause food poisoning
Food spoilage	The action of enzymes or microorganisms which make the food unacceptable to consume.
Additives	Are added to ensure safety, increase shelf life or improve the taste, texture of appearance of food. They must be shown clearly on food labels.
Binary fission	The process that bacteria uses to divide and multiply.
Cross contamination	The transfer of bacteria from one source to another. Usually raw food to ready-to-eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests
Tier 2	**Definition**
Food poisoning	Illness resulting from eating food which contains food poisoning micro-organisms or toxins produced by micro-organisms.
Micro-organisms	Single celled organisms that cam be harmful or helpful eg. To make cheese and yoghurt
Nutritional information	Information on the packaging that helps consumers make healthier choices.
Allergen labels	Allergens must be clearly shown in **bold**, highlighted, <u>underlined</u> or in *italics* on the back of the packaging

Section B: Food spoilage, contamination and food poisoning

Food contamination

Food contamination can lead to food poisoning. There are three ways which food can be contaminated: **bacterial**, **chemical** and **physical**.

Chemical contamination
Chemical contamination can occur when chemicals from the farm; cleaning products used in the processing plant and fly spray used in the kitchen.

Physical contamination
This can occur in a variety of ways at different stages of food processing and production. Some examples are:
soil from the ground when harvesting;
a loose bolt from a processing plant when packaging;
a hair from a chef in the kitchen.

Bacterial contamination
Can occur when cross contamination occurs where a pathogen contaminates food.

Food spoilage

As soon as food is harvested, slaughtered or processed it starts to change. This happens for two main reasons:
autolysis – self destruction, caused by enzymes present in the food;
microbial spoilage – caused by the growth of micro-organisms, i.e. bacteria, yeasts and moulds.

Micro-organisms

Micro-organisms need conditions to survive and reproduce these can include:

- temperature; moisture; food; time; oxygen and pH level.

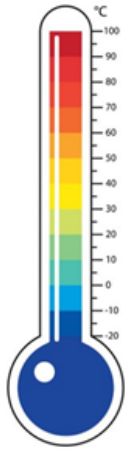
Pathogen	Sources
E coli 0157	Raw and undercooked meat
Listeria	Unpasteurised dairy, poultry
Salmonella	Raw meat, poultry and eggs
Staphylococcus aureus	Cooked meat products

Section C: important ideas

Temperatures to remember

To reduce the risk of food poisoning, good temperature control is vital:

- 5-63°C – the danger zone where bacteria grow most readily.
- 37°C – body temperature, optimum temperature for bacterial growth.
- 8°C – maximum legal temperature for cold food, i.e. your fridge.
- 5°C (or below) – the ideal temperature your fridge should be.
- 75°C – if cooking food, the core temperature, middle or thickest part should reach at least this temperature.
- 75°C – if reheating food, it should reach at least this temperature. In Scotland food should reach at least 82°C.



Why do we eat food?

We choose the food we eat for a variety of different reasons, some include

- Celebrations
- Enjoyment
- Cost
- Physical activity level
- Availability
- Seasonality
- Time available to cook

Week Beginning	TASKS Year 10 – Spring term – Food safety and Food Choice
9/01/23	Use look, cover, write, check and correct, learn the last 4 (Tier 2) key words from Section A on vocabulary. If you are unsure how to do this, use the 'How to self quiz?' guide on page 6 of this knowledge organise
23/01/23	Create flashcards to learn the first 7 key words on section A. If you are unsure how to do this, use the 'How to self quiz?' guide on page 7 of this knowledge organiser.
6/02/23	Read through the information on 'Temperatures to remember' on the left of the Knowledge organiser. For each temperature, explain why it is important mineral. E.g. for reheating, it is important to reheat to 75C to reduce pathogens to a safe level.

Year 10 iMedia – Spring 1 – Software and hardware options for iMedia products

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Software (n)	Program that executes specific tasks for a user.
Hardware (n)	Physical parts and aspects of a computer device.
File types (n)	A standard way that information/ data is stored as on a computer. Each with own purpose and benefits.
Compression (n)	A reduction in the number of bits needed to represent the data. Making the file size smaller.
Exporting (v)	Transferring data in another format that can be used by other program.
Resolution (n)	A measurement of the number of pixels on screen.
Tier 2 Vocabulary	**Definition**
Connections (n)	A device for keeping two parts of an electric circuit in contact. E.g. Jack, USB, Bluetooth.
Option (n)	Are fixed choices for someone to select from to benefit different scenarios.
External (n)	Are physical parts that are often connected to the computer.
Internal (n)	Are physical parts that are inside/ installed within the computer.
Platform (n)	A service, site, or method that delivers media/content to an audience.
Optimising (v)	Rearrange or rewrite data to improve efficiency of loading or processing.

