KNOWLEDGE ORGANISER

Year 11
Half Term 3

Name:	
Tutor Group:	
Academic Year:	


CORE

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ACADEMY BLACKPOOL

English, Year 11
An Inspector Calls

Context

1912 – when the play was set. Just before WW1 and the sinking of the Titanic. JBP wanted to make sure audiences in 1945 recognised the problems in society in 1912 before the wars (class system, Capitalism, sexism) and weren't tempted to go back to living like that. He wrote the play to highlight the dangers of the Capitalist lifestyle.

1945 – when the play was written and performed. After WW2, society changed for the better. The benefit system started to be introduced, and we had more equality for women and less of a class divide because of different classes and different genders mixing in the war effort. JBP supported and encouraged these changes and wanted to make sure he promoted them in his play by making Capitalists like the older Birlings appear ignorant and selfish.

Socialism – JBP was a keen socialist. This meant that he wanted everyone to look after each other rather than just caring about themselves. He was trying to promote this with the play, by making the Socialist characters like the Inspector much more respectable than the Capitalist ones.

Capitalism – JBP hated Capitalism and disagreed with those who thought that everyone should only care about themselves and that making money was more important than human rights. He created Mr and Mrs Birling as Capitalists, in order to make Capitalism seem out-dated and selfish. Mr and Mrs B are portrayed in a negative way by JBP for this reason.

Outdated ideas – In 1912, the social classes were segregated, women got paid less than men for the same work, there was no benefit system or help with unemployment or housing. Society was patriarchal (men ruled).

Plot

ACT 1	The family are celebrating Sheila and Gerald's engagement. Birling makes speeches saying there will be no war, and the Titanic is unsinkable. An Inspector arrives and tells them Eva Smith has committed suicide. He gets Mr B to admit sacking her. He doesn't take blame. Inspector gets Sheila to admit getting her sacked for laughing. She feels guilty and ashamed of herself.
ACT 2	Inspector gets Gerald to admit having an affair with Eva Smith (now called Daisy Renton. Sheila is upset and questions her relationship with Gerald. Inspector gets Mrs B to admit not helping Eva when she came to Mrs B's charity for help when she became pregnant. Mrs B says it should be the father's responsibility. At the end of the Act, we realise that the father of Eva's baby was Eric.
ACT 3	Eric's involvement with Eva is revealed and a possible rape is hinted at, as he says he forced Eva. The Inspector gives his final speech about fire, blood and anguish. He is warning the family that if they don't start to take responsibility for others, they will live to regret it. He then leaves. Gerald finds out that the Inspector wasn't a real inspector. Mr B rings to check and there is no Inspector Goole. Also, there is no dead girl! Mr and Mrs B (and Gerald) celebrate and act like nothing has happened. Sheila and Eric still feel guilty and can't go back to how they were before. Right at the end, the telephone rings and they are told that a girl has just committed suicide and an inspector is on his way over to ask some questions.

Key themes

GENERATIONAL DIFFERENCES

The older generation (Mr and Mrs Birling) are a symbol of Capitalism, so they do not change their ways and they are reluctant to accept blame for their role in Eva's demise. The younger generation, on the other hand (Sheila and Eric) become a symbol of Socialism as the play progresses. They accept blame and want to change; they change throughout the play, for the better.

RESPONSIBILITY / JUSTICE

The Inspector, as Priestley's mouthpiece, is a symbol of Socialism – he wants everyone to look after each other and to view community as very important. He is sent to uncover the family's wrongdoings and to make them see that they should take responsibility for others. Sheila and Eric realise this, but Mr and Mrs B do not.

GENDER INEQUALITY

Priestley wanted to show his audience that there was a lot of inequality back in 1912 when it came to how women were treated. By making certain characters out to be sexist, he highlighted this problem and tried to shame audiences into changing their own views about gender equality too. This is perhaps why the victim of their actions is a woman, and why she is working class (working class women were at the bottom of the pile in those times).

Key Quotes

'A man has to mind his own business and look after himself and his own-' Arthur Birling

'She was claiming elaborate fine feelings and scruples that were simply absurd in a girl in her position' – Sybil Birling

'I felt rotten about it at the time and now I feel a lot worse'- Sheila Birling

'I suppose it was inevitable. She was young and pretty and warm heart- and intensely grateful.- Gerald Croft

'You never understanding anything. You never did. You never even tried'- Eric Birling

'We don't live alone. We are members of one body. We are responsible for each other. And I tell you that the time will soon come when, if men will not learn that lesson, then they will be taught it in fire, blood and anguish.' – Inspector Goole

Characters

Mr Birling	Arrogant and Capitalist businessman who hates social equality and loves money. Sacks Eva from his factory when she asks for equal pay for women and threatens a strike.
Mrs Birling	Snobbish and cold-hearted Capitalist who believes everyone is responsible for themselves. Doesn't help Eva when she comes to the charity for help.
Inspector	Priestley's mouthpiece (represents JBP's ideals), keen Socialist who fights for community responsibility and gets the Birlings to face up to what they have done.
Sheila	The daughter. Gets Eva sacked from the shop for smirking at her. Starts off as a spoilt rich girl but quickly changes her views, feels sorry for Eva Smith and starts to become Socialist as the play progresses. Is ashamed of her parents at the end.
Eric	The son. Typical young man – drinks too much and has a one-night stand with Eva. Ends up getting her pregnant and steals from his dad to give Eva money. Regrets his actions and changes his ways. Ashamed of his parents at the end.
Gerald	Sheila's fiancé. Businessman who has Capitalist ideals and is similar to Mr Birling politically. Shows some regret for his affair with Eva, but happy to act like nothing has happened when it suits him.

Context

- When was ‘An Inspector Calls’ written?
- When was it set?
- Describe the British class system before the First World War.
- What is the difference between Socialism and Capitalism?
- Describe Priestley’s political beliefs.
- What did people in 1912 think about the Titanic? What happened to it?
- Which political party won power in the mid-1940s?
- How did the class system change after the two world wars?

Main Characters

Arthur Birling
- How is Arthur Birling described in the stage directions?
- What is Mr Birling’s job?
- Mr Birling is a symbol of _____ ?
- How does Mr Birling view Sheila’s engagement?

Sybil Birling
- How does Mrs Birling view her husband?
- What is Mrs Birling’s primary concern?
- Describe Mrs Birling’s personality.
- What does Mrs Birling’s committee do?

Sheila Birling
- Describe Sheila’s personality
- How is Sheila affected by the news of Eva Smith’s death?
- What was Sheila’s role in the death of Eva Smith?
- Describe the change in Shelia’s attitude as the play progresses.

Eric Birling
- How is Eric introduced? What are your first impressions of him?
- What was Eric’s role in the death of Eva Smith?
- Describe the change in Eric’s attitude as the play progresses.
- Why might Eric be most responsible for the family’s downfall?

Gerald Croft
- What is Gerald’s social status?
- What was Gerald’s role in the death of Eva Smith?
- Give a quotation that suggests Gerald may not have treated Eva fairly.

The Inspector
- Whose views does the Inspector represent?
- How do each of the character’s respond to the Inspector’s message?
- Give a quotation that summarises the Inspector’s attitude towards society.

Form

- Describe the conventions of a crime thriller.
- Describe the conventions of a Morality Play.
- Describe the conventions of a Well-Made Play.

Dramatic Devices

- What is dramatic irony?
- Give an example of how dramatic irony is used in ‘An Inspector Calls’
- How does Priestley use stage directions?
- Give one example of Preistley building dramatic tension.

Plot

Act 1
- What are the characters celebrating at the start of the play?
- Describe the lighting at the beginning of Act 1.
- Give one example of a prediction that Mr Birling makes.
- Mr Birling believes that “a man has to… look after _____”?
- How did Eva Smith commit suicide?
- Why do you think the inspector only shows the photograph to one person at a time?
- What is Arthur Birling’s connection to Eva Smith?
- What did Eva Smith change her name to?
- Why did Shelia have the girl fired from Milwards?

Act 2
- How does Sybil Birling describe the inspector’s questions?
- What does Sheila warn her mother about?
- What problem of Eric’s do Sheila and Gerald acknowledge?
- What is Gerald’s connection to Daisy Renton?
- Where did Gerald meet Daisy?
- What is Sheila’s reason for postponing the engagement?
- What was Sybil’s reason for refusing support to Eva Smith?
- Who does Mrs Birling believe is responsible for what happened?

Act 3
- Where did Eric steal the money from?
- What does the Inspector believe is required for society to survive?
- What is Arthur’s main worry about the girl’s death?
- What do the Birlings begin to suspect about the Inspector?
- How are their suspicions confirmed?
- Describe the difference between the response of Arthur and Sybil and that of the children.

Main Themes

Responsibility and guilt
- Which members of the family accept responsibility?
- Which do not?
- What is Priestley’s message to his audience?

Age
- What is the difference between the responses of the old and young characters to the Inspector?

Class and Gender
- Why is Eva Smith’s position in society ‘weakened’?
- How is the theme of social class introduced at the start of the play?
- How does Mrs Birling refer to Eva Smith?
- Why is Mr Birling dismissive of his factory workers?

The Supernatural
- How might the Inspector be considered a supernatural figure?

Key Vocabulary

For each of the words below, look up the definition, then write a sentence about ‘An Inspector Calls’ that uses the word.

dramatic irony
patriarchal society
patriarchy
responsibility
capitalism
socialism
bourgeoisie
suburban
prosperous
portentous
scaremonger
impertinent
foreshadowing
hypocrisy
collectivist
conscience
conservative
hierarchy
industrialist
materialistic
microcosm
omniscient
proletariat
superficial
unionisation

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English, Year 11
A Christmas Carol

Stave	Key Quotation	Info / Analysis
Stave One Marley's Ghost	Hard and sharp as flint	Description of Scrooge at start
	solitary as an oyster	Simile to convey his lone existence
	"I don't make myself merry at Christmas, and I can't afford to make idle people merry."	Shows his unsympathetic attitude to the poor ('idle') people.
	"It's enough for a man to mind his own business, and not to interfere with other people's."	He is obsessed with business and money.
	"I wear the chain I forged in life" *Jacob Marley*	A warning for Scrooge: Marley created his own eternal punishment through his greed.
Stave Two Ghost of Christmas Past	A solitary child, neglected by his friends, is left there still	Description of Scrooge as a child. How has his childhood affected him?
	"I have seen your nobler aspirations fall off one by one, until the master passion, Gain, engrosses you."	Scrooge's ex-fiancée (Belle) when she leaves him, because he is obsessed with 'Gain'.
	"Remove me!" Scrooge exclaimed. "I cannot bear it!"	Scrooge, just before extinguishing the ghost's light (he can't bear the truth).
Stave Three Ghost of Christmas Present	Scrooge entered timidly, and hung his head before this Spirit	Scrooge is more subdued when he meets the second ghost (Ghost of Xmas Present).
	"Oh no, kind Spirit! Say he will be spared"	Scrooge shows concern and sympathy for Tiny Tim.
	"To hear the insect on the leaf pronouncing on the too much life amongst his hungry brother in the dust!"	The Ghost reminds Scrooge of his earlier words about decreasing the population of the poor. He compares Scrooge to an insect.
	"This boy is Ignorance. This girl is Want. Beware them both."	The ghost warns Scrooge with **personification** / **symbols** of mankind's faults.
Stave Four Ghost of Christmas Yet To Come	plundered and bereft, unwatched, unwept, uncared for, was the body of this man	Description of the man on the deathbed.
	Avarice, hard dealing, griping cares? They have brought him to a rich end, truly!	Scrooge's **ironic** statement about the dead man, before he realises that he is looking at himself.
	"Men's courses will foreshadow certain ends"	Scrooge realises that his past behaviour will determine his future
Stave Five	"I don't know how long I have been among the Spirits. I don't know anything. I'm quite a baby."	Scrooge discards logic and is now carefree. He is a **transformed character.**
	Scrooge regarded everyone with a delighted smile.	He spreads good-will instead of fear and hatred.

Themes

Logic and Time: Scrooge's sense of logic is continually disrupted, helping to dismantle his cold and rational view of society. He initially dismisses the **supernatural** appearances, before then submitting to them. The ghosts are late to visit him, and then distort time as they seem to visit him all in one night – not over three nights as planned. This discarding of logic reflects Dickens' criticism of the heartless economical logic that was used to create the New Poor Law.

Compassion, Forgiveness and Reclamation: Dickens uses different characters to demonstrate compassion and forgiveness (Fred and Bob who feel pity for him) and how these people lead happy lives. In contrast, he shows the selfish nature of mankind in the dark and sinister Stave Four.

Poverty and Greed: Dickens wanted to highlight the plight of the poor in Victorian England, and how they are exploited by the greed of the wealthy. He used to harshness of winter to further emphasise this. He also uses Scrooge as a vehicle to show that financial wealth does mean contentment. Scrooge is impoverished in other ways (family, friends, happiness).

Isolation versus Family: We quickly learn that Scrooge ('solitary as an oyster') and Marley are isolated, and unhappy, characters. Scrooge was Marley's 'sole friend and sole mourner'. The warmth and emotional richness of families (Bob Cratchit's, Fred's, his ex-fiancée's) are used as a contrast to Scrooge's self-determined isolation. The disruption to Scrooge's childhood family life may have also contributed to his future behaviour. The message may be that family is the cornerstone of a happy society.

Transformation: The **novella** contains many examples of transformation: the transformation of young Scrooge into an embittered old man; his transformation to a benevolent man; the transformation of Marley from selfish human to eternally-suffering ghost; supernatural transformations; the transformation of the future – to save Scrooge and Tiny Tim. Dickens message may have been that it is never too late to change.

Dickens' message on poverty- Dickens had a comfortable childhood until the age of 12 when his father was sent to a debtors' prison and young Charles had to work in a factory. The harsh conditions made a lasting impression: through his works of social criticism, he sought to draw attention to the plight of the poor

The New Poor Law, 1834- In order to deter poor people from claiming financial help, the government made claimants live in workhouses: essentially, prisons for the poor. Dickens hated this concept. He spent 1843 touring factories and mines in England and wished to highlight the situation facing poor people. *A Christmas Carol* was published soon after – in **December 1843.**

Scrooge The protagonist who initially dismisses the goodwill and generosity associated with Christmas. After being forced to transform, he becomes a symbol of Christmas spirit in Stave Five. He is cheerful and benevolent. He is a dynamic character (a character who changes).

Bob Cratchit and family- Bob is Scrooge's downtrodden but loyal employee. His family are a symbol of Victorian poverty, cheerfulness in adversity, teamwork and Christmas Spirit. Bob shows pity for Scrooge, and provides a **contrast** to Scrooge's isolation and meanness.

Nephew Fred- The character of Fred serves as another **contrast** to Scrooge. He epitomises the Christmas spirit of goodwill and refuses to be discouraged by his uncle's misery. People (such as the Cratchits) speak highly of him and his generosity, in contrast to how they speak of Scrooge. Fred shows that Scrooge has chosen isolation.

The Ghosts- The ghosts are the **antagonists** to Scrooge. They force him to view his selfish and greedy ways, and to admit how his behaviour will lead to a lonely death ("Men's courses will foreshadow certain ends"): a metaphor for how the greed of the wealthy middle class will lead to a disastrous future for society.

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English, Year 11
A Christmas Carol- Questions

Stave	Key Quotation	Info / Analysis
Stave One Marley's Ghost	How is Scrooge presented as isolated in the opening stave of the novella? Use key quotes and ensure you full analyse Dickens' methods and intentions. How does Scrooge change throughout the novel?	
Stave Two Ghost of Christmas Past	A solitary child, neglected by his friends, is left there still	What technique does Dickens use here? What does it reveal about the impact of Scrooge's childhood on his later behaviour?
	"Remove me!" Scrooge exclaimed. "I cannot bear it!"	How might this quote suggest Scrooge is beginning to change? Why has Dickens chosen to place it so early on in the novella?
Stave Three Ghost of Christmas Present	"Oh no, kind Spirit! Say he will be spared"	How does Tiny Tim represent the poor during the Victorian period? What message might Dickens be trying to send to his reader with this line?
	"This boy is Ignorance. This girl is Want. Beware them both."	What social message does Dickens present through the characters of ignorance and want?
Stave Four Ghost of Christmas Yet To Come	plundered and bereft, unwatched, unwept, uncared for, was the body of this man	Write the opening to a short story using this description.
	Avarice, hard dealing, griping cares? They have brought him to a rich end, truly!	Why is this quote ironic? What does Scrooge learn from this realisation?
	"Men's courses will foreshadow certain ends"	How can this be seen as a message to the whole of society at the time? Define the term allegory and explain why this can be seen as an allegorical message.
Stave Five	Scrooge regarded everyone with a delighted smile. He spreads good-will instead of fear and hatred.- How has Scrooge transformed? Why does Dickens reveal this at the start of the novella? Find a quote from stave one and stave five that explore Scrooge's transformation. Hint- they are both similes. Define parallel syntax and explain why the contrasting quotes are an example of this.	

Themes

Logic and Time- Create a mind map, including key quotes, that explores this theme.

Compassion, Forgiveness and Reclamation:
A student having read A Christmas Carol said the following: "The novella is clearly about forgiveness and redemption" . How far do you agree with this statement. Answer this question in the style of a paper 1, question 4. If you need any support ask your English teacher.

Poverty and Greed: Find and analyse 4 key quotes that explore the theme of poverty and greed.
How did Marley's greed impact him in the after life?

How does this theme link to the context of the time and class inequalities? Is society still filled with poverty and greed today?

How do you think Dickens feels about the greed of the higher classes?

Isolation versus Family:

Summarise Dickens' message with regards to family?
How does this theme link to Scrooge's transformation?

Transformation: Create a dual coding poster, including key quotes, that represents Scrooge's transformation.

List 10 relevant contextual facts about the period that Dickens was writing in.

Research Karl Marx's ideas on communism and capitalist society. Do you think Dickens is critiquing capitalism?

Scrooge becomes a better person and gives to the poor (the Cratchitts). Is charity enough to end social inequalities between the rich and the poor? Fully explain your ideas.

Produce character summaries for the following, ensuring you explain how Dickens' present them and what message he conveys through these characters:
- Scrooge
- Marley
- Each of the Cratchitts
- Ghost of Christmas past, present and yet to come
- Fred
- Ignorance and Want

Mathematics Knowledge Organiser HT3
Year 11: Circle Theorems, Direct and Inverse Proportion and Graphs of Trigonometric Functions

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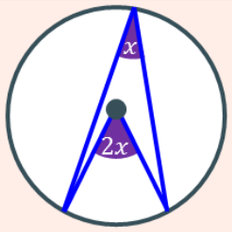
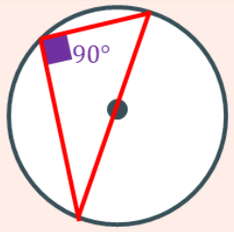
CIRCLE THEOREMS

Angle at the centre is twice the angle at the circumference



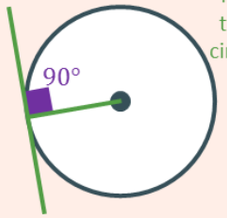
Look for the 'Arrow' Shape!

Angle subtended at circumference by a semicircle is 90°

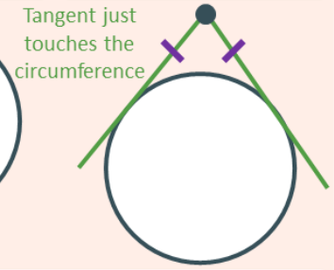


Opposite angle to the diameter!

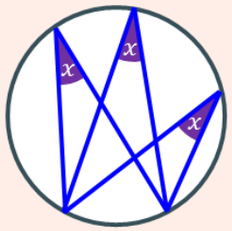
Tangents and radii meet at 90°



Tangents from a point have equal length

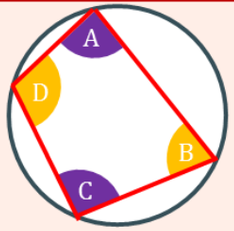


Angles in the same segment are equal



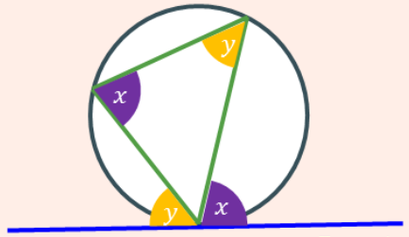
Look for the 'Bow' Shape!

Opposite angles in a cyclic quadrilateral sum to 180°



$A + C = 180°$ $B + D = 180°$

Alternate Segment Theorem



Tangent

DIRECT AND INVERSE PROPORTION

Direct Proportion

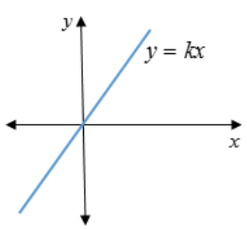
$y \propto x$

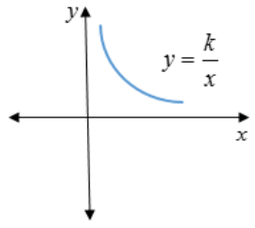
$y = kx$ for a constant k

Inverse Proportion

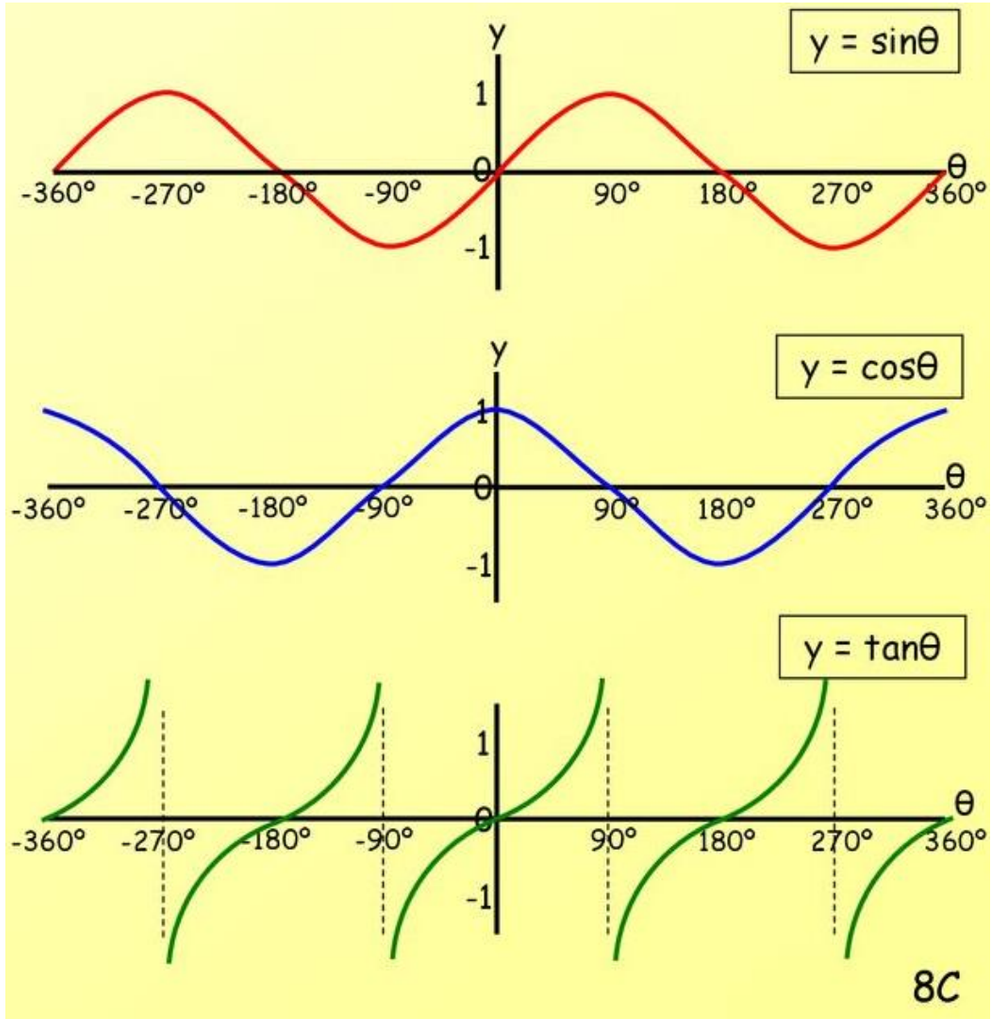
$y \propto \frac{1}{x}$

$y = \frac{k}{x}$ for a constant k





GRAPHS OF TRIGONOMETRIC FUNCTIONS

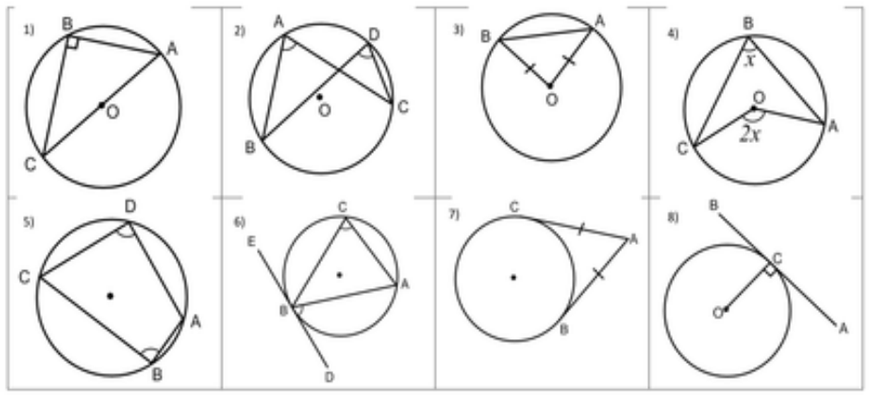


KEY VOCABULARY/TERMS

Proportion, Direct, Inverse, Circumference, Tangent, Radius, Cyclic, Quadrilateral, Segment, Sine, Cosine, Trigonometric, Function, Asymptote

Mathematics Knowledge Organiser HT3
Year 11: Circle Theorems, Direct and Inverse Proportion and Graphs of Trigonometric Functions

CIRCLE THEOREMS



A) Two tangents from the same point are equal length.	B) The angle between a tangent and a radius is 90^o at the point of contact.	C) Angles in the same segment are equal.	D) A triangle with two radii as sides is isosceles.
E) Opposite angles in a cyclic quadrilateral add up to 180^o	F) The angle between a chord and a tangent is equal to any angle in the opposite segment, lying on the same chord.	G) The angle in a semi-circle is 90^o	H) The angle at the centre is twice the angle at the circumference, subtended by the same arc.

Match these diagrams with the corresponding circle theorem

TASK) For each theorem state the key features in identifying it.

Example) G- You are looking for a diameter (line passing through the centre) forming one side of a triangle, where all three points are on the circumference.

DIRECT AND INVERSE PROPORTION

y is directly proportional to x, and y = 24 when x = 4.

What is the value of y when x = 3?

A 18

B 20

C 23

D 43

GRAPHS OF TRIGONOMETRIC FUNCTIONS

1. What is the value of sin(0)?
2. What is the value of cos (0)?
3. What is the value of tan(0)?
4. How are the graphs of sin and cos related?
5. What is an asymptote?
6. Where does the tan graph have asymptotes?
7. What is the period of tan (x)?
8. What is the period of sin(x) and cos(x)?
9. How does the transformation sin(2x) effect the period of the graph?
10. How does the transformation sin(x) +1 effect the graph?
11. How does the transformation sin(x+90) effect the graph?

KEY VOCABULARY/TERMS

Name as many parts of a circle as you can. Are there any prefixes/suffixes which could help you remember the words and their meanings?

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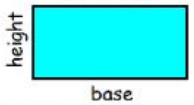
Mathematics Knowledge Organiser
Year 11 Foundation : Shape

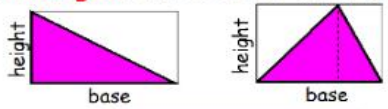
Area formula

rectangle



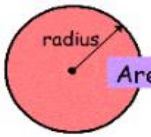
Area = base x height

a **triangle** is half the area of a rectangle



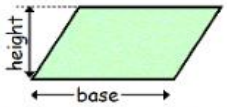
$\text{Area} = \frac{\text{base} \times \text{height}}{2}$

circle



$\text{Area} = \pi r^2$

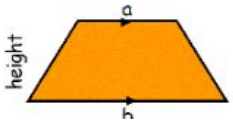
parallelogram



Area = base x height

trapezium

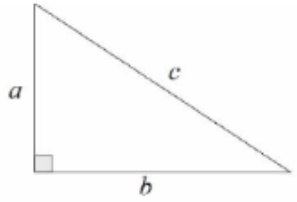
$\text{Area} = \frac{(a + b) \times h}{2}$



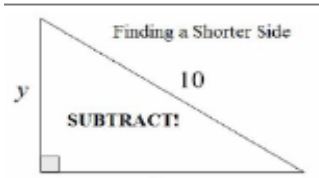
Pythagoras Theorem

For any **right angled triangle**:

$a^2 + b^2 = c^2$



Used to find **missing lengths**.
a and b are the shorter sides, c is the **hypotenuse (longest side)**.



$a = y,\ b = 8,\ c = 10$

$a^2 = c^2 - b^2$

$y^2 = 100 - 64$

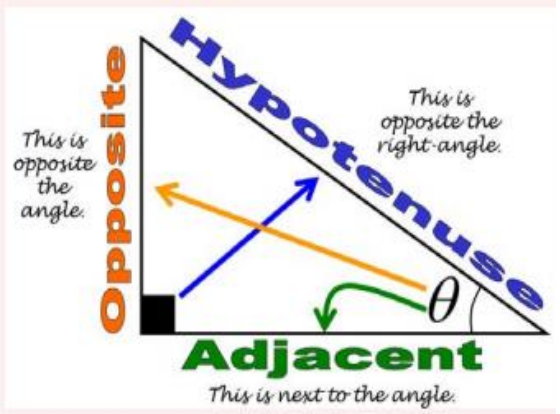
$y^2 = 36$

$y = 6$

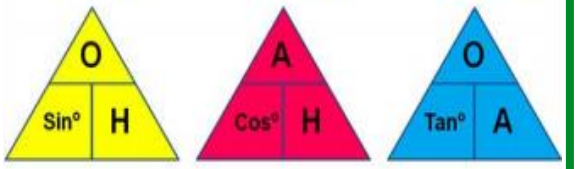
Exact trigonometry values

	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
tan	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Undefined

Trigonometry



SOH CAH TOA



KEY VOCABULARY

Area – the inside of a shape **Pythagoras Theorem – $a^2 + b^2 = c^2$**

Trigonometry – opposite side to the angle, adjacent is next to the angle, hypotenuse is opposite the RIGHT angle

SOHCAHTOA – sin = opp/hyp, cos = adj/hyp, tan = opp/adj

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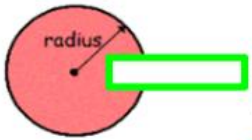
Mathematics Knowledge Organiser
Year 11 Foundation : Shape

Area formula

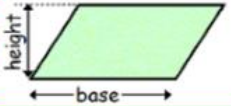
rectangle

a triangle is half the area of a rectangle

circle



parallelogram



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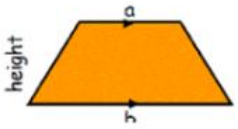
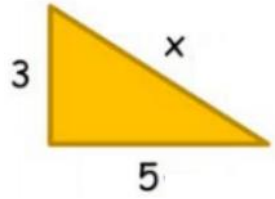
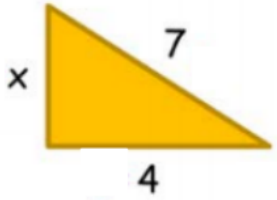


Pythagoras Theorem

What is the formula?

Which side is the hypotenuse: a, b or c?





Find the missing side

Exact trigonometry values

	0°	30°	45°	60°	90°
sin					
cos					
tan					

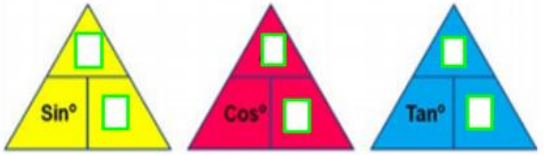
Can you remember the exact values?

Trigonometry

Find the missing angle

Fill in the gaps

S□ C□ T□



KEY VOCABULARY

Define 'Area' & 'Perimeter'

What is the formula for Pythagoras Theorem?

How do we recognise a trigonometry question?

USING RESOURCES PART 1

Key vocab = Purple

Using the Earth's resources and obtaining potable water

Using the Earth's resources and sustainable development

Earth's resources	***Used to provide warmth, shelter, food and transport for humans***	Natural resources and resources from agriculture provide: timber, food, clothing and fuels.
		Finite resources from the Earth, oceans and atmosphere are processed to provide energy and materials.
Sustainable development	***Development that meets the needs of current generations without compromising the ability of future generations to meet their own needs.***	
Finite resources	Resources that are being used up faster than they can be replaced. There is a limited amount.	
Renewable resources	A renewable energy resource is one that is being (or can be) replenished as it is used.	

Potable water

Sterilising agents include chlorine, ozone and UV light.

Potable water	***Water of an appropriate quality is essential for life***	Human drinking water should have low levels of dissolved salts and microbes. This is called potable water.
UK water	***Rain provides water with low levels of dissolved substances***	This water collects in the ground/lakes/rivers. To make potable water an appropriate source is chosen, which is then passed through filter beds and then sterilised.
Desalination (removing salt from seawater)	***Needs to occur if fresh water is limited and salty/sea water is needed for drinking***	This can be achieved by distillation or by using large membranes e.g. reverse osmosis. These processes require large amounts of energy.

Waste water treatment

Waste water	***Produced from urban lifestyles and industrial processes***	These require treatment before used in the environment. Sewage needs the organic matter and harmful microbes removed.
Sewage treatment	***Includes many stages***	- Screening and grit removal - Sedimentation to produce sludge and effluent (liquid waste or sewage). - Anaerobic digestion of sludge - Aerobic biological treatment of effluent.

Life cycle assessment and recycling

Life cycle assessment

LCAS	***Life cycle assessments are carried out to assess the environmental impact of products***	They are assessed at these stages: - Extraction and processing raw materials - Manufacturing and packaging - Use and operation during lifetime - Disposal

Ways of reducing the use of resources

Reduce, reuse and recycle	***This strategy reduces the use of limited resources***	This, therefore, reduces energy sources being used, reduces waste (landfill) and reduces environmental impacts.
Limited raw materials	***Used for metals, glass, building materials, plastics and clay ceramics***	Most of the energy required for these processes comes from limited resources. Obtaining raw materials from the Earth by quarrying and mining causes environmental impacts.
Reusing and recycling	***Metals can be recycled by melting and recasting/reforming***	Glass bottles can be reused. They are crushed and melted to make different glass products. Products that cannot be reused are recycled.

Alternative methods of extracting metals (HT)

Metals ores	***These resources are limited***	Copper ores especially are becoming sparse. New ways of extracting copper from low-grade ores are being developed.
Phytomining	***Plants absorb metal compounds***	These plants are then harvested and burned; their ash contains the metal compounds.
Bioleaching	***Bacteria is used to produce leachate solutions that contain metal compounds***	The metal compounds can be processed to obtain the metal from it e.g. copper can be obtained from its compounds by displacement or electrolysis.

Chemistry Knowledge Organiser
Using resources part 1

Self Quizzing Questions

1. Name 3 things humans use Earths resources to provide.
2. What is sustainable development?
3. What is meant by a finite resource?
4. What is meant by a renewable resource?
5. Give 2 examples of finite resources.
6. Give 2 examples of renewable resources.
7. What is potable water?
8. Is potable water the same as pure water?
9. Where does most of the potable water in the UK come from (freshwater, seawater or wastewater?)
10. What are the 2 steps to treat freshwater and make it potable?
11. Name the 3 sterilisation agents that can be used to sterilise freshwater.
12. What do we call removing salt (sodium chloride) from seawater?
13. Name 2 methods we can use to remove salt from seawater.
14. Why is it more expensive to make seawater potable than to make freshwater potable?
15. How is wastewater produced?
16. Name 2 things that need to be removed from wastewater.
17. Name 2 stages of sewage treatment.
18. Why are life cycle assessments carried out?
19. Name 2 stages of a LCA.
20. What strategy is used to reduce the use of limited resources?
21. Name 2 products that are made using limited resources.
22. How can metals be recycled?
23. Name a product that can be reused.
24. What 2 steps happen to glass bottles so they can be used as other glass products?

HIGHER TIER ONLY

25. Why are scientists developing new ways to extract copper from low-grade ores?
26. What is phytomining?
27. Describe how phytomining works.
28. What is bioleaching?
28. Describe how bioleaching works.

Using resources part 2

Key vocab = Purple

Corrosion and its prevention

Corrosion	*The destruction of materials by chemical reactions with substances in the environment*	An example of this is iron rusting; iron reacts with oxygen from the air to form iron oxide (rust) water needs to be present for iron to rust.
Preventing corrosion	*Coatings can be added to metals to act as a barrier*	Examples of this are greasing, painting and **electroplating**. Aluminium has an oxide coating that protects the metal from further corrosion.
Sacrificial corrosion	*When a more reactive metal is used to coat a less reactive metal*	This means that the coating will react with the air and not the underlying metal. An example of this is zinc used to **galvanise** iron.

Alloys are useful materials

Alloys	***A mixture of two elements, one of which must be a metal e.g. Bronze is an alloy of copper and tin and Brass is an alloy of copper and zinc.***
Gold carats	***Gold jewellery is usually an alloy with silver, copper and zinc. The carat of the jewellery is a measure of the amount of gold in it e.g. 18 carat is 75% gold, 24 carat is 100% gold.***
Steels	***Alloys of iron, carbon and other metals.***
	High carbon steel is strong but brittle.
	Low carbon steel is softer and easily shaped (malleable).
	Steel containing chromium and nickel (stainless) are hard and corrosion resistant.
	Aluminium alloys are low density.

Ceramics, polymers and composites

Polymers	*Thermosetting*	polymers that do not **melt** when they are heated.
	Thermosoftening	polymers that melt when they are heated.
Composite materials	*A mixture of materials put together for a specific purpose e.g. strength*	**Soda-lime glass**, made by heating sand, sodium carbonate and limestone.
		Borosilicate glass, made from sand and boron trioxide, melts at higher temperatures than soda-lime glass.
		MDF wood (woodchips, shavings, sawdust and resin)
		Concrete (cement, sand and gravel)
Ceramic materials	*Made from clay*	Made by shaping wet clay and then heating in a **furnace,** common examples include pottery and bricks.
Polymers	*Many monomers can make polymers*	These factors affect the **properties** of the polymer. Low density (LD) polymers and high density (HD) polymers are produced from ethene. These are formed under different conditions.

Using materials

Production and uses of NPK fertilisers

NPK fertilisers	*These contain nitrogen, phosphorous and potassium*	**Formulations** of various salts containing appropriate percentages of the elements.
Fertiliser examples	*Potassium chloride, potassium sulfate and phosphate rock are obtained by mining*	Phosphate rock needs to be treated with an acid to produce a **soluble** salt which is then used as a fertiliser. Ammonia can be used to manufacture ammonium salts and nitric acid.

Phosphate rock	
Treatment	*Products*
Nitric acid	*The acid is neutralised with ammonia to produce ammonium phosphate, a NPK fertiliser.*
Sulfuric acid	*Calcium phosphate and calcium sulfate (a single superphosphate).*
Phosphoric acid	*Calcium phosphate (a triple superphosphate).*

The Haber process and the use of NPK fertilisers

The Haber process

The Haber process – conditions and equilibrium	
Pressure	***The reactants side of the equation has more molecules of gas. This means that if pressure is increased, equilibrium shifts towards the production of ammonia (Le Chatelier's principle). The pressure needs to be as high as possible.***
Temperature	***The forward reaction is exothermic. Decreasing temperature increases ammonia production at equilibrium. The exothermic reaction that occurs releases energy to surrounding, opposing the temperature decreases. Too low though and collisions would be too infrequent to be financially viable.***

The Haber process	*Used to manufacture ammonia*	***Ammonia is used to produce fertilisers*** Nitrogen + hydrogen ⇌ ammonia
Raw materials	*Nitrogen from the air while hydrogen from natural gas*	Both of these gases are purified before being passed over an iron catalyst. This is completed under high **temperature** (about 450°C) and **pressure** (about 200 atmospheres).
Catalyst	*Iron*	The catalyst speeds up **both** directions of the reaction, therefore not actually increasing the amount of valuable product.

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Chemistry Knowledge Organiser
Using resources: Part 2 Yr 11

Self Quizzing Questions

1. Define corrosion.
2. Define sacrificial corrosion.
3. Describe galvanisation.
4. Give 3 ways of preventing corrosion by using a barrier.
5. Why does aluminium not corrode?

In the exam you will also have to describe and interpret experiments, to prove water and air are required to form rust.

5. Define an alloy.
6. Describe what is used to make Brass.
7. Describe what is used to make Bronze.
8. Describe what is used to make Gold jewellery.
9. What does 24 carat gold mean?
10. Which element is mixed with iron to make steel?
11. What is a property of high carbon steel?
12. What is a property of low carbon steel?
13. What is added to iron to make stainless steel?
14. Why are aluminium alloys so useful?

In the exam you will be asked to recall and match the properties of alloys to their uses.

15. Describe the difference between thermosetting and thermosoftening polymers.
16. Define a composite material.
17. Explain why borosilicate glass is used to make test tubes.
18. How do make soda lime glass?
19. How do we make borosilicate glass?
20. What is used to make Medium density fibreboard?
17. What is used to make concrete?
18. What do we need to make ceramic materials?
19. What do we need to make LD and HD polymers?
20. What do LD and HD mean in polymers?

In the exam you will be asked to recall and match the properties of composite materials to their uses.

In the exam you will be asked to compare properties of composite materials using data and charts to select the best material for a job.

25. What does the Haber process produce?
26. Recall the raw materials for the Haber process and state where they come from?
27. What 2 conditions are needed in the Haber process?
28. What is the catalyst in the Haber process and why is it used?
29. Why is ammonia an important product?
30. HT why do we need to use as high a pressure as possible?
31. HT Why do we need to use as low a temperature as possible?

HT: In the exam you will be asked to interpret graphs comparing temperature, pressure and rates of the forward and reverse reaction.

32. Which 3 elements make up NPK fertilisers?
33. What do we have to do to phosphate rock to make a fertiliser?
34. What is made when phosphate rock reacts with nitric acid?
35. What is made when phosphate rock reacts with sulfuric acid?
36. What is made when phosphate rock reacts with phosphoric acid?

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Biology Knowledge Organiser
Year 11:Ecology

Ecology: eco- (Gk. OIKOS, house) + -logy (the study of)

Food chains

Producers produce their own food using the suns energy	**Primary consumers** eat producers (herbivores)	**Secondary consumers** eat primary consumers (carnivore/omnivore)	**Tertiary consumers** eat secondary consumers (carnivores)

A food web is the interaction of multiple food chains within a habitat

Photosynthetic organisms are the producers of biomass for life on Earth

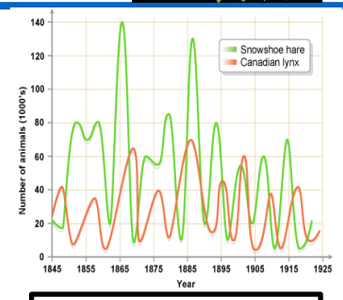
Environmental changes can be categorised in 3 ways

1.Seasonal Changes e.g. changes in temperature or conditions can affect the distribution of organisms (migration).

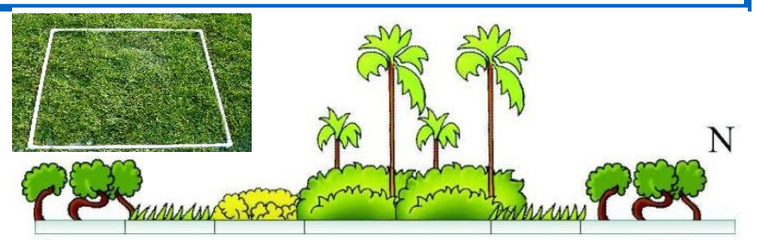
2.Geographical Changes e.g. differences in soil, altitude, saltiness of water and availability of water. Plants and animals usually have very specific adaptations to deal with geographical conditions.

3.As a result of human interaction e.g. global warming and climate change.

Human activity can have a positive impact on biodiversity
Scientists and concerned citizens can put in place programmes to reduce the negative impacts of humans on ecosystems and biodiversity
Breeding programmes for endangered species.
Protection and regeneration of rare habitats.
Reintroduction of field margins and hedgerows in agricultural areas where farmers grow only one type of crop.
Reduction of deforestation and CO_2 emissions by some governments.
Recycling resources rather than dumping waste in landfill.

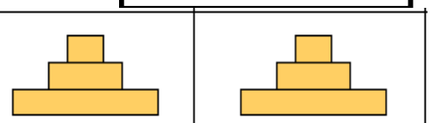


In a stable community the numbers of predators and prey rise and fall in cycles.



Sampling techniques methods are used to determine the distribution and abundance of a species.		
	Quadrats	Shows the distribution of different organisms in an environment. A grid is created of the area and each square of the grid assigned a number. You use a random number generator to chose your squares to avoid bias and place your quadrat on these points. Count the number of organisms in your quadrat
	Transects	Shows how the distribution of organisms change across an area. Use a tape measure to measure the area and place quadrats at equal intervals along the transect

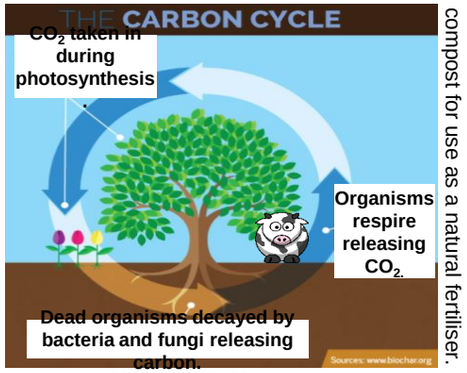
Pyramid of biomass compares the mass of biological material at each trophic level



Materials are recycled to provide the building blocks for future organisms

Organisms require a supply of materials from their surroundings.

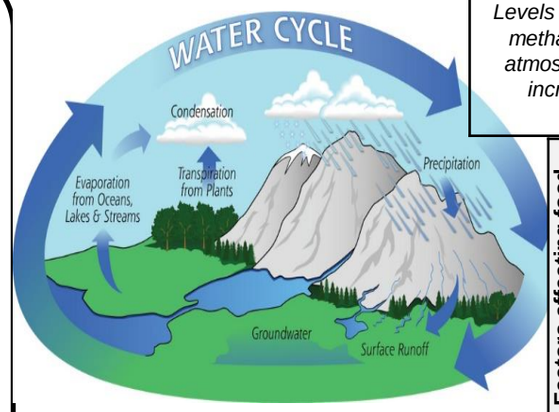
Breakdown of dead organisms releases mineral ions into the soil.



Anaerobic decay in biogas generators produces methane gas, used as a fuel.

Farmers optimise conditions for making compost for use as a natural fertiliser.

Bacteria respire when breaking down dead organisms releasing CO_2.



Global Warming *Levels of CO_2 and methane in the atmosphere are increasing.*	**Decreased land availability from sea level rise, temperature rise damages delicate habitats, extreme weather events harm populations of plants and animals.**

Factors affecting food security ***Enough food is needed to feed a changing population***
Increasing birth rate.
Changing diets in developing countries.
New pests and pathogens affecting farming.
Environmental changes e.g. famine when rains fail.
Cost of agriculture input.
Conflicts (war) affecting water of food availability

Organisms adaptations enable them to survive in conditions where they normally live. Adaptations may be structural, behavioural or functional.

	Adaptations		
	Plants	*Animals*	*Extremophiles*
	Cactus in dry, hot desert	Polar bear in extreme cold artic	Deep sea vent bacteria
	No leaves to reduce water loss, wide deep roots for absorbing water.	Hollow hairs to trap layer of heat. Thick layer of fat for insulation.	Populations form in thick layers to protect outer layers from extreme heat of vent.

KEY VOCABULARY/TERMS

Biodiversity
Incomplete combustion
Recycle
Sustainable
Deforestation
Conservation
Behavioural adapation

Functional adaptation
Extreme environment
Extremophile
Sampling
Quadrat
Transect
Producer
Biomass
Consumer

Population
Community
Competition
Interdependence
Abiotic
Biotic
Invasive species
Ecosystem
Structural adaptation

Biology Knowledge Organiser
Year 11: Ecology

Self quizzing questions

1. Describe the different levels of organisation in an ecosystem. Write definitions for each level
2. Describe the importance of interdependence and competition in a community
3. Suggest factors for which plants compete
4. Suggest factors for which animals compete
5. What is a stable community?
6. What is an abiotic factor? Name seven
7. What is a biotic factor? Name four
8. What is an adaptation? What are the three types of adaptation?
9. Explain how a polar bear is adapted to its environment
10. Describe the extreme environments
11. What is an extremophile?
12. **Required Practical:** Measure the population size of a common species in a habitat using sampling techniques
13. Explain the carbon cycle
14. Explain the water cycle
15. What are the effects of temperature, water and availability of oxygen on the rate of decay?
16. What is anaerobic decay?
17. What is a biogas generator?
18. **Required Practical:** Investigate the effect of temperature on the rate of decay of fresh milk by measuring the pH change
19. Describe three environmental changes that can affect the distribution of a population in an eco-system
20. What is biodiversity?
21. Why the amount of waste is produced increasing?
22. What effect does waste have on biodiversity?
23. Explain how excess fertiliser can lead to a reduction in biodiversity
24. Explain how landfill can lead to a reduction in biodiversity
25. Name four human activities that leads to a reduction in the amount of land for habitats
26. Why has deforestation taken place?
27. Which gases are contributing to global warming?
28. Describe the different trophic levels in a food chain
29. Explain what a pyramid of biomass is
30. Roughly how much energy is passed between each trophic level?
31. Why is energy (biomass) lost between each trophic level?
32. What is food security?
33. Describe some intensive farming methods and the disadvantages of them
34. Why is it important to maintain fish stocks?
35. Describe two sustainable fishing methods
36. Describe three biotechnology methods to improve food security

KEY VOCABULARY

Learn the spelling of key words by using the look, cover, write, check method.

Look each word up in a dictionary. Write the dictionary definition down. Try to reword it in your own words. Use the word in a new sentence of your own.

Write a summary of the story using at least 10 of the key words/phrases.

Challenge – find out the etymology and morphology of some of the key vocabulary for this topic


EBACC

GCSE Computer Science
Topic 2.3 Robust Programs

Why defensive design?
Helps to ensure programs function properly.
- ✓ Not breaking
- ✓ Not producing errors

3 elements of Defensive design:
- Anticipate how users might '**misuse**' their program to prevent it from happening.
- Ensure their code is **well maintained**.
- Reduce the numbers of errors in the code through **testing**.

Planning for contingencies / anticipating misuse
- Computer programs should be designed to COPE with unexpected or erroneous input from users.
- Coders should PLAN for all contingencies that might occur. (accidental and deliberate inputs)

Input validation: Validation checks that data input is sensible, reasonable and appropriate to be processed by the program.

Presence check: Checks that data has actually been entered and the field has not been left blank..

Length check: Checks that a specified number of characters has been entered.

Range check : Checks that the input falls within a certain range. e.g. 1-100

Type check : This checks that the data inputted is a certain data-type e.g. number or letters.

Format check :
Checks that the input is in the correct format e.g.
National insurance number XX999999X

Input sanitisation :
Removes any unwanted characters BEFORE passing the data to the program.

Authentication is determining the identity of the user before they can access the program or parts of the program.
This is usually based upon a username and associated password.
TOO MUCH AUTHENTICATION CAN:
- *Affect the functionality of the system.*
- *Can put people off using it.*

Maintainability:
Keeping the code well maintained aids defensive design as it means when editing, improving or testing the code – it is clear and easy to understand what the code should be doing.

Commenting:
#Usually written with // or #
#Comments are useful for explaining what key features of a program do.
#Well written/clear comments are essential in allowing other programmers to understand your program.

Indentation :
This is used to separate different statements in a program. This allows other programmers to see the flow of a program more clearly and pick out the different features.
Indentation is usually used to show which statements are part of a previous line of code.
E.g. with ***selection*** and ***iteration***.

Test Plan	A test plan will outline exactly what you're going to test and how you are going to test it. It should cover all the possible paths through a program.
Normal data	Data that the user is LIKELY to input into the program. Data that the program should be able to process.
Extreme / Boundary data	Values at the limit of what the program should be able to handle. This data should still be able to be processed by the program.
Erroneous data	Data that the program should not accept; usually the wrong data type.

Naming Variables:
Variables should be named so that they reflect their purpose.
This helps other programmers keep track and recognise what the variables are when reading /using the program.

- **Testing** ensures that the software produces the expected results and meets the needs of the user.
- Testing makes sure the program is robust.
- Testing should be destructive and should try to find errors rather than just proving the program works.

ITERATIVE TESTING: Tests carried out whilst the program is being developed. The test results are then used to guide further improvements.

FINAL TESTING: This is carried out once the software has been developed.
Alpha testing is done by the developers.
Beta testing is carried out by the potential users of the software.

A **syntax error** occurs when the compiler or interpreter doesn't understand something the user has typed because it doesn't follow the rules or grammar of the programming language. Syntax errors produce a error message which details what is wrong and which line of code contains the error.

Logical errors: The interpreter / compiler will be table to run the code, but the program will do something unexpected.
E.g. using the wrong Boolean operator.
Logical errors are difficult to diagnose / track down.
Logical errors can only be found through testing, using a test plan.

GCSE Computer Science - Topic 2.3 Robust Programs

What I need to know:

Explain the programmers defensively design programs.
State the 3 elements of defensive design.
Explain what planning for contingencies involves.
Describe input validation.
State the function of a presence check.
State the function of a length check.
State the function of a range check.
State the function of a type check.
State the function of a format check.
Describe input sanitisation.
Define authentication.
Explain what is meant by maintainability.
Describe how commenting helps improve maintainability.
Describe how indentation helps improve maintainability.
Describe how variable names help improve maintainability.
Explain why programs are tested.
Describe iterative testing.
Describe final testing.
State what is meant by a syntax error. Give an example.
State what is meant by a logical error. Give an example.
Describe what is meant by a test plan.
What are the three types of data a program should be tested with?
Define normal, extreme and erroneous data.

A retailer keeps a database of its loyalty card holders. The retailer stores the following data for each loyalty card holder: name, age, postcode and customer number.

Name	Age	Postcode	Customer No.
Carol Foreman	20	NE85 3TW	100278
Peter Taylor	55	HA55 8PZ	223327

b) Give **two** suitable input validation checks for an entry in the age field.

1 .....

2 .....

Tiffany writes some code to check if an entered pincode is between 4 and 6 characters long.

```
STRING pincode
INPUT pincode
IF pincode.length >= 4 OR pincode.length <= 6 THEN
   print("Valid pincode"
ELSE
   print("Not a valid pincode, please try again")
ENDIF
```

a) Identify the syntax error in Tiffany's code and suggest how she could correct it.

Error .....

Correction .....

[2]

b) Identify the logic error in Tiffany's code and suggest how she could correct it.

Error .....

Correction .....

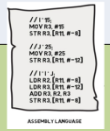
[2]

Malcolm wants to prevent users from putting spaces in the flight numbers.
Give an example of how he can do this using defensive design.

.....

GCSE Computer Science
Topic 2.4 Translators and facilities of languages

Low Level		High Level
Machine Language	Assembly Language	Python, C, C++, Java, SQL, HTML etc.
Binary Programs are written as millions of 1s and 0s.	Each command word represents one binary instruction in machine code. ADD e.g. is used to replace the binary command 1011 0000	Resemble human language. Keywords used e.g. print, if, input. Deal with logic not how the CPU / Memory works.



ASSEMBLY LANGUAGE	HIGH Level
Used by embedded systems as it is used to control system hardware. Used in real-time systems where speed is essential. Specific code per CPU – Programs written in for one type and cannot be used on others.	Most software is developed. Programs are portable from one machine to another. Can be used on different models of CPU.

LOW level	HIGH Level
1 instruction in assembly = 1 in machine code.	1 instruction in high level = many instructions of machine code.
Written for 1 type of machine.	Same code will work on many different machines/processors.
The programmer needs to know about the specifics of the CPU.	The programmer doesn't need to know about the CPU.
Code is difficult to read, understand and modify.	Code is easy to read, understand and modify.
Commands in machine code can be executed directly without the need for a translator.	Must be translated into machine code before a computer can understand it.
Machine code controls exactly what the CPU does/ how it uses memory so programs will be memory efficient and faster.	You don't have control over the CPU does, so programs will be less memory efficient and slower

	Translators of High Level Code	
Assembler	Compiler	Interpreter
Assemblers are used to turn assembly language into machine code. They just have to assemble the mnemonics then turn them into machine code instructions. *Remember – 1 assembly instruction per machine language command.*	Compiler translates high level code in one go. It compiles the program first then executes it so it can be processed quicker. It creates an executable file of 'compiled code' which protects the source code from being viewed by others. Errors reported at the end.	An interpreter translates line by line and is required each time the program is run. When an error is encountered, the translation process is halted and the error is reported to the programmer. Easier to debug but slower as needs to be translated each time it is run. Easy to edit as source code is always available.

IDEs: A piece of software that provides a **combination** of tools to help the programmer develop their program.

The 5 main features of IDEs

Editors: This is where the code is written.
Line numbering, colour coding, auto-indentation.
Some IDEs have auto-correct and auto-complete

Run-time environment
Allows the code to be RUN within the IDE.

Error diagnostics / debugging tools help the programmer identify syntax errors.

They provide the location and type of error encountered.

Translators: **Compiler** / **interpreter** or both.

Which translates the program code into machine code within the IDE.

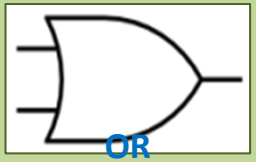
GCSE Computer Science
Topic 2.5 Computational Logic

Computers are DIGITAL .
Digital signals can only be ON or OFF.
Computers use binary to represent this:
1 = ON, 0 = OFF

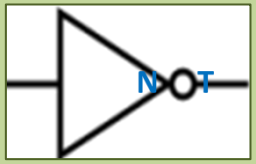
Logic gates are special switches built into computer chips that use transistors

They receive binary data 1s and 0s.
Apply a Boolean operation: AND, OR, NOT.
Then output a binary result: either 1 or 0

1 AND 1 = 1
Any other inputs = 0
∧



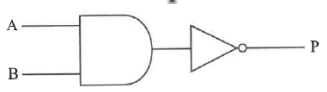
1 OR more 1s
INPUTTED = 1 OUTPUT.
∨



If 1 is INPUT,
it is **NOT** 1 on OUTPUT.
¬

Multiple logic gates can be added to the same circuit to carry out different operations.
You can work out the truth tables by working through each gate, in order.

State the input values when output P is 0.



A = 1 B = 1 [1]

GCSE Computer Science
Topic 2.4 Computational Logic & 2.5 Translators and facilities of languages

What I need to know:

State the two levels of programming language.
Describe the key features between machine, assembly and high level language.
Describe the uses of assembly language and high level language.
Describe the differences between high level and low level languages.
Outline the function of an assembler.
Outline the function of a compiler.
Outline the function of an interpreter.
State what IDE stands for.
Explain what an IDE is used for.
Describe the 5 main features of an IDE.
Explain why computers use binary.
Describe what a logic gate is.
Draw and label the 3 main logic gate symbols.
Draw a truth table to show the inputs and outputs for each logic gate.
Draw a logic diagram with multiple gates and explain how to work out the input/output combinations.

Natasha needs to translate her program into machine code. Outline **two** differences in the way a compiler and interpreter would translate her program.

A logic gate can be written as P = A AND B.

a) State the value of input B when input A is 1 and output P is 0.

B = ...

Two truth tables are given below. A and B are inputs. P and Q are outputs.

Draw the correct logic gates for each of these truth tables.

a)

A	P
0	1
1	0

[1]

b)

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	1

[1]

A series of transistors make the two-level logic circuit (NOT A) AND (B AND C).

a) Complete the truth table below.

A	B	C	NOT A	B AND C	(NOT A) AND (B AND C)
0	0	0			
0	0	1			
0	1	0			
0	1	1			
1	0	0			
1	0	1			
1	1	0			
1	1	1			

[3]

Unit 2a AQA GCSE Geography
Urban issues and challenges
(Part 5 – Urban growth in the UK:
Liverpool - Introduction and opportunities)

What is Liverpool like?

Liverpool is a port city in the north West of England. It is located on the estuary of the River Mersey. It became an important port as part of the triangular trade of goods and slaves between Britain, Africa and the West indies in the 1970s. Manufacturing thrived until the 1960s when factories closed causing unemployment, deprivation and migration.

How important is Liverpool?

Nationally	Internationally
• HM **passport office** • Maersk Line UK headquarters • **Two universities** – Liverpool John Moores and University of Liverpool attracting **50 000 students per year**. • **Liverpool 2 container port**: gateway for imports and exports	• **European capital of culture** in 2008 • Industries exporting to the world e.g. **Halewood Jaguar plant** • **Liverpool International Music Festival** • **Alderhey** Children's hospital • Birthplace of the **Beetles**

Why has Liverpool grown?

The rapid urbanisation has been caused by **migration**

Regional Migration	• From other parts of the UK such as **Wales** in the **late 1800s** for work in the construction of docks and warehouses. This has impacted the accent and names of some streets. • From rural areas of the north west looking for work in factories and now service industries.
International migration	• From China in the 1800s as trade with china grew. • From Ireland in the 1700s due to the potatoes famine. People who were looking for passage to America often stayed. • More recently migration has been from Latin America (Bolivia, Colombia, Brazil and Peru) creating the largest Latin American community outside London.

What opportunities has urban growth created?

Social and economic

Cultural mix

- The ethnic diversity brought through immigration has created a range of foods, festivals and cultural experiences: Britain's first China Town, Irish Festival and the Brazillica festival.

Recreation and entertainment

- Liverpool ONE : contemporary open-air complex for shopping, eating, drinking and relaxing.
- Liverpool and Everton football clubs
- Liverpool Echo arena: hosting concerts and exhibitions
- Annual music and cultural festivals: African Oye festival for over 25 years - African and Caribbean culture

Employment

- Liverpool 2 container port opened in 2016
- A growth of creative industries (art, film making and digital design) in the 'Baltic triangle' area.
- Tourism and the service sector (health and finance) provide the most jobs

Integrated transport systems

- Mersey travel operates the all the bus, trains and ferry networks. A prepaid card can be used across all the networks making travel easier.
- Trains from Liverpool Lime Street connect to the rest UK
- Liverpool john Lennon airport connects Liverpool to many cities in Europe

Environment

Urban greening

- 16.4% of the city is green space = 10km²
- The location, accessibility and quality of parks varies.
- £3.4 million pounds invested 'green corridors' throughout the city (Urban Greenup). Plans include planting trees and vertical gardens where plants grow on green walls.
- They should cut pollution by offering walking and cycling routes across the city.
- New developments also include green spaces. E.g. Liverpool 1 – Chavasse park

Unit 2a AQA GCSE Geography
Urban issues and challenges
(Part 5 – Urban growth in the UK: Liverpool - Introduction and opportunities)

Unit 2a AQA GCSE Geography
Urban issues and challenges
(Part 6 – Urban growth in the UK:
Liverpool - Challenges)

What challenges has urban change created?

The industrial decline in the UK lead to many industries relocating overseas or to the rural-urban fringe. In Liverpool, this saw the closing down of the port in 1972 and then the factories and warehouses which relied on it. As social mobility increased lots of people migrated to the suburbs. As a result the inner city and CBD areas declined with many derelict buildings, more and more people commute to work and there is more pressure on land and services in the rural-urban fringe.

What are the social and economic challenges?

There are inequalities in wealth, education, health, employment and housing across Liverpool. We compared **Allerton** and **Toxteth**.

Urban deprivation	The degree to which an area is deprived of services, decent housing, adequate income and local employment.
Inequalities	Differences between poverty and wealth, as well as in peoples' wellbeing and access to things like jobs, housing and education.

Area of Liverpool	Allerton	Toxteth
Free school meals	11%	34%
unemployment	2.1%	3%
Meeting expectations (KS2)	59%	46%
Life expectancy	81.2 years	76.0 years
Semi-detached house value	£187 000	£121 000
Crimes per 1000	70	250

What are the environmental challenges?

Dereliction	Abandoned buildings and wasteland.

Dereliction results from factories, warehouses and homes being abandoned as they become useless or are condemned. It leads to graffiti, vandalism and pest-control issues and can devalue neighbouring property.

Brownfield site	Land that has been used, abandoned and now awaits some new use.
Greenfield site	A plot of land which has not yet had any building development.

Brownfield sites are often found in the CBD and inner city whereas greenfield sites are often found on the rural-urban fringe.

Brownfield site development	Greenfield site development
✓ Run down areas are **redeveloped** and listed buildings preserved	✓ New homes can be built **quickly and cheaply**
✓ City centre gets **revitalised** as people live and socialise there	✓ Gives **good access** to the city for commuters
✓ Reduces need to build on greenfield sites	✓ Live in a **pleasant environment**
? **Expensive** to clear and decontaminate land	? Natural habitats are **destroyed**
? Not always suitable for families	? **Congestion and pollution** increase
	? Increased **pressure** on local services
	? Increased **flood risk**

Waste Disposal has become an increasing issue as the population has grown. Kerbside collections have reduced the waste going to landfill at Arpley, near Warrington ,with recyclables being processed at the waste recycling centre in the Old Swan area. Some waste is processed nationally and internationally.

What impact has urban sprawl had on the rural-urban fringe?

Commuter settlement	Where people live and travel elsewhere for work.
Urban sprawl	The unplanned growth of urban areas into the surrounding countryside

Huge pressure to build in these areas as 12 000 new homes in 5 years are needed. Permission has been given to build new homes on greenfield sites in **Skelmersdale** as it is not in the greenbelt. **The greenbelt** prevents urban sprawl which would join Liverpool and Manchester and maintains green spaces.

Unit 2a AQA GCSE Geography
Urban issues and challenges
(Part 6 – Urban growth in the UK: Liverpool - Challenges)

Name the two areas of Liverpool we are comparing.			
Name one social and one economic challenge in Toxteth.			
Name one economic and one social challenge in Allerton.			
Give two advantages and two disadvantages of building on a brownfield site			
Give two advantages and two disadvantages of building on a brownfield site			
What is urban sprawl?			
What is urban deprivation?			
What does the greenbelt do?			
What are inequalities?			
Define the term 'greenfield sites'.			
Define the term 'dereliction'.			
Define the term 'brownfield sites'.			
Which area of Liverpool has the highest crime rates?			
When and why did the Port of Liverpool close?			
What is happening in Skelmersdale? Why?			
What impact did the closing of the Port of Liverpool have?			
In which areas to inequalities exist between Allerton and Toxteth?			
Calculate the difference between number of children on free school meals in Toxteth and Allerton			
Describe what is happening in the rural-urban fringe			
Compare the areas of Allerton and Toxteth			
'All areas of Liverpool are equally developed'. Do you agree with this statement? Explain why.			
In your opinion is it better to build on a greenfield or brownfield site? Justify your answer.			

IN UNITY WE SUCCEED
ACADEMY BLACKPOOL

History Knowledge Organiser
Elizabeth 3 - Troubles at home and abroad

Key individuals

Mary Queen of Scots - heir to the throne of England
Pope Pius V - excommunicated Elizabeth
Sir William Cecil - Secretary of State
Cardinal William - Allen - involved in the Throckmorton Plot and Spanish Armada
Edmund Campion - Jesuit
Anthony Babington
Sir Francis Walsingham - Secretary of State and Spymaster
King Philip of Spain
Duke Medina Sidonia - in charge of the Spanish Armada
William of Orange - Protestant and leading a rebellion against Spain in the Netherlands.

Religion

Elizabeth was Protestant but inherited the upheaval of the Reformation and her families changes. As a practical monarch she tried to bring compromise with her 'religious settlement'. This included priests could marry, book of common prayer and she declared herself 'governor'. Catholics - recusancy fines were low and many kept their own beliefs. Following the Papal Bull which excommunicated Elizabeth, Catholics were encouraged to rise against her. There was a change in policy clamping down on them - see dates. Jesuits were sent to convert Protestants back to Catholic including Edmund Campion who was executed becoming a martyr. Puritans - strict protestants were disappointed in the settlement. Their prophesyings criticised Elizabeth's church and in 1583 they were banned from unlicensed preaching and imposed recusancy fines.

Mary Queen of Scots

Mary was Queen of Scotland from 8 days old but was brought up in France. She returned to Scotland in 1560 but was very unpopular. It was suggested that she had been involved in the murder of her second husband Lord Darnley. In 1567 she fled from Scotland and her son James became King of Scotland. Mary was placed under house arrest and was moved around for 19 years. Mary was the legitimate heir to the English throne and was Catholic, this made her a threat to the childless Elizabeth. Several plots planned to put her on the throne but during the Babington Plot Walsingham found evidence that she knew of the plot. Mary was put on trial in October 1586 and found guilty of treason even though she argued that as she was not English and a Queen they had no right. On 8/2/1587 Mary was executed at Fotheringhay Castle making her a martyr.

Conflict with Spain

Causes - Philip had been married to Mary Tudor and wanted England to be Catholic again. He had asked Elizabeth to marry him but she married England. Elizabeth authorised the sea dogs to steal Spanish Silver. Elizabeth also sent troops to help with William of Orange's rebellion against Spain.Advances in naval warfare meant ships were faster and more manoeuvrable. They had more powerful weapons and more accurate navigation with the astrolabe.
The Armada failed because of poor tactics by the Spanish including having a seasick man in charge - Duke Medina Sidonia. The English tactics including the use of fire ships. This was then followed by terrible storms that wrecked many of the Spanish ships on their way back round Scotland.

Key dates

1567	**Mary Queen of Scots comes to England.**
1569	**The Northern Rebellion**
27/4/ 1570	**Pope Pius V issued the Papal Bull and excommunicated**
1571	**The Ridolfi Plot. Recusancy fines.**
1581	**Treason to attend Catholic mass. Recusancy fines increased.**
1583	**The Throckmorton Plot. Rules to crack down on Puritanism.**
1585	**Treason to have a Catholic priest in your home. Act against Jesuits and Seminary Priests**
1586	**The Babington Plot. Mary Queen of Scots put on trial.**
8/2/ 1587	**Mary Queen of Scots executed.**
1588	**The Spanish Armada**
1593	**Statute of Confinement - Catholics could not travel more than five miles from home.**

KEY VOCABULARY/ TERMS - Tier 3

Protestant, Catholic, Puritan, recusancy, Papal Bull, excommunicate, Jesuits, missionary, martyr, rosary beads, plot, prophesying, treason, iconoclasm, astrolabe, fireship, line of battle, armada, propaganda.

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History Knowledge Organiser
Elizabethan 3 - Troubles at home and abroad

KEY WORDS/VOCABULARY - Tier 2

Interpretation, social, political, economic, religious, convincing, foreign, indicate, significance, achieve, restrict, previous, contribute, considerable, challenge, whereas, motivate, trigger, reluctance, pose.

Write an account… 8 marks

- Write an account of Elizabeth's changing policy towards Catholics.
- Write an account of Puritanism during the reign of Elizabeth I.

Explain… 8 marks

- Explain what was important about the execution of Mary Queen of Scots for Elizabethan England.
- Explain what was important about the navy for Elizabethan England

How convincing is interpretation...about… 8 marks

How convincing is Interpretation A about the threats to Queen Elizabeth I? Explain your answer using Interpretation A and your contextual knowledge.

Interpretation A - *An assessment of the threats to Queen ELizabeth from* The Life and Times of Elizabeth I, by Neville Williams (1972)

There were other plots against Elizabeth's life in later years. However the revelations of the Ridolfi conspiracy, coming so soon after the Northern Rebellion, alarmed her the most. That her own cousin, the Duke of Norfolk, should have plotted her downfall was the ruellest blow she had yet suffered.

French Knowledge Organiser
GCSE core information

Year 11
Theme 1 – L'identité et la cultur

Qui suis-je?

Remember, there are three different words for 'my':

mon before a masculine person or noun, e.g. ***mon*** *père*

ma before a feminine person or noun, e.g. ***ma*** *mère*

mes before a plural noun (more than one), e.g. ***mes*** *parents*

These are the two most useful verbs in French.

avoir	to have	***être***	to be
j'ai	I have	*je suis*	I am
tu as	you have	*tu es*	you are
il/elle/on a	he/she has; we have	*il/elle/on est*	he/she is; we are
nous avons	we have	*nous sommes*	we are
vous avez	you have	*vous êtes*	you are
ils/elles ont	they have	*ils/elles sont*	they are

aller *(to go)*	
je vais	nous allons
tu vas	vous allez
il/elle/on va	ils/elles vont

You use the **perfect tense** to talk about what you **did** or **have done**.

For most verbs, you use the *je* form of ***avoir*** (***j'ai***) followed by a **past participle**.

For *-er* verbs, the past participle has *-é* on the end: *mang**é**/contact**é**/discut**é***.

j'ai contacté I contacted

The verb *aller* (to go) is different. It uses ***être*** instead of *avoir*.

*je **suis** allé(e)* I went

Add the extra *-e* if you are a girl.

The near future tense is formed with the verb *aller* followed by an **infinitive**.

je vais	**aller** à un match/au bowling/ au cinéma/à la piscine
tu vas	**voir** un spectacle
il/elle/on va	**faire** du patin à glace/du skate/ les magasins
nous allons	**jouer** à des jeux vidéo
vous allez	
ils/elles vont	

Most French verbs are ***-er*** verbs. To form the present tense, remove the *-er* and add the correct ending, depending on the pronoun. The ***je*** and ***il/elle/on*** forms both end in ***-e***.

Example: ***jouer*** (to play)

je jou**e**	nous jou**ons**
tu jou**es**	vous jou**ez**
il/elle/on jou**e**	ils/elles jou**ent**

Most adjectives work like this:

masculine	**feminine**	**masc plural**	**fem plural**
no ending e.g. *charmant*	add ***-e*** e.g. *charmant**e***	add ***-s*** e.g. *charmant**s***	add ***-es*** e.g. *charmant**es***

Le temps des loisirs

You use *aimer, adorer, préférer* and *détester* followed by **a noun** to say what you like or don't like.

You use them followed by **the infinitive of another verb** to say what you like or don't like **doing**.

j'aime *j'adore* *je préfère*	*le foot* *la guitare* *la lecture*	*jouer au foot* *jouer de la guitare* *lire*
je n'aime pas *je déteste*	*la photographie* *la musique*	*prendre des photos* *écouter de la musique*

J'aime la photographie. I like photography.

J'adore prendre des photos. I love taking photos.

Negatives come in two parts, which go **around** the French verb.

ne … pas (not) *Je **ne** lis **pas** beaucoup.*

ne … jamais (never) *Elle **ne** lit **jamais**.*

ne … plus (no longer/not any more) *Je **ne** lis **plus**.*

If the negative is followed by a noun, you usually put ***de*** afterwards.

*Je ne lis pas **de** romans.* I don't read novels.

*Je ne lis jamais **de** mangas.* I never read mangas.

But *aimer* is an exception.

*Je n'aime pas **les** livres d'épouvante.* I don't like horror novels.

Most verbs, like *télécharger, jouer, regarder* and *créer*, are regular ***-er*** verbs.

However, not all verbs follow this pattern. You're already familiar with the irregular verbs *avoir, être, aller* and *faire*. Here are four more that you need to know.

lire *(to read)*	**écrire** *(to write)*	**prendre** *(to take)*	**mettre** *(to put)*
je lis	j'écris	je prends	je mets
tu lis	tu écris	tu prends	tu mets
il/elle/on lit	il/elle/on écrit	il/elle/on prend	il/elle/on met
nous lisons	nous écrivons	nous prenons	nous mettons
vous lisez	vous écrivez	vous prenez	vous mettez
ils/elles lisent	ils/elles écrivent	ils/elles prennent	ils/elles mettent

This is a key irregular verb.

faire *(to do/make)*
je fais
tu fais
il/elle/on fait
nous faisons
vous faites
ils/elles font

In French, you often use *faire* with a sport where we might use 'go' in English.

Je fais de la natation. I go swimming.

Je fais du vélo. I go cycling.

Jours ordinaires, jours de fête

To say 'some' in French, you use ***du, de la, de l'*** or ***des***.

masculine singular noun	**feminine singular noun**	**in front of a vowel or *h***	**plural noun**
du *pain* (some bread)	***de la*** *glace* (some ice cream)	***de l'*** *eau* (some water)	***des*** *poires* (some pears)

In English, we don't always use the word 'some', but in French you have to use it.

*Pour le dîner, je prends **du** poulet et **des** frites.* For dinner, I have (some) chicken and (some) chips.

The verbs *devoir* (to have to/must) and *pouvoir* (to be able to/can) are known as **modal verbs**. They are usually followed by another verb in the infinitive.

devoir	**pouvoir**
je dois	je peux
tu dois	tu peux
il/elle/on doit	il/elle/on peut
nous devons	nous pouvons
vous devez	vous pouvez
ils/elles doivent	ils/elles peuvent

Use the **present tense** to say what you **normally or usually do**.	Use the **near future tense** to say what you **are going to do**.
Je mange/danse (etc.)	*Je **vais** manger/danser* (etc.)
On mange/danse (etc.)	*On **va** manger/danser* (etc.)

As well as meaning 'we', ***on*** can be used to mean 'people'. It takes the same part of the verb as *il* and *elle*.

- You use the **perfect tense** to describe completed actions in the past.
  - Some verbs have irregular past participles:
    *avoir – j'ai **eu*** (I had)
    *boire – j'ai **bu*** (I drank)
    *prendre – j'ai **pris*** (I took)
    *recevoir – j'ai **reçu*** (I received)
  - Some verbs take *être* in the perfect tense:
    *aller – je **suis** allé(e)* (I went)
    *naître – je **suis** né(e)* (I was born)
- You use the **imperfect tense** to say 'was' or 'were'.
  The imperfect of *c'est* is ***c'était*** (it was).
  The imperfect of *il y a* is ***il y avait*** (there was/were).

Find examples of both tenses in exercise 1.

En général

Les mots essentiels	***High-frequency words***		
très	*very*	d'abord	*first of all*
assez	*quite*	puis	*then*
mais	*but*	ensuite	*next*
ou	*or*	après	*afterwards*
où	*where*	plus tard	*later*
hier	*yesterday*	le soir	*in the evening*

The words and phrases in the grid are useful for describing a photo. Check that you know what they all mean.

Sur la photo, il y a		un	garçon/homme …
		une	fille/femme/famille …
		des/trois/un groupe de/d'	enfants/jeunes/copains …
Le garçon/La famille/Il/Elle	est	dans	le jardin/une maison …
		en	ville …
Les jeunes/Ils	sont	au	parc/café …
		à la	plage …
La famille/Il/Elle	joue au foot/regarde un match …		
Les amis/Ils	rigolent/discutent ensemble …		

French Knowledge Organiser
GCSE core information

Year 11 Higher Tier
Theme 1 – L'identité et la cultur

Reading practice

Lisez l'article et traduisez-le en anglais.

L'ENFANCE DE … *Napoléon Bonaparte: ancien Empereur de France*

Quand il était petit, Napoléon habitait à Ajaccio en Corse. Il avait quatre frères et trois sœurs, et habitait avec ses parents. Il était sérieux et travailleur mais il n'avait pas beaucoup d'amis. Entre 15 et 16 ans, il était dans une école militaire en France où il aimait les mathématiques. Selon la légende, Napoléon commandait ses camarades de classe pendant les batailles de boules de neige.

selon *according to*

Translate this passage into English.

Beaucoup de jeunes Canadiens admirent Terry Fox. Il avait dix-huit ans quand il est tombé malade. Cependant, Terry Fox était quelqu'un qui avait du courage face au cancer. Aujourd'hui, il y a des douzaines de marathons à son nom au Canada. Dans le futur, la Fondation Terry Fox va continuer à collecter de l'argent pour la recherche sur le cancer.

Look at how Emily has responded to the task. In her answer, find examples of:

a the different tenses and pronouns she uses
b opinions she expresses, and opinion phrases she includes
c details she adds to make her answer more interesting
d connectives
e impressive vocabulary and structures she uses.

À mon avis, les traits de personnalité importants chez un ami sont la patience et le sens de l'humour. Je pense qu'un bon ami est quelqu'un qui voit le bon côté des choses.

Ma meilleure amie, Anna, est très compréhensive. Je m'entends bien avec elle parce qu'elle n'est jamais de mauvaise humeur et parce qu'elle me fait rire!

Hier, je suis allée faire les magasins à Norwich avec deux copines. Comme nous adorons faire du shopping, nous avons passé une bonne journée ensemble. Le soir, nous avons mangé dans un restaurant et c'était bien.

Samedi soir, je vais sortir avec mes copains. Nous allons voir un spectacle en ville et je pense que ça va être vraiment super.

Speaking & writing practice

Look at the role play card and prepare what you are going to say.

Your teacher will play the part of your French friend and will speak first. You should address your friend as *tu*.
When you see this – **!** – you will have to respond to something you have not prepared.
When you see this – **?** – you will have to ask a question.

Tu parles avec ton ami(e) français(e) d'un concert.

- Musique écoutée hier (**deux** détails).
- **?** Concert de Stromae demain.
- **!**
- Lieu et heure de rendez-vous.
- Moyen de transport au concert.

What might the unexpected question be? When you have prepared your other answers, try to predict different possibilities, and think how you would answer them.

What tense do you need to use here? Be sure to give two details!

First of all, identify the question you need to ask. Then work out how to ask it. You could start with ***Tu veux…?***

Make sure that you give both of the required details – a place and a time.

Remember that for most means of transport, you use ***en*** (e.g. ***en voiture***, ***en train***, ***en bus***).

Read the English text and Matthew's translation of it. Write down the missing verb for each gap.

My sister, Amélie, is very kind and I get on well with her. She often goes out with her boyfriend, but last night she stayed at home and we made a pizza. Amélie used to work hard when she was at primary school. She loves children; I think she is going to be an excellent mother one day.

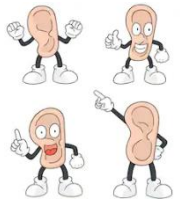
Ma sœur, Amélie, 1 _____ très gentille et je 2 _____ bien avec elle. Elle 3 _____ souvent avec son petit ami, mais hier soir, elle 4 _____ à la maison et nous 5 _____ une pizza. Amélie 6 _____ très dur quand elle 7 _____ à l'école primaire. Elle 8 _____ les enfants; je 9 _____ qu'elle 10 _____ une excellente mère un jour.

Translate the following passage into French.

My friend Georges is very hard-working and funny and I get on well with him. He used to like football when he was little. Now he plays video games. Yesterday I went into town with Georges and we saw a film at the cinema. Tomorrow night we are going to eat in a restaurant with my family.

Listening Practice

Use your CGP Exam Practice workbook for Theme 1 listening practice.



Angels

‘They exalt him night and day and do not slacken ‘ Qur’an 21:20

Most Muslims believe that Allah made malaikah (angels) from light. Muslims believe that Allah made them to carry out orders and to help communicate with humans.

Angels are immortal, are made of light and have wings. They are pure and cannot sin. They are believed to vary in size but they are described as large in the Qur’an.

They always obey and serve Allah . They praise God. Angels can appear in human form and there are some who have specific roles, including guardian angels.

Israfil

The role of angels

- They act as messengers to the prophets.
- They take care of people.
- They record everything a person does, and this information is used on the Day of Judgement.
- They welcome Muslims into Paradise and also supervise the pits of Hell.

Jibril

Jibril (Gabriel)	Mika’il (Michael)	Izrail + Israfil
Angel Jibril (known in Christianity as the Angel Gabriel) always brings good news. He is mentioned in both the Qur’an and the Hadith. He revealed Allah’s words (the Qur’an) to Muhammad on the Night of Power so he is known as the Angel of Revelation.	Also known as Michael, the Angel Mika’il is a friend to humanity and known as the giver of rain and food. He is believed to reward people who do good deeds. He asks Allah to forgive people’s sins as he is the Angel of Mercy	Izrail, the Angel of Death, who takes the souls from bodies when people die so they can enter the afterlife. Israfil is another angel. It is believed that he will blow a trumpet to announce the Day of Judgement.

Islam – Angels

Good	Better	Best	Mastered
List 4 angels in Islam	Explain two beliefs about angels in Islam Explain two ways that a belief in angels influences Muslims	Explain the quote below ‘They exalt him night and day and do not slacken ‘ Qur’an 21:20	‘Allah uses angels to demonstrate his omnipotence’ Evaluate this statement. In your answer give • reasoned arguments to support this statement • give reasoned arguments to support a different point of view • reach a justified conclusion. • [12 marks] [+ 3 SPaG marks]

I want to work harder: How many purple words can you define?

Business Studies

marketing for business and enterprise

Niche marketing is where a business concentrates all marketing efforts on a small but specific, well defined segment of the population. The customers the business is targeting have similar and specific needs.

Lush cosmetics target customers who have a need for environmentally friendly products. Lush don't test on animals and their products, such as soaps, are sold in recyclable packaging. A small amount of the larger personal hygiene market will pay extra for this.

Mass marketing is a technique where a business focuses on selling their product or service to everyone in the market. Advertising on TV is mass marketing as there is no specific segment of the market that is being targeted. The business is trying to attract everyone in the market to but their product.

Domino's pizza gives out leaflets to all households as they want everyone to buy their pizzas.

A company that follows **production orientated marketing** doesn't just focus on their customer's needs as its main focus is on the products efficiently and building a quality product. This type of company believes that if they can make the best product then people will buy it.

McDonald's focus on their fast food products such as happy meals to make sure that they taste nice and are of high quality. They make their boxes fun for children and give them toys. They believe that if their fast food is the best it can be then people will buy it.

3 reasons why businesses need marketing *and how these benefit the business*

1. Increase sales

A business uses marketing such as advertising on TV and in magazines to tell people about the products they sell and where they can buy them from. If people know about a business's products then they are more likely to buy them. This should increase sales.

Benefit (Distinction)

This is a benefit as people will know that their products exist and where to buy them from. As a consequence they should sell their products and increase revenue. If people don't know about their products then they won't buy them which means the business will be left with excess stock.

2. Help to create a brand

A business uses marketing to create a good brand image. By advertising on TV or in magazines, people will recognise their business and their brand. Customers are more likely to trust a brand that they recognise. This means customers might buy new products that the business sells.

Benefit (Distinction)

This is a benefit to the business as it can help to promote new products that they produce. For example, if Heinz brought out curried beans then people might trial purchase them as they trust Heinz. If they like them then they will repeat-purchase them. This will increase Heinz revenue.

3. To satisfy customer needs (discover what products people want and how much people will pay for them).

A business will use market research such as questionnaires to find out if customers will buy their products and how much they will pay for them. This helps the business when deciding whether to make the products and how much to charge for them.

Benefit (Distinction)

This is benefit to a business as they know if there is a need in the market for their product. If there isn't enough customers who want it then the business will make a financial loss in producing it. Furthermore, they will know what is a reasonable price to charge for their products. They need to ensure that they are charging enough to cover their costs to make a product. If the production price is higher than what customers will pay, then they will know not to produce it and try to sell it as they will make a loss.

Market Research

Primary research is where a business gathers **new** information to find out customer needs.
Surveys, questionnaires, focus groups.

Secondary Research is where a business use information that already exists to find out customer needs.
Internet, newspapers, government surveys, journals, leaflets and surveys conducted by others such as Mintel or office of national statistics.

Business Studies - *marketing for business and enterprise exam*

What I need to know:

Only tick when you know these off by heart:	
I can define mass marketing	
I can define niche marketing	
I can define product orientated marketing	
I can provide an example of Mass marketing	
I can provide an example of niche marketing	
I can provide an example of product orientated marketing	
I can explain three reasons why a business needs marketing	
I can define primary research	
I can provide 3 examples of primary research	
I can explain two advantages of primary research	
I can explain two disadvantages of primary research	
I can define secondary research	
I can provide examples of secondary research	
I can explain two advantages of secondary research	
I can explain two disadvantages of secondary research	

Additional information on primary and secondary research

Accurate market research helps to reduce the risk of launching new or improved products.

Some businesses opt out of field research and rely instead on the know-how and instincts of the entrepreneur to 'guess' customer requirements. They do this because market research costs time and money. Existing business can make use of direct customer contact to help them identify changing fashion and market trends.

INNOVATION

IN UNITY WE SUCCEED
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ART Knowledge Organiser
Year 11 : Term 2:1

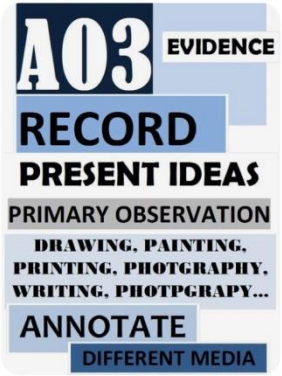
FCAT
The best we can be

ASSESSMENT OBJECTIVES

These are the 4 objectives used to assess your folder of work, with suggestions of what you should do for each one.
Each objective is worth 24 marks
Remember that the objectives cover all of the work in each project, from initial sketches and notes to the final image.

I have researched the work of artists.
I have worked in the style of an artist.
I have written about the artists and how they have influenced my work.

I have experimented with a range of materials and techniques.
My folder shows how I have developed my idea from an initial start to a final conclusion.
My work has been completed with care and thought.



I have drawn images from observation.
I have worked from relevant photographic images.
I have used annotation to explain the development of and my thoughts about my work.

I have produced my own imaginative final piece of work.
My work shows a clear connection to the work of my chosen artist.
I have thought carefully about the presentation of my work throughout the project.

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ART Knowledge Organiser
Year 11 : Term 2:1

FCAT
The best we can be

Write definitions for each Assessment Objective

AO1		AO2	
AO3		AO4	

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Musical Elements - DR SMITH

Dynamics – volume
mp, f

Rhythm – long and short beats
Crotchet, quaver, dotted note

Structure – organisation of the music
Verse, chorus, pre chorus, intro, outro

Melody – the tune
Disjunct, conjunct, melisma

Metre – how many beats in a bar
Triple time, quadruple time

Instrumentation – the instruments used
Tambura, Lowrey Organ, Maracas, kick drum, snare drum, distortion

Texture – the layers in the music
Melody and accompaniment, countermelody

Tempo – speed
Double speed

Tonality – key
A, Bb, G

Harmony – chords
7 chords, 2 chords, major, minor

Lucy in the Sky With Diamonds – The Beatles

Instrumentation

Unusual instruments: Lowrey organ with a celeste (bell) sound, tambura (Indian instrument) and maracas

Acoustic guitar, bass, drums, piano, lead electric guitar distorted

Lowrey organ plays an ostinato first heard in the intro

Tambura plays a drone, heard first in the verse

Pitch bend on guitar in pre chorus – up a tone

Countermelody on electric guitar in chorus – ascending pattern below vocals

Verses

Chord sequence:
A5, A7, F#m7, Dm/F, A5, A7, F#m7, F
Includes word painting and limited melodic range
Drum kit is heard towards the end of each line
Bass adds momentum towards end of verse
Verse 2:
Double tracked vocals, organ plays chords on beat 3 of each bar, organ melody is now on electric guitar, tambura drone heard throughout

Harmony and tonality

Written in 3 keys – A, Bb, G

Chord change is faster in the chorus than the verse

The song finishes on the dominant leaving it unresolved

Intro and Outro

Intro is 4 bars long in 3 time in A major, *mp*, Lowrey organ plays an ostinato

Outro is the music from the chorus with repeated 'Ah' and harmony, fades out. Finishes on the dominant.

Rhythm and metre

Verses and pre-chorus are in 3, chorus is in 4

Organ ostinato is mostly crotchets

Verse melody starts with 3 bars of crotchets

Pre Chorus and Chorus

Pre chorus: Bb major
Limited melody mostly sung on a single note, *mp* Cymbal and kick drum play
Musical changes on lyric 'gone'

Chorus: G major
4 beats in a bar, *forte*, tempo doubles
Full drum kit, catchy and energetic, faster rate of chord change
G, C, C2, D

Chorus 2: harmony in 3rds
Chorus 3: No pre-chorus, first line solo, others have harmony

Use of technology

Overdubbing

Echo

Melody

Organ ostinato is disjunct
Two melodies in verse 1, limited range
Word painting 'slowly' longer notes
Melisma in the chorus – diamonds'
Countermelody on the electric guitar

Other key features

Said to be inspired by drug use, banned on the radio

Based on a picture by John Lennon's son

Classed as psychedelic pop due to the lyrics, timbre and atmosphere

Echo effect added to the recording

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Music Knowledge Organiser
Year : 11 Lucy In The Sky

FCAT
The best we can be

QUESTIONS

1. Who wrote Lucy in the Sky?
2. Who sang on Lucy in the Sky?
3. Give the three keys that the piece is written in
4. Why is this unusual?
5. Make two points about metre in this piece
6. Why is this unusual?
7. Give three unconventional instruments used
8. Why is the piece classified as 'psychedelic pop'?
9. What is double tracking?
10. Which of the instruments has been 'double tracked'?
11. Where in the piece is an ostinato used?
12. Select one term to describe the melodic movement
13. Fill in the chord sequence for the verses below:

A5	Dm/F		

14. Give an example of word painting in this piece
15. What is the effect of the first key change?
16. Which tech effect is heard more clearly in the pre-chorus?
17. Which guitar playing technique is heard in the pre chorus?
18. Give 3 ways in which the intensity is increased in the chorus
19. Give 2 modifications heard in verse 2
20. What music do we hear in the outro?
21. What is reduction mixing?
22. Why would you use the technique 'close-micing'?

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Musical Elements - DR SMITH

Dynamics – volume
Moderately loud

Rhythm – long and short beats
Syncopated, swung, crotchets

Structure – organisation of the music
Intro, Verse 1, Chorus, Verse 2, Chorus, Bridge, Verse 3, Chorus, Bridge, Chorus

Melody – the tune
Narrow range, call and response

Metre – how many beats in a bar
4

Instrumentation – the instruments used
Piano, drum kit, guitar, Hammond organ, tambourine, cowbell

Texture – the layers in the music
Melody and accompaniment

Tempo – speed
Moderate, 110bpm

Tonality – key
G modulating to E

Harmony – chords
Plagal cadence, perfect cadence, bVII chord

Instrumentation

Original recording: Piano, Electric guitar, cowbell, drums – only fill is at the end of the chorus, Hammond organ – heard in the intro

Overdubbs: tambourine, rhythm guitar, lead guitar, bass, extra lyrics, vocal harmonies

Melody

Narrow range – original written for Ringo to sing who had a narrow vocal range

Syncopated melody

Contains slides and melisma ('own' and 'lone' in v2)

Verses

Melody uses first 5 notes of E major scale ascending and then descending and is repeated

Chord changes are on the first beat of the bar

Piano, guitar, bass and drums only

Verse 2 – call and response effect in vocal Ringo sings the call and John and Paul respond (higher pitched)

Verse 3 – call and response, John and Paul sing the call (higher pitched in thirds) and Ringo responds

Harmony and tonality

Starts in G → E

Verse uses a circle of 5ths progression

Perfect cadence at the end of the verse

Double plagal cadence in the chorus (IV of IV-IV-I)

Intro and Outro

Intro – 'Billy Shears' sung in harmony (3 consecutive major chords ascending in tones) over cheering crowd, in G modulating to E major with 2 bar guitar solo

Outro – 6 bars, sustained chords on piano, guitar and bass, repeated melody notes, final E sung by Ringo – falsetto, descending melody sung by Paul and John, final cadence bVII-I, cymbal struck on last chord

Rhythm and metre

Guitar and piano mainly play straight crotchets, bass emphasises beat 1 and 3
Quavers are played swung
Triplet feel set by the guitar after intro

Chorus

Contains the hook
8 bars long with guitar fill and drum solo
First melody uses triplet pattern and is repeated
Third line has added vocal harmony
Used D major chord – flat vii chord common in Pop (not found in E major therefore chromatic)
Uses an added 6th chord (A,C#,E,F#)
Chorus 2 – additional upper harmonies, additional chromatic sliding
Chorus 3 – same as chorus 2
Last chorus – same as before but line 2 and 3 swapped

With A Little Help From my Friends – The Beatles

Use of technology

Overdubbing

Reduction mixing

Bridge

Question and answer/call and response
Question is higher pitched than the response
C#m11 and F# chords added
Longer note values make the bridge sound broader
Pitch range is larger
Second bridge has a slight change in the first few notes

Other key features

Second song on the album

Flows straight in from the first song

Billy Shears is a fictional character created for the album

Swapped lines in last chorus were apparently a mistake but stuck!

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Music Knowledge Organiser
Year : 11 With A Little Help

FCAT
The best we can be

QUESTIONS

1. Who performed lead vocals on *With a Little Help from My Friends*?
2. The introduction is in which key?
3. What are the first three chords?

4. *Sgt. Pepper's Lonely Hearts Club Band* was recorded using which piece of equipment?
5. Which instruction is given as to how the quavers should be played?
6. How many times does the time signature change?
7. In the verse, which rhythmic feature is heard in the vocal melody?
8. What is Ringo Starr's vocal range?
9. Where is the hook heard for the first time?
10. What is melisma?
11. The songs on *Sgt. Pepper's Lonely Hearts Club Band* were never meant to be performed live.

What technique was used to add additional instruments to the original recordings?

12. How does this piece demonstrate that Ringo Starr wasn't a confident singer?
13. How does this piece demonstrate balance and development?
14. Explain the contrasting rhythms used in this piece.

Musical Elements - DR SMITH

Dynamics – volume
Soft

Rhythm – long and short beats
Tala, Tintal, Jhaptal

Structure – organisation of the music
Intro/Alap, Verse/Bandish, Chorus, Instrumental

Melody – the tune
Conversational, dialogue, Khamaj that, myxlodian mode

Metre – how many beats in a bar
4 and 5

Instrumentation – the instruments used
Indian Classical instruments, Strings, double and triple track recording, overdubbing

Texture – the layers in the music
Melody and drone

Tempo – speed
Slow

Tonality – key
Based around C drone, myxolidian mode

Harmony – chords
No chords – typical of Indian classical

Instrumentation

Indian classical influences
Tambura – plays the drone, **sitar** – plays a musical conversation with the dilruba in the instrumental, **tabla** – provides the rhythm after the intro including fills between verse 2 and chorus and instrumental and verse 3, **swarmandal** – enters in the intro playing a glissando, **dilruba** – plays a swooping melody, doubles the voice throughout the song
Cello – has a 5 note riff at the end of the verse and a descending melody at the end of the instrumental
Voice – imitates the swooping of the dilruba (feature of indian classical music)
Violins – have a riff similar to cellos in the chorus, play pizz and arco in instrumental

Rhythm and metre

Tintal in verse and chorus – rhythm with 16 beats (4+4+4+4)
Brief metre changes from 4 to 5 in verse and chorus
Jhaptal in instrumental – rhythm with 10 beats

Verses

Slow paced and reflective
Interval of a tritone used
Dilruba doubles the voice
End of verse 2 – melody rises to higher register to emphasise the lyrics

Verse 3 has dialogue between strings and voices

Chorus

Link before the chorus – 3 bars with 1 bar (2 beat) tabla fill
Rhythmically simple (quarter notes throughout)
Dilruba doubles vocal, Tintal tala
Violin riff in the middle
Hook is heard at the end of the chorus
7 bar link before chorus 2 with dilruba and strings improvisation
Tabla ends **before** the last word

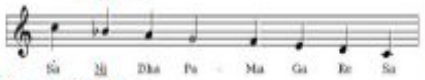
Within You Without You – Beatles Set Work

Structure

Intro – Verse 1 – Verse 2 (variation of verse 1) – Chorus – Instrumental – Verse 3 (similar to verse 1) Chorus
Intro is slow with a long drone and no rhythm – Alap section
Verses are similar to each other but verse 2 rises to the higher register
Chorus does not modulate and remains reflective and simple
Instrumental is very long, uses the jhaptal tal and features a musical conversation between dilruba and sitar, at the end of the section in 5 there is a 'sighing' motif in the dilruba and the drone starts again

Melody

Uses Khamaj that



Melody has swoops and glissando

Dilruba plays variations on verse melodies in the instrumental

Outro

Unresolved harmony
Sighing motif

Use of technology

Dilruba line in instrumental is triple tracked

Indian Terms

Swar – notes of the melody
Alap – slow introduction without pulse
Pakad – ascending and descending structure of the raga
Vadi – the more important notes of the raga
Raga – a melody-like scale specific to a time or day and season

Other key features/Context

George visited India and wrote this song at a harmonium

Message is about realising that life flows on within you and without you

Song is a fusion of pop and Indian Classical

No chords – the whole song is melodic

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Music Knowledge Organiser
Year : 11 Within You Without You

FCAT
The best we can be

QUESTIONS

1. Who performed lead vocals on *Within You Without You*?
2. What 'tonality' is the song based on?
3. Describe the melodic movement of the first four bars.
4. How does this song create a dream like quality?
5. What instrument is used in the introduction?
6. What technology effects does it use on Lennon's voice to make it sound 'fuller and thicker'?
7. How many times does the time signature change?
8. What is unusual about the length of the melodic phrases?
9. What key is the chorus in?
10. What Indian instrument is used by George Harrison?
11. Discuss how the song is a good example of word painting.
12. What kind of rhythm does the tabla drums play?

GCSE DANCE
Year 11: Physical and Performance skills

What are physical skills?

One of the first things we notice when we see professional dancers performing on stage is how technically strong they are. Good technique underpins everything we do in dance. It makes the work look easy to an audience and helps us develop our physical facility. Technique is how well you can dance.
So what kinds of things do professional dancers do in their daily classes and how does this relate to what you need to work on in your technical sessions?

Physical skills

Posture- body position
Flexibility- the range of movement in a joint
Balance- a steady or held position
Stamina- fitness levels
Strength- holding body weight
Coordination- placing body parts smoothly and efficiently
Alignment- presenting lines and shapes in the body
Control- being in control of what your body is doing
Mobility- how easy you can move

What are performance skills?

Focus
Musicality
Communication of choreographic intent
Relationships
Sense of style
Projection
Some might call it the x factor but in dance we call it expression or artistry
Making you stand out

How to improve

100% focus and effort in class
Extra exercise: jogging, stretching, muscle building exercises
Record yourself and watch back
Teacher feedback
Peer feedback
Extra practice in the studio

KEY VOCABULARY/TERMS

Actions: what a dancer does, for example, leap, spin, balance. Contraction: shortening of a muscle or muscles
Core stability: relates to the use of the centre to stabilise the body during movement. Elevation: the action of going up.
Extension: lengthening one or more of the muscles. Focus: using the eyes to enhance performance or interpretation
Isolation: moving a part of the body independently such as a shoulder shrug
Projection: when a dancer gives out appropriate energy to connect with an audience and draw them into the performance

GCSE DANCE
Year 11: Physical and Performance skills

What are physical skills?
Can you name all of them and explain what they are?
What do they help achieve?
Choose two and explain how you would improve that skill

What are performance skills?
Can you name all of them and explain what they are?
What do they help achieve?

You will need to develop your physical skills and expressive skills in order to gain a high mark

IN UNITY WE SUCCEED
ACADEMY BLACKPOOL

Hair & Beauty Knowledge Organiser
Year 11

FCAT
The best we can be

Hair and beauty design brief

Information

A design brief can be defined as: 'a key project planning document which specifies what the project has to achieve by what means within a specific time frame.'

Description of work

The images that you see everyday involving hair and beauty will have been developed from an initial brief. All images and total looks such as those seen in adverts, leaflets, films, theatre, fashion shows, magazine covers,etc. Have been developed by someone's vision and design brief.

KEY VOCABULARY

Describe-Write about the subject giving detailed information, including relevent characteristics,qualities or events.
Justify-Give an explanation for actions or decisions made.
Evaluate- Assess something under discussion. Examine strengths and weaknesses.
Present - To demonstrate, show or make something known.

Example of beauty design brief

ASSESSMENT CRITERIA

ASSESSMENT OBJECTIVE 1 - Understand how to analyse hair and beauty briefs

ASSESSMENT OBJECTIVE 2 - Be able to develop and present ideas for a hair and beauty design brief.

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Hair and beauty Knowledge Organiser
Year 11

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Write 3 relevant facts about Design brief

1.Target Audience

2.Timescales

3.Feasibility

Discuss different ways to present design briefs

Write the definitions for these words

Describe –
Justify -
Evaluate-
Present -

What is an advantage of a moodboard ?

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Abuse

Types of abuse

Physical Abuse

Hitting, slapping, shoving, grabbing, pinching, biting, hair pulling, etc. are types of physical abuse. This type of abuse also includes denying a partner medical care or forcing alcohol and/or drug use upon him or her

Sexual Abuse

Coercing or attempting to coerce any sexual contact or behaviour without consent. Sexual abuse includes, but is certainly not limited to, marital rape, attacks on sexual parts of the body, forcing sex after physical violence has occurred, or treating one in a sexually demeaning manner.

Emotional Abuse

Undermining an individual's sense of self-worth and/or self-esteem is abusive. This may include, but is not limited to constant criticism, diminishing one's abilities, name-calling, or damaging one's relationship with his or her children

Economic Abuse

Is defined as making or attempting to make an individual financially dependent by maintaining total control over financial resources, withholding one's access to money, or forbidding one's attendance at school or employment.

Psychological Abuse

Elements of psychological abuse include - but are not limited to - causing fear by intimidation; threatening physical harm to self, partner, children, or partner's family or friends; destruction of pets and property; and forcing isolation from family, friends, or school and/or work.

Signs of abuse

Physical	Emotional	Social
Unexplained and an increase in Injuries such as : • Black eyes • Busted lips • Red or purple marks on the neck • Sprained wrists • Bruises on the arms It's also common for someone to try to cover up the physical signs with clothing. For example: • Wearing long sleeves or scarves in the hot summer. • Wearing heavier than normal makeup • Wearing sunglasses inside	Domestic abuse, of course, can take a serious emotional toll, creating a sense of helplessness, hopelessness, or despair. Other emotional signs of abuse include : • Low self-esteem • Extremely apologetic or meek • Seeming fearful • Changes in sleep habits • Agitation, anxiety, or constant apprehension • Developing a drug or alcohol problem • Symptoms of depression • Loss of interest in daily activities • Talking about or attempting suicide	If you notice that someone who was once outgoing and cheerful has gradually become quiet and withdrawn, it could be a sign of abuse. You may notice that the person: • Is reserved and distant • Drops out of activities they would usually enjoy. • Cancels appointments or meetings with you at the last minute. • Is often late to work or other appointments. • Exhibits excessive privacy concerning their personal life or the person with whom they're in a relationship. • Begins isolating themselves by cutting off contacts with

Help and Support

- Parents or trusted family members and Friends
- The Police / Community support officers
- School Safe Guarding Team or any member of staff. NSPCC Helpline: 0808 800 5000 (24 hours, every day) nspcc.org.uk Childline Helpline: 0800 1111(24 hours, every day) https://www.childline.org.uk Women's Aid Helpline: 0808 2000 247 24hr https://www.womensaid.org.uk Men's Advice Line Helpline: 0808 801 0327 Monday-Friday 9am5pm http://www.mensadviceline.org.uk/

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Abuse

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Good	Better	Best	Mastered
What is abuse?	Describe the different types of abuse	Explain some of the symptoms of abuse	Explain a variety of sources of help and support

I want to work harder: How many purple words can you define?

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KO 1:2 Construction Year 11 Job Descriptions

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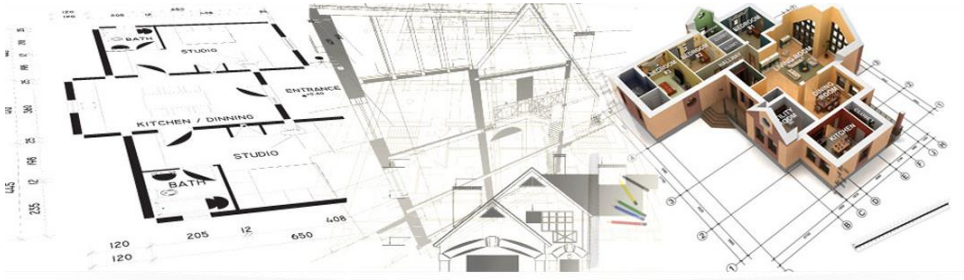
Architects-Architects design residential and commercial structures. An architect must also think about a building's style, safety and sustainability to ensure it meets the needs of its occupants as well as the requirements of council regulators. Architects work with both government agencies and private clients.

Site Engineer - He/she is part of the site management team, and takes some of the responsibility for security, health and safety, and organising and supervising materials and people. Site engineers mark out the site, make sure designs are applied correctly and liaise with main and sub-contractors and the site manager. A site engineer's role is vital to a construction project: they have a number of responsibilities including solving technical issues, providing advice, management and preparing reports.

Quantity surveyor- Acts as the client's economic consultant or accountant. They advise during the design stage as to how the work will fit into the client's budget and measure the quantity of labour and materials necessary to complete the project from drawings and other information. They measure and prepare valuations of the work carried out to date to enable interim payments to be made to the building contractor and, at the end, they prepare the final account for presentation to the client. They advise the architect on the cost of any additional work or variations.

Sub-contractor-The building contractor may call upon a specialist firm to carry out a specific part of the building work. For this, they will enter into a sub-contract, hence the term sub-contractor.



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KO 1:2 Construction Year 11 Job Descriptions part 2

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Using the information write out a job description on each craftsperson.
You must include the following with the correct heading for each.

- What does each of the crafts person do ?
- What do they produce/make?
- What responsibilities including health and safety does the crafts person have?

KEY VOCABULARY
Clients- Another word for a customer Economic- Carrying out a job using cost effective ways to save money. Valuation- This relates to evaluating a job at the end or middle of a project to see how much is left to do.

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Year 11 Hospitality Knowledge Organiser

Term 2.1 Nutritional Needs of Different groups

Individual nutritional needs, calories & the amount of energy they need varies from person to person. The factors that affect nutritional needs are:

Age: This affects our nutritional needs as you grow your body develops & it requires more energy. However, after the age of 40, the metabolic rate slows down & then not as much food (energy) is required

Gender: Males usually require more energy than females as they tend to have greater muscle mass & be more heavily built.

Activity Levels: The more active a person is the more energy they require, which is provided by the food they eat.

Health Conditions: This is affected depending if you have an allergy, intolerance or specific needs e.g. coeliac, diabetic. People maybe on a diet for specific reasons e.g. obesity; high cholesterol, coronary heart disease or high blood pressure.

Pregnant Women

Pregnancy does not mean eating for 2, but caring for 2 instead. The baby's brain, heart & lungs are developed even before the 6 week point. During the first 12 weeks the baby's growth is rapid. At 12 weeks the placenta takes over from the nutrients in the sac & extracts the nutrients from the blood supply. Folic acid aids the development of the spinal system & the neural motor tubes.

Need slightly more food intake for energy, increase in protein.

Enough iron, calcium, vitamin D and Folic Acid for foetal development

Daily requirements of pregnant women:

Calories = additional 300 in 2nd & 3rd trimester

Calcium = 1200 milligrams

Folate (Folic Acid) = 600-800 micrograms

Iron = 27 milligrams.

The increased Iron intake form red blood cells & the babies iron store is produced during pregnancy, then lasts for 6mnths after birth

Babies & Infants-totally reliant on parents to provide food

Breast-feeding is optimum feeding for first 6 months this provides the baby with protein, and vitamins. Fat soluble vitamins are essential to help support the babies growth. The advantages for baby are a lower risk of infection, protection against allergens, provides correct mix and quantity of nutrients, plus baby only takes what it needs. Advantages for mother are no preparation needed, help with weight loss after birth & it is associated with lower risk of certain cancers; eg. Breast & ovarian.

Vitamin A, C & D and calcium all important for infants.

Toddlers/Pre-school children

Toddlers and pre-school children grow at a slower rate than infants. Toddlers are Growing fast & require a lot of energy from their food but need a balanced diet that provides **complex carbohydrates** to provide this energy. (**Complex carbohydrates** are found in foods such as whole grains, vegetables like peas & beans.) They need enough energy or calories to fuel their active play and their various stages of growth, but they do not need adult-size portions. Servings for these children should be a quarter to a third the size of an adult portion. Avoid giving large amounts of sweet desserts, soft drinks, fruit-flavored drinks, sugarcoated cereals, chips, or candy. These foods have little to no nutritional value and will fill a child up quickly, leaving little room for more nutritious foods. Younger children usually like plain, unmixed foods, as well as finger-foods that make eating easier. The Eatwell guide can be used to model a balanced diet for this group of people. Offer them meals with plenty of variety from each of the food groups. If your children don't like spinach, don't assume they don't like vegetables. Just offer another vegetable.

School-Age Children

School-aged children are still reliant on parents but can be influenced by media & their peers. They need a variety of foods that are based on the eat well guide & they need to take regular physical activity to maintain a healthy body weight. It is recommended that a school-age child should partake in exercise for a minimum of 60 mins per day. Through school-age children eating a healthy diet it can enhance their growth and optimize development. When children eat too many calories & not enough nutrients it can lead to malnutrition, obesity or both. Malnutrition in children can result in difficulty learning, poor growth, fatigue, dizziness, weakness, a low body weight and decaying teeth.

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Year 11 Hospitality Knowledge Organiser

Use the information to answer the questions in your reflection log. Use full sentences.

1. What factors affect a persons nutritional requirements?
2. Which gender requires the most energy and why?
3. What is the importance of taking folic acid when you are pregnant?
4. What type of foods should toddlers eat to provide energy?
5. What foods should toddlers and pre-school children avoid? Explain why?
6. How many minutes of exercise should a school age child do per day?
7. Why is exercise important for a child?
8. What issues can occur for a child who doesn't eat the right amount of calories/nutrients?
9. What is the impact of malnutrition in children? How does it affect them?

KEY VOCABULARY/ TERMS
Learn the spelling of each word and look up any you do not know.

Gender	Activity
Requirement	Extract
Complex Carbohydrate	Malnutrition
Obesity	Metabolic
Development	Intolerance

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