Section B: Hardware

	**Processor/ CPU -** Used to carry out instructions from programs/software that allows a computer or other device to perform its tasks.
	**Random-Access Memory (RAM) –** Used to store and access data from open software and files on a short-term basis. It stores the information your computer is actively using so that it can be accessed quickly.
	**Storage (Cloud, Optical, HDD, SSD) –** Used to keep programs and data for later use.
	**Motherboard –** Used to tie the computer's components/internal hardware together at one spot and allows them to talk to each other.
	**Graphics card –** Used to render images to the display – frames, resolution, techniques such as ray tracing.
	**Sound card –** Used to enable a computer to input, process, and deliver sound.

The hardware options for developing iMedia products:

- **Scanner**
- **Camera**
- **Audio interface**
- **Microphone**
- **Graphics tablet**
- **Musical instrument digital interface**

- ❑ **Focus (auto)**
- ❑ **Zoom**
- ❑ **Lens**
- ❑ **Shutter speed**
- ❑ **Flash**
- ❑ **Orientation**
- ❑ **Tripods**

Section C: Exporting

Compression:
Lossless compression - every bit of data originally in a file remains after it is uncompressed, and all the information is restored. Keeping the quality the same.
Lossy compression - permanently eliminaes certain information. Making the sizes smaller but can lose quality.

Images:
JPEG – file type that benefits from a fast loading time thanks to the small file size.
PNG – transparent background and supports the alpha channel.
GIF –A single GIF file contains all frames and time information needed for an animation.

Video:
AVI – file type that can contain both audio and video data
MP4/M4A - format used to store video, audio, subtitles and images into one single file.

Audio:
WAV - original audio waveform at the highest quality sound, uncompressed.
AIFF - file type that same as WAV but allows recording and playback on Apple computers.
MP3 - file type that captures and recreates an original audio waveform but compressed.

Concepts seen before:
Year 7 – Software and hardware
Year 8, 9 – How images are represented

Week Beginning	TASKS **Y10 iMedia** Topic: **Software and hardware options for iMedia products** Term: **Spring 1**
15/01/24	List each of the **six types of computer hardware**. For each one write the main function of the hardware.
29/01/24	List the **advantages** and **disadvantages** of each file type – • **video:** MP4, M4A, AVI • **audio:** WAV, AIFF, MP3 • **image:** JPEG, TIFF, PNG
12/02/24	Use look, cover, write check. What are the **features** on a digital camera.

Year 10 – Film Studies – Tsotsi – Spring Term 1

Section A: Key vocabulary	
Tier 3 Vocabulary	**Definition**
Genre (noun)	A style or category of film.
Cinematography (noun)	Camerawork in a film
Representation (noun)	The portrayal of a group of people.
Lighting (noun)	The arrangement or effect of lights.
Mise-en-scene (noun)	The arrangement of everything in shot.
Context (noun)	The circumstances surrounding an event.
Setting (noun)	Where the film takes place.
Tier 2 Vocabulary	**Definition**
Analyse (verb)	Examine something and explain the decisions made around it.
Connotations (noun)	An idea a word/item invokes
Summarise (verb)	The main points.
Represents (verb)	Shows or stand for.
Symbolises (verb)	To represent something through an item.

Section B: Key Concepts/Ideas/Questions

BIG QUESTIONS:

1. What narrative theories are there?
2. How can narratives be structured?
3. What is representation?
4. How can films be analysed within a particular context?
5. How is aesthetic used in film?
6. What is mise-en-scene and why is it important?
7. How do directors manipulate an audience's reaction?

TSOTSI is an award-winning, critically regarded and highly enjoyable film. It provides a unique insight into the life of a young teenager in South Africa and offers representation of many of South Africa's citizens, as well as key ideas of society and sociology. It is also an enjoyable film which creates a strong emotional response in audiences, playing with our expectations of a protagonist. It features not only beautiful production design and engaging performances, but key moral messages which feel organic and relevant. Overall, it's a wonderfully made film, with a strong emotional core and a filmmaking style that is engaging to work with, providing a unique insight for all audiences.

Section C: Subject Specific

Film Teaching Focus: Representation

How media portrays groups of people to an audience.

Main Characters:

Totsi
Miriam
Butcher
John Dube
Boston

Key Locations in the film:

Tsotsi's shack
The Township
Miriam's shack
The train station
Dube's house

Types of Context to understand:

Social context
Technological context
Political context
Historical context
Cultural context
Institutional context

Concepts you have seen before: This unit builds upon the analysis skills you already use in English! Film Studies is a GCSE option subject we offer at Lees Brook and could lead to future careers within the media industry.

Week Beginning	TASKS Year: Subject: Topic: Term:
15/01/2024	Find a film poster for Tsotsi. Analyse what was chosen to be included on this poster. Think about: text, colour, positioning, genre.
29/01/2024	Choose three of the main characters from the film. Summarise how they are represented to the audience. Are the represented positively or negatively?
12/02/2024	1. Give the name of 5 different locations in the film TSOTSI. 2. In your opinion, rank them in order of most important to least important. 3. For each location, give reasons as to why you've ranked them in that order. 4. For each location, list at least 1 important event that happened at that location. 5. For each location, list at least 2 characters who are in that location at some point during the film.

Year 10 – Health and Social Care– Component One – Spring 1 one

Section A: Key vocabulary	
Tier 3	**Definition**
Infancy (n)	0-2 years. The development of fine and gross motor skills.
Early Childhood (n)	3-8years. Learning to play (solitary, parallel, social).
Adolescence (n)	9-18years. Peer groups develop, emotions are affected by hormones, building relationships, the onset of puberty.
Early Adulthood (n)	19-45years. Starting a family, having attained full growth or maturity.
Middle Adulthood (n)	46-65years. An individual in the transitional age span between young adult and elderly, potential onset of midlife crisis..
Later Adulthood (n)	65+years. Importance of finding meaning and satisfaction in life, potential onset of dementia.
Tier 2	**Definition**
Relationship changes	Altering the way that two or more people connect with each other.
Life circumstances	Factors that play a part in determining aspects of an individual's life.
Expected life events	A major event that changes a person's status or circumstances, such as giving birth, marriage, divorce, death of spouse, loss of job.
Unexpected life events	Events that take individuals by surprise as they do not know that they are going to happen, they are unplanned. Some examples are having an accident or an unexpected death.

Section B: Key Concepts/Ideas/Questions

Environmental factors

Positive effects

- Good location of housing will be close to amenities, outdoor space, work, relaxing and quiet
- Outdoor space allows us to meet friends and exercise
- Good living conditions provides warmth, space, prevents illness and stress
- Access to facilities supports leisure activities

Negative effects

- Air pollution can irritate the eyes and severely affect people with asthma
- Noise pollution can cause high blood pressure, stress and sleeplessness,
- Poor living conditions may be cold, damp and dirty, cramped, and a greater chance of illness
- High level of traffic increases the risk of accident
- Building security may increase stress and anxiety

Social emotional and cultural factors

Positive effects

- Socialise regularly gives a feel-good factor
- Spend time with others to make friends and interact with others Supportive relationships an reduce stress, make us feel secure, improve confidence, improve self-image and feel a belonging Part of a community allows social integration & opportunity to make friends

Negative effects

- Unsupportive relationships can make us sad and upset, make us feel lonely and insecure, give us stress and anxiety
- Isolation can be emotionally upsetting & make you feel threatened
- Feeling sad or worried because of bereavement
- Stress through work, relationship issues, redundancy, stuck in traffic
- Stress can cause, sleeplessness, high blood pressure, anxiety, insecurity, headaches, heart disease, loss of appetite

Section C: Subject Specific

Case Study 1: Zach has started to hang out with a new friendship group, and his parents have become worried that he maybe smoking cannabis. Zach's behaviour has changed at home, grades have not been as good at school and his parents smell the cannabis scent on him. What support would you offer Zach?

Case Study 2: Sarah has recently recovered from a hip operation and has found that she is lacking in mobility and is starting to feel isolated from friends and that everyday tasks are becoming at issue due to having a wheelchair. What support could you offer Sarah?

Concepts seen before:
Command words: describe , identify, evaluate , analysis, critically analyse

Week Beginning	TASKS Year: 10 Subject: H&SC Topic: Component 1/2 Term: Spring 1
10C/Hc1: W/C 15.01.24	Using Tier 3 words—Bullet point the differences between infancy and later adulthood (e.g. Infancy, physical growth, Later adulthood physical decline)
10C/Hc1: W/C 29.01.24	Using Tier 2 words— choose 1 (One) and write down one example and three positive and three negatives. (e.g. unexpected life events, Divorce, 3 Positive, 3 negatives)
10C/Hc1: W/C 12.02.24	Using Section C: Answer case study one using some of the key words learnt in class and listed in your booklets.

Notes page

Notes page

Your equipment you need for learning every day: