THE ABBEY SCHOOL
A BUSINESS & ENTERPRISE ACADEMY

Knowledge Organiser
Year 10
Term 3

CONTENTS

English
Power and Conflict Poetry

Power: **i)** the ability to affect others or events **ii)** a force exerted on others
Conflict: a serious disagreement or argument, often long, such as a war

BIG QUESTIONS

For all poems the student will need to answer these two big questions:

Question 1

How does [poet's name] present power/conflict through their choice of language, structure and form in [poem]?

Question 2

What is [insert poem] about?

Ozymandias
Percy Shelley

Context

- Shelley wrote at a time of great interest in classical antiquity: the poem was written in 1817, inspired by a new British Museum statue of a Pharaoh (King) from Ancient Egypt
- Shelley was a revolutionary and believed in the overthrow of the British ruling class
- Shelley was a Romantic poet

Summary

An unnamed narrator recounts his conversation with a traveller from an 'antique land', who tells him about a broken statute of Ozymandias in the desert. Ozymandias had been a great ruler, the 'king of kings,' but now only this statue remains. The poem explores the idea that power doesn't last forever, however strong it appears.

Key Quotations

- **'Boundless and bare'** – plosives mock the ruin of a once mighty statue
- Semantic field of decay – **'wrinkled', 'shattered', 'lifeless', 'wreck'**
- Sibilance to emphasise nature's power – **'sands stretch far away'**
- **'Nothing beside remains'** – followed by caesura to mimic the isolation of the ruined statue

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London
William Blake

Context

- Poem written in the 1790s
- May be in part a reaction to the Industrial Revolution (from 1760) which caused migration into London, overcrowding, and exploitation of a new labouring class.
- Blake was critical of the abuse of power by those in authority, including the monarchy ('blood down palace walls')
- Blake was a Romantic poet

Summary

An unnamed narrator (perhaps Blake himself) walks through streets in a poor area of 18th century London. He describes the misery he sees, highlighting how London is controlled by private individuals – 'chartered' – and that the most vulnerable in society are miserable and suffering.

Key Quotations

- Repetition of **'chartered'** – meaning owned privately
- Focus on the poor in society: **'chimney-sweepers cry'; 'hapless soldier'; 'youthful harlot'; 'new-born infant'**
- **'Mind-forged manacles'** – metaphorical chains that hold vulnerable people back
- **'Marriage hearse'** – metaphor suggesting a marriage can be a poverty trap for young women

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Prelude
William Wordsworth

Context

- Wordsworth was a Romantic poet, and was also critical of the Industrial Revolution, which he saw as deadening the human spirit.
- Wordsworth was also Poet Laureate, so his work has national significance
- Poem is an extract from a book-length autobiographical work about Wordsworth growing up.

Summary

The poem describes Wordsworth's experience of taking a rowing boat out at night. He feels elated and powerful until he realises there are mountains surrounding him, at which point he becomes overwhelms, rows back, and remains troubled for days afterwards. The poem describes the beauty and terror of nature's power

Key Quotations

- Personification of nature throughout: **'a huge peak, black and huge…upreared its head'; 'like a living thing…strode after me'.**
- Oxymoron **'troubled pleasure'** – nature is both impressive and terrifying
- Semantic field of light – **'glittering', 'stars'**
- Ends with **'trouble to my dreams'**, indicating the lasting effects

My Last Duchess
Robert Browning

Context

- Browning published the poem in 1842.
- Browning's poetry often explores the unfairness of women's lives and the violence they experience at the hands of men.
- Browning was fascinated by the Italian Renaissance
- Focus on the painting reflects general Victorian interest in Renaissance culture

Summary

The poem is a dramatic monologue from the viewpoint of the 16th Century Duke of Ferrara speaking to a messenger from a count to arrange his next marriage. Ferrara mentions a painting of his *last* Duchess whom he appears to have had murdered in jealous rage.

Key Quotations

- Possessive pronouns – **'my last Duchess'**
- Archaic language – **'durst; will't;** to place the poem in a particular context
- Objectification of the Duchess **'such a one'**
- Arrogance of Ferrara – **'my gift of a hundred years old name'; 'I choose/Never to stoop'**
- **'her looks went everywhere'** – Ferrara's paranoia of his wife's infidelity or refusal to treat him as special.

Charge of the Light Brigade
Alfred Lord Tennyson

Context

- The poem describes an historic battle during the Crimean War (1853-56)
- Tennyson was Poet Laureate at the time of the charge; poem was written for a national audience to commemorate the event, and was published in newspapers
- Tennyson's propaganda turned a military disaster into a cause for patriotic celebration

Summary

Tennyson describes a famous event in The Crimean War where Britain and France fought against Russia. The 'noble six hundred' cavalrymen of the 'Light Brigade' fulfilled a mistaken order to 'charge for the guns' of the enemy through a valley, with devastating consequences.

Key Quotations

- Personification of death to represent danger**: 'mouth of Hell', 'valley of Death', 'jaws of Death'**
- Sounds of conflict mimicked with onomatopoeia **'volley'd'; 'flashed' 'half a league, half a league'**
- Alliteration brings pace and drama **'storm'd at with shot and shell'**
- Rhetorical q.: **'when can their glory fade?'**
- Imperative ordering the reader: **'Honour the charge they made'**

Exposure
Wilfred Owen

Context

- Owen fought and died in WW1, and is perhaps the most prominent WW1 poet in the popular imagination
- Poems were the only forum that soldiers effectively had to voice criticism
- Poem unique in the anthology as a personal recollection of conflict

Summary

Owen describes a night in the trenches of WW1, waiting for the enemy to attack, commenting that the real enemy is in fact the weather. It also references the boredom of trench warfare, with long periods of inactivity – 'But nothing happens'.

Key Quotations

- **'Merciless iced east winds that knive us'** – personification of nature as the enemy
- Inclusive use of **'we'** shows that Owen is writing from the perspective of a group
- Tactile imagery and premonitions of death – **'pale flakes with fingering stealth'**
- Visual imagery: **'twitching agonies of men'**
- **'Love of God seems dying'** – faith removed

Storm on the Island
Seamus Heaney

Context

- Heaney was an Irish poet; letters in the title of the poem spell out STORMONT, the Irish assembly, where the representatives of the two opposing communities of Northern Ireland meet. This seems to be a reference to conflict in Northern Ireland known as 'The Troubles.

Summary

Heaney describes the experience of a community on an unnamed island battling the onslaught of the weather.
The weather is presented as a military enemy.

Key Quotations

- Inclusive use of **'we'** throughout
- Plosives **'blows full blast'**
- Personification and personal effects of conflict **'pummels your house'**
- Martial language: **'we are bombarded by the empty air'**
- Oxymoron: **'exploding comfortably'**

Bayonet Charge
Ted Hughes

Context

- Hughes was Poet Laureate; Hughes wrote at a time when society was very critical of how soldiers were treated in WW1
- 'Bayonet Charge' relates the experience of a soldier 'going over the top': charging across no man's land to attack the enemy trenches.

Summary

A nervous, inexperienced soldier experiences a fright response to the extreme terror of going over the top. He is jolted into action by seeing a hare on fire in front of him. He hurls himself into a personal battle for survival, with the personal and political reasons for fighting no longer mattering to him.

Key Quotations

- Verbs of physical difficulty in the first stanza – **'stumbling', 'lugged'**
- Auditory imagery **'bullets smacking'**
- Nature as a victim **'belly out of the air'**
- Patriotism personified and weakened – **'patriotic tear…sweating like molten iron'; 'king, honour…dropped like luxuries'**
- Indecision shown in the simile **'foot hung like/Statuary'**

English
Power and Conflict Poetry

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BIG QUESTIONS

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Remains
Simon Armitage

Context

- Armitage is a contemporary British poet who interviewed war veterans about their experiences.
- British soldiers faced impossible situations in conflicts in Iraq and Afghanistan, with enemy soldiers hiding amongst civilians
- PTSD for veterans is a current issue

Summary

Armitage recounts the experience of an unnamed soldier 'sent out/to tackle looters'. 'All three of us open fire' and kill a looter, but it wasn't the 'end of story' – the narrator is haunted by guilt about what occurred and uses alcohol and drugs to deal with what he has experienced.

Key Quotations

- Inclusive use of **'we'**
- Impersonal language to avoid implicated colleagues **'somebody else'**
- Disdainful language – **'carted off'**; **'tosses his guts'; 'this looter'**
- Alliteration and metaphor **'he's here in my head'** shows how the narrator can't get rid of his guilt
- **'His bloody life in my bloody hands'** – the phrase 'blood on my hands' suggests responsibility. Repetition of 'bloody' suggests the vivid nature of the images stuck in the soldier's mind.

Emigree
Carol Rumens

Context

- Emigrée refers to a specifically female person who has left one country to live in another.
- Context of modern refugee crises and mass migrations in the Middle East and Africa caused by war and extremism.
- Relationship between migration and language – the narrator 'carried here' a 'child's vocabulary' is now banned

Summary

Rumens writes an imagined 1st person narrative of an 'emigrée' recollecting her childhood memories growing up in her country of birth. It appears that war and perhaps a group such as Islamic State have taken over, creating an oppressive environment. The narrator switches between fond memories and imagining what the country is like now.

Key Quotations

- Opening is almost like a fairy-tale – **'there was once a country'**
- Contrasts of light and darkness: country is always associated with **'sunlight'**, the oppressors with darkness
- **'Branded'** –metaphor suggests the hold the country has over the emigrée in painful
- Personification of the country **'I comb its hair and love its shining eyes'**

Poppies
Jane Weir

Context

- Commissioned by Carol Ann Duffy in 2009 for a set of poems to be published in *The Guardian,* giving women a voice about conflict
- Poem references Armistice Sunday, when memorials are held to remember the war dead and poppies are worn.
- Weir said she had Susan Owen – the mother of Wilfrid Owen (Exposure) – in mind when she wrote the poem.

Summary

1st person narration of a mother's experience of her son going to war. The poem relates her tending to his uniform as he leaves, and remembering the boy he was. After he has gone she walks to a graveyard and touches the names on the war memorial.

Key Quotations

- 'Plosives, martial language and metaphors– **'blockade/of yellow bias binding around your blazer'**
- Semantic pattern of damage – **'spasms', 'grazed', 'bandaged'**
- '**Steeled the softening'** – sibilance
- **'Playground voice'** – metaphor for youth

War Photographer Carol Ann Duffy	**Kamikaze** Beatrice Garland	**Checking Out Me History** John Agard	**Tissue** Imtiaz Dharker
Context • Poet Laureate • Relates the experiences of photographers such as Don McCullin. The photograph mentioned ('running children in nightmare heat') sounds like his Vietnam pictures. • References to modern conflicts all over the world, showing war is widespread	**Context** • Japanese kamikaze pilots were sent on suicide missions during WW2 to crash their planes into enemy targets, normally ships. • Being honourable is a massive part of Japanese culture, and the shame of behaving dishonourably can lead to being disowned.	**Context** • Agard is from Guyana, which used to be controlled by Great Britain. This meant that schoolchildren were taught about British figures from history. • Agard's poems normally deal with issues of race and identity • Poem is written in Agard's Guyanese dialect. ('dem tell me')	**Context** • Dharker is from Pakistan; her poems normally deal with issues of identity or the search for meaning in everyday life • References to borders and the Koran influenced by issues in Pakistan • Tissue refers to paper and also to human (muscle) tissue.
Summary Duffy describes a war photographer, 'finally alone', developing his pictures in the aftermath of visiting a conflict zone. The photographer finds the pictures difficult to look at, and his trembling hand suggests he suffers from PTSD. He is upset and defeated by the lack of response from public who see his pictures. Photographs taken on film (not digital) require a darkroom to develop, using chemicals to fix the image.	**Summary** The daughter of a kamikaze pilot explains how her father, unlike most of his comrades, turned back from the target and came home. The pilot faced immediate rejection from his wife and, in time, his children. She wonders whether he wished he had chosen to die that day as opposed to the 'death' of his life afterwards.	**Summary** Agard vents his frustration at not having been taught 'me own history'. Instead, he was taught about British history ('1066 and all dat') and culture. He feels 'blind[ed] to me own identity' because he doesn't understand his background. Agard references figures from black history to make his point. The poem is triumphant in tone, as the narrator finishes by claiming his own history for himself.	**Summary** Dharker reflects on the inherent power of paper: something that seems so flimsy has significance for families, countries and in everyday life. Paper is also an extended metaphor for life – fragile yet powerful. The message might be that if the borders and institutions of world countries were as fragile as paper or treated with more tenderness, then the world would be a happier place.
Key Quotations • **'Spools of suffering'** the alliteration highlights the metaphor, which shows the connection between the pictures and pain. • Colour imagery – **'red'** light **'softly glows'** suggests he is in an intimate, perhaps religious space • The metaphor **'half-formed ghost'** suggests he is haunted by what he has seen.	**Key Quotations** • **'Embarked at sunrise'** – sense of hope; reference to Japanese battle flag too • **'One-way/journey into history'** – suicide mission, pilot wasn't supposed to return • **'Cairns'** – reference to death, may make the pilot reconsider • **'Translucent sea'** – adjective could also mean the pilot looks into himself	**Key Quotations** • Metaphor of being wounded without his own history **'bandage'; 'blind'** • Opening anaphora of **'Dem tell me'** – history is being 'told' by the faceless 'dem' • Adverb **'never'** is repeated throughout – there was no place for black history in Agard's education • Toussaint L'Overture as a metaphorical **'thorn'**	**Key Quotations** • Tactile imagery reinforces status of paper – **'thinned', 'smoothed', 'stroked'** • **'this/is what could alter things'** – paper has the power to change • Weakness personified – **'they fall away'** • Extended metaphor of **'tissue'** as human – **'turned into your skin'; 'living tissue'** • Possibilities – 'if buildings were paper'

Sentence Structures

1. Independent Clause: A clause that can stand alone as a sentence. E.g. The cat sat on the mat. Contains a subject and a verb.
2. Subordinate Clause: A clause that depends on an independent clause to make sense. E.g. Without turning around, the cat sat on the mat.
3. Simple Sentence: Contains just one clause (subject + verb) E.g. Tom went to the shops.
4. Compound Sentence: Independent Clause + Conjunction (FANBOYS) + Independent Clause (For, And, Nor, But, Yet, So) E.g. Tom went to the shops and he bought some bread.
5. Complex Sentence: Contains one main clause and one or more subordinate clause/s. E.g. Although it looked difficult, they still pushed on with the challenge.
6. Exclamatory: A sentence that shows great emotions. E.g. I am appalled by your behaviour!
7. Imperative: A sentence that gives commands. E.g. Get out!
8. Interrogative: A sentence that asks a question (not rhetorical questions). E.g. How much is that?
9. Declarative: A sentence that makes a declaration. E.g. She sells sea-shells.

Sentence Openers

Adverbs — Describe how something is being done. Quickly, Carefully, Bravely, Quietly, Slowly, Suddenly, Happily,

Connectives — Show a consequence or a sense of time. Instead, Unless, Soon, Before, Eventually, While, However

Adjectives — Pair two describing words together with 'and' or 'but'. Happy and cheerful, Sweet and kind, Scared but excited, Tired and weary,

Relative Pronouns — Words that relate to a noun. Which, That (animals and things), Who (people)

Use a range of punctuation. ( ) ... ! ;

Prepositions — Tells us where something is. Inside, Next to, Above, Hidden in, Behind, Under, Past

Ing Words — Says what the character is doing. Thinking, Eating, Crying, Shouting, Laughing, Smiling,

Ed Words — Describes how a character is feeling. Worried, Defeated, Scared, Flabbergasted, Shocked,

Paragraphs

Ti P To P

Time — Topic — Place — Person

Ti...you move to a new period of time
P ... you move to a different place/location
To ... you move from one topic to another
P ... you bring a new person into your writing, or change from one person to another – including dialogue (speech)

Homophones: words that sound the same but have different meanings

1. Their - means it belongs to them. E.g. I ate their sweets.
2. They're - short for they are. E.g. They are going to be cross.
3. There - refers to a place. E. g. I'm going to hide over there.
4. Your – refers to something that belongs to you. E.g. Your bag.
5. You're – contraction of 'you are.' E.g. You're going to win.

Punctuation

- **Full stops:** remember to use a full stop at the end of every sentence.

- **Capital Letters** : make sure every name of something has a capital letter. *E.g. California has a capital letter. Also, make sure every new sentence starts with a capital letter.*

- **Apostrophes**: you can use apostrophes to connect certain words together. *E.g. It is = It's OR to express belonging or property = John's phone*

- **Exclamation marks:** used to end a sentence to show a strong feeling of emotion like surprise, anger, or shock. *E.g. I'm so frightened!*

- **Ellipses:** used to show an omission of words, a pause in thought or to create suspense. *E.g. Suddenly, there it was … his worst nightmare.*

- **Colons:** used to precede lists or explanations. *E.g. I went to the store and bought a lot of fruit: peaches, apples, oranges and pears. Sarah wrote a story: The Hungry Fish.*

- **Semi Colons:** used to join two related independent clauses. E.g. We made too many mistakes; we lost the game. Also, use a semi-colon instead of a comma, usually in a list. *E.g. You will need many backpacking items: a sleeping bag; torch ; tent ; and pillow.*

- **Hyphens:** you can use hyphens for a number of reasons.
- To separate sentences with added information e.g. *I enjoy English – as well as Maths.*
- To indicate periods of time. E.*g. 2000-2006.*
- To form hyphenated words. *E.g. self-respect.*
- To create emphasis. E.g. *Mum loves seafood – she absolutely adores seafood.*

- **Brackets:** use brackets to indicate added information. The sentence should still make sense when removed. E.g. I did my homework, (it took me twenty minutes) and brought it in early.

The 7 Main Commas Rules

1.) Use a comma before a conjunction, (and, but, nor, yet, or, so), to connect two independent clauses.
E.g. I had an English test last night, so I revised.

2.) Use a comma to set off an opening phrase.
E.g. As such, I feel there is much I can learn.

3.) Use a comma when using quotes to separate the quote from the rest of the sentence.
E.g. Like Bob Johnson said, "It's a great day for hockey".

4.) Use a comma to separate adjectives in a descriptive list.
E.g. The pizza was hot, delicious and freshly cooked.

5.) Use a comma to separate three or more things in a series.
E.g. Of Charles Dickens' novels, I have read "A Christmas Carol", "Oliver Twist", and "Great Expectations".

6.) Use a comma with phrases that present a contrast.
E.g. Learning about Hemingway can be highly advantageous for students, not only in their secondary school studies, but also in their future careers.

7.) Use a comma to set off a parenthetical element (added information that can be taken out without changing the meaning of the sentence).
E.g. Now, many years after their time, we as a country are faced at the starting ground where these men once were.

Areas
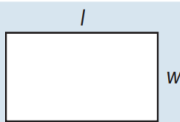
Rectangle $= l \times w$	
Parallelogram $= b \times h$	
Triangle $= \frac{1}{2}b \times h$	
Trapezium $= \frac{1}{2}(a + b)h$	
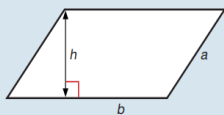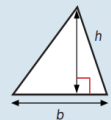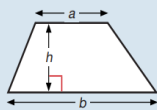
Volumes
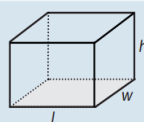
Cuboid $= l \times w \times h$	
Prism = area of cross section × length	
Cylinder $= \pi r^2 h$	
Volume of pyramid = $\frac{1}{3}$ × area of base × h	
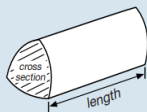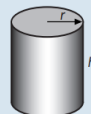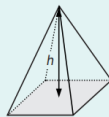
Pythagoras

Pythagoras' Theorem

For a right-angled triangle,
$a^2 + b^2 = c^2$
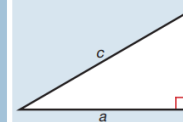
Trigonometric ratios (*new to F*)

$\sin x° = \dfrac{\text{opp}}{\text{hyp}}$, $\cos x° = \dfrac{\text{adj}}{\text{hyp}}$, $\tan x° = \dfrac{\text{opp}}{\text{adj}}$
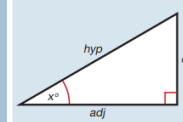
Compound measures

Speed

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

D | S | T
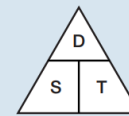
Density

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

M | D | V
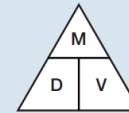
Pressure

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

F | P | A
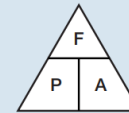
Gradient of a Line

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

or

$$m = \frac{\text{height}}{\text{base}}$$

(x_1, y_1) (x_2, y_2)
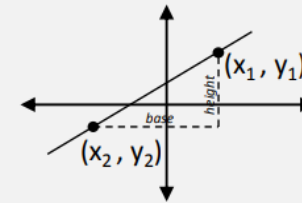
Midpoint of two points

between
(x_1, y_1) and (x_2, y_2)

$$\left(\frac{x_1 + x_2}{2}, \frac{x_1 + y_2}{2} \right)$$

Compound Growth & Decay

The amount after n years (or days, etc.) is:

$$\text{starting amount} \times \left(1 \pm \frac{r}{100}\right)^n$$

where r is the rate of change.
The $\pm$ means + for growth and − for decay

Literacy In Maths	Command Words
Evaluate ...	Work out and write your answer
Work out ...	Working out is required
Calculate ...	Working out is required. A calculator may be needed.
Solve ...	Work out the values
Prove ...	All working must be shown in steps to link reasons and values.
Expand...	Multiply out of the brackets
Draw...	Draw accurately with a pencil and equipment.
Explain ...	Use words to give reasons
Factorise	The reverse process of expanding brackets. Remove the HCF.
Estimate	Work out an approximate answer using rounded values.

Circles

Circumference = $\pi \times$ diameter, $C = \pi d$

Circumference = $2 \times \pi \times$ radius, $C = 2\pi r$

Area of a circle = $\pi \times$ radius squared, $A = \pi r^2$

Area of a Sector

$$A = \frac{\theta}{360°} \times \pi r^2$$

Length of an Arc

$$A = \frac{\theta}{360°} \times \pi d$$

Set Notation

$A \cup B$
Union: in A or B (or both)

$A \cap B$
Intersection: in both A and B

$P(A \text{ or } B) = P(A) + P(B)$

$P(A \text{ and } B) = P(A) \times P(B)$

BIG QUESTIONS

How can I use ratio knowledge to solve practical, real-life problems?

How does understanding proportion help us to solve problems?

Sparx Maths

U687, U865, U753, U176 U610, U743, U257

Writing a Ratio

Ratio: The is the relationship between two or more numbers and each number is separate by a colon.

The ratio of footballs to rugby balls: 1:4

Football is mentioned first so that is why the 1 comes before 4.

The ratio of rugby balls to footballs: 4:1

Rugby is mentioned first so that is why the 4 comes before 1.

As fractions: If we wanted to represent the ratio as fractions then:

$1 : 4$

$= \frac{1}{5} : \frac{4}{5}$

The denominator comes from adding the two parts of the ratio together.

Simplify   60 : 40 : 100

$\div 10$

This could have been done in one step by dividing by 20.

6 : 4 : 10

$\div 2$

3 : 2 : 5

Write 2 : 5 in the form 1 : n

2 : 5

$\div 2$ $\div 2$

1 : 2.5

Share £45 in the ratio 2 : 7

$45 \div 9 = 5$

£10 : £35

2 : 7

5	5
5	5
=10	5
	5
	5
	5
	5
	=35

Joy and Martin share money in the ratio 2 : 5. Martin gets £18 more than Joy. How much do they each get?

£12 : £30

$18 \div 3 = 6$

2 : 5

6	6
6	6
	6
	6
	6
=12	=30

Best Buys - To calculate a **value** for a single item we use the **unitary method**.

When working with best value in monetary terms we use:

$$Price \ per \ unit = \frac{price}{quantity}$$

In recipe terms we use: $Weight \ per \ unit = \frac{weight}{quantity}$

Box A has 8 fish fingers costing £1.40.
Box B has 20 fish fingers costing £3.40.
Which box is the better value?

$A = \frac{£1.40}{8}$ $B = \frac{£3.40}{20}$

$= £0.175$ $= £0.17$

Therefore Box B is better value as each fish finger costs less.

Ratio

Key Words

Ratio: Relationship between two numbers.

Simplify: Divide both parts of a ratio by the same number.

Equivalent: Equal in value.
Convert: Change from one form to another.

Scale: The ratio of the length in a drawing to the length of the real thing.

Proportion: A name we give to a statement that two ratios are equal.

Exchange rate: The value of one currency for the purpose of conversion to another.

Proportion

Key Concept

Proportion states that two fractions or ratios are equivalent.

$$\frac{4}{6} = \frac{2}{3}$$

$$4:2 = 2:1$$
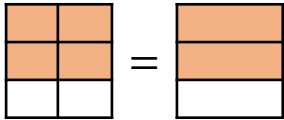
Direct Proportion Examples

Conversion graph
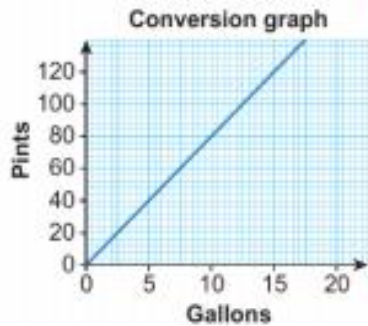
This is what a direct proportion graph will look like.

a:b = 4:5 and b:c = 6:7 Find a:b:c.

The LCM of 5 and 6 is 30

```
a  :  b  :  c
   4  :  5
          6  :  7
24 : 30 : 35
```
×6   × 5

Cake recipe for 6 people.
3 eggs
300g flour
150g sugar
What would you need for 8 people?

÷ 3   ×4

	6	2	8
eggs	3	1	4
flour	300g	100g	400g
sugar	150g	50g	200g

Direct Proportion:
If 5 gallons is the same as 40 pints, calculate how many pints convert to 15 gallons.

5 gallons = 40 pints
15 gallons = ?
15 gallons = 120 pints

× 3
× 3

We could also use the direct proportion graph to convert gallons to pints.

Key Concept

Variables are **directly proportional** when the **ratio is constant** between the quantities As one quantity increases, the other increases.

Variables are **inversely proportional** when **one quantity increases in proportion to the other decreasing.**

Inverse proportion:

×2   ÷5

| A | 10 | 20 | 14 | R | 28 | R = 2 |
| B | 14 | P | 10 | 70 | 5 | P = 7 |

÷2   ×5

It takes 2 painters 7 days to paint a house. How many days does it take 1 painter to paint the same house?

2 people = 7 days
Divide by 2
1 person = ?
Multiply by 2
1 person = 14 days

Key Vocabulary

Ratio

Proportion

Unitary

Direct

Inverse

Simplest

Factor

HCF

Simplify

| Subject: Mathematics | Year / Group: 10H |
| Topic: Ch10 Probability & Ch12 Similarity and Congruence | Term: 3 |

BIG QUESTIONS

How do I describe and calculate probability for events?

How can we use diagrams to help us solve probability problems?

How do congruence and similarity differ?

How does the scale factor affect the area and volume of similar shapes?

Sparx Maths

U476, U748, U699, U408, U981, U558, U729, U699, U806, U578, U630, U110, U790, U866

Two way tables are used to tabulate a number of pieces of information.

Probabilities can be written as a **fraction, decimal or a percentage** however we often work with fractions. You do not need to simplify your fractions in probabilities.

Estimating the number of times an event will occur   Probability × no. of trials

Independent events are events which do not affect one another.

Dependent events affect one another's probabilities. This is known as **conditional probability**.

Mutually exclusive - Two events are mutually exclusive if they can't happen at the same time.

Examples

There are only red counters, blue counters, white counters and black counters in a bag.

Colour	Red	Blue	Black	White
No. of counters	9	$3x$	x-5	$2x$

A counter is chosen at random, the probability it is red is $\frac{9}{100}$. Work out the probability is black.

$$9 + 3x + x - 5 + 2x = 100$$
$$6x + 4 = 100$$
$$x = 16$$

Number of black counters = 16 − 5
= 11

Probability of choosing black = $\frac{11}{100}$

80 children went on a school trip. They went to London or to York.
23 boys and 19 girls went to London. 14 boys went to York.

	London	York	Total
Girls	19	24	43
Boys	23	14	37
Total	42	38	80

What is the probability that a person is chosen that went to London? $\frac{42}{80}$

If a girl is chosen, what is the probability that she went to York? $\frac{24}{38}$

Probability

$$Probability = \frac{number\ of\ successful\ outcomes}{total\ number\ of\ possible\ outcomes}$$

Mutually exclusive
If you need the probability of mutually exclusive events, you can add the probabilities.

$$P(A\ or\ B) = P(A) + P(B)$$

What is the probability of picking an ace or a red jack from a pack of cards?
P(ace) = 4/52 as there are 4 aces.
P(red jack) = 2/52 as there are 4 jacks but only two are red.
P(ace or red jack) = 4/52 + 2/52 = 6/52

Combined events
If we know the probability of two events, we can calculate the probabilities of both events happening by <u>multiplying</u> the probabilities.

$$P(A\ and\ B) = P(A) \times P(B)$$

A fair dice is rolled then a fair coin is flipped. What is the probability we will get a 3 and heads?
The probability of a 3 is 1/6.   The probability of heads is ½.
To find the probability of 3H, we multiply these fractions:
1/6 x ½ = 1/12.

Probability Diagrams

Venn diagrams show all possible relationships between different sets of data.

Probabilities can be derived from Venn diagrams. Specific notation is used for this:

P(A ∩ B) = Probability of A **and** B

P(A ∪ B) = Probability of A **or** B

P(A') = Probability ∪f **not** A

Example

Out of 50 people surveyed:

30 have a brother
25 have a sister
8 have both a brother and sister
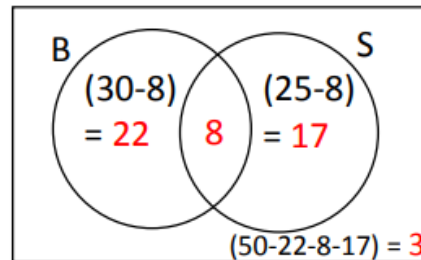
a) Complete the Venn diagram

b) Calculate:

B _____ S

(30-8) = 22 | 8 | (25-8) = 17

(50-22-8-17) = 3

i) P(A ∩ B) $= \frac{8}{50}$ ii) P(A ∪ B) $= \frac{47}{50}$ iii) P(B') $= \frac{20}{50}$

iv) The probability that a person with a sister, does not have a brother.

$= \frac{8}{25}$

Tree diagrams

- Tree diagrams are a visual way of representing and calculating probability.

- Each branch represents an outcome, with the probability of that outcome next to it.

- Be careful, if you are given a question where things are picked but not replaced, then the probability will change for the second outcome as there will be a different amount of things to pick from.

Examples

There are red and blue counters in a bag.
The probability that a red counter is chosen is $\frac{2}{9}$.
A counter is chosen and **replaced**, then a second counter is chosen.
Draw a tree diagram and calculate the probability that two counters of the same colour are chosen.

$\frac{2}{9}$ R
$\frac{7}{9}$ B

$\frac{2}{9}$ R → $\frac{2}{9}$ R, $\frac{7}{9}$ B
$\frac{2}{9}$ R, $\frac{7}{9}$ B

Prob of two reds:
$\frac{2}{9} \times \frac{2}{9} = \frac{4}{81}$

Prob of two blues:
$\frac{7}{9} \times \frac{7}{9} = \frac{49}{81}$

Prob of same colours:
$\frac{4}{81} + \frac{49}{81} = \frac{53}{81}$
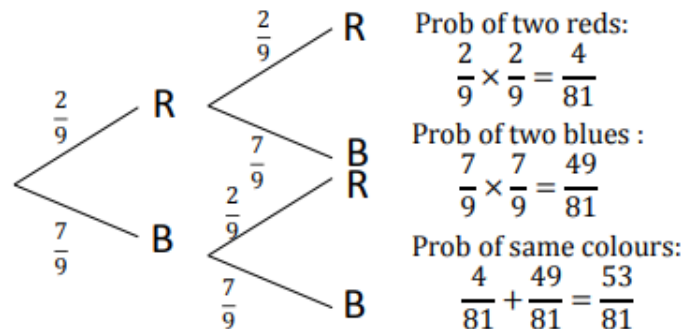
There are red and blue counters in a bag.
The probability that a red counter is chosen is $\frac{2}{9}$.
A counter is chosen and **not replaced**, then a second counter is chosen.
Draw a tree diagram and calculate the probability that two counters of the same colour are chosen.

$\frac{2}{9}$ R
$\frac{7}{9}$ B

$\frac{1}{8}$ R, $\frac{7}{8}$ B
$\frac{2}{8}$ R, $\frac{6}{8}$ B

Prob of two reds:
$\frac{2}{9} \times \frac{1}{8} = \frac{2}{72}$

Prob of two blues:
$\frac{7}{9} \times \frac{6}{8} = \frac{42}{72}$

Prob of same colours:
$\frac{2}{72} + \frac{42}{72} = \frac{44}{72}$
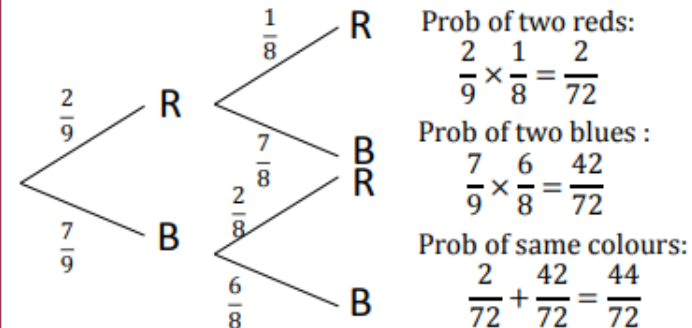
Key Vocabulary

Independent

Mutually exclusive

Conditional probability

Combined events

Tree diagrams

Venn diagrams

Experimental probability

Theoretical probability

Key Concepts

Congruent triangles are triangles that have the **same size and shape**. This means that the corresponding sides are equal and the corresponding angles are equal.

There are four rules of congruency that prove whether a triangle is congruent or not.

Examples
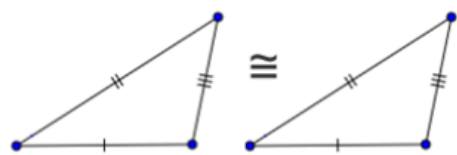
SSS = 3 sides on triangle A are equal to those on triangle B

SAS = 2 sides with the included angle on triangle A are equal to those on triangle B

ASA = 2 angles with the included side on triangle A are equal to those on triangle B
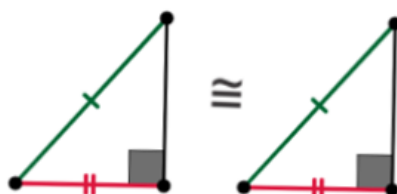
RHS = When the hypotenuse and another side on triangle A are equal to those on triangle B

Key Vocabulary

Congruent

Similar

Scale factor

Linear

Key Concepts

Similar shapes are an enlargement of one another.

A **scale factor** is used, whereby all lengths are multiplied by the same number.

When finding a missing length on the larger shape we **multiply** by the scale factor.

When finding a missing length on the smaller shape we **divide** by the scale factor.

× scale factor
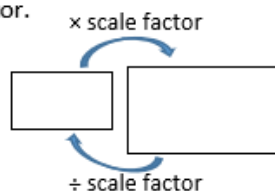
÷ scale factor

When a shape is enlarged by linear scale factor k, the area of the shape is enlarged by scale factor k^2.

When a shape is enlarged by linear scale factor k, the volume is enlarged by scale factor k^3.

11cm

y

2.5cm

10cm

3cm

x
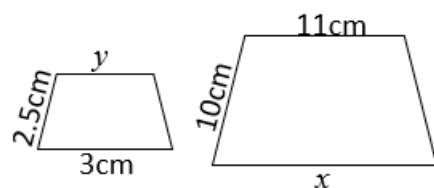
$$Scale\ factor = \frac{10}{2.5}$$
$$= 4$$
$$x = 3 \times 4$$
$$= 12cm$$
$$y = 11 \div 4$$
$$= 2.75cm$$

P

4 cm

Q
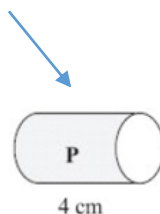
The total surface area of cylinder P is 90cm².
The total surface area of cylinder Q is 810cm².
Calculate the length of Q.

$$Area\ scale\ factor = \frac{810}{90}$$
$$= 9$$
$$Length\ scale\ factor = \sqrt{9}$$
$$= 3$$
$$Length\ of\ Q = 4 \times 3$$
$$= 12cm$$

4 cm

6 cm

A

B
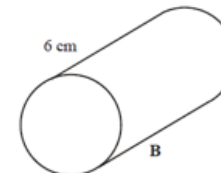
The volume of cylinder A is 80 cm^3.
Calculate the volume of cylinder B.

$$Length\ scale\ factor = \frac{6}{4}$$
$$= 1.5$$
$$Volume\ of\ B = 80 \times 1.5^3$$
$$= 270cm^3$$

D) Respiration

Key term/question	Definition/answer
45. What is respiration?	Process of transferring energy from glucose
46. What type of reaction is respiration?	Exothermic (energy is transferred to the environment)
47. What is an enzyme?	Biological catalyst
48. What do organisms use energy for? (3)	**1.** To build larger molecules **2.** muscle contraction **3.** to maintain body temperature
49. How is anaerobic respiration different to aerobic respiration?	Anaerobic occurs without oxygen
50. Why does anaerobic provide less energy than aerobic respiration?	Glucose is not fully oxidised
51. What is anaerobic respiration in yeast cells?	Fermentation
52. What happens to muscles during vigorous exercise?	The muscles fatigue
(HIGHER TIER) 53. Oxygen debt	The extra oxygen your body needs after exercise to react with the build up of lactic acid and to remove it from cells
54. What is metabolism?	Sum of all chemical reactions in the body

I) RESPONSES TO EXERCISE

Response	Benefit
55. Heart rate increases (2)	**1.** Increases the blood flow to muscles and supplies them with more oxygen and glucose **2.** Increases the rate that carbon dioxide is removed from muscles
56. Breathing rate increases	**More** oxygen enters your bloodstream
57. Breath volume increases	**More** oxygen enters your bloodstream
58. Arteries to muscles dilate	Arteries get wider to increases the blood flow to muscles and supply them with more oxygen and glucose.
59. Glycogen is converted to glucose	Supplies muscle cells with more glucose

II) Respiration reactions

Reaction	Reactants	Products
Aerobic respiration	Glucose and Oxygen	Carbon Dioxide + Water
Anaerobic respiration	Glucose	Lactic acid
Fermentation	Glucose	Ethanol + Carbon Dioxide

III) DIFFERENCES BETWEEN AEROBIC AND ANAEROBIC RESPIRATION

	Aerobic respiration	Anaerobic respiration
60. Is oxygen needed?	Yes	No
61. Where it happens?	Mitochondria	Cytoplasm
62. What products are made?	Carbon dioxide and water	**1.** Lactic acid (in muscles) **2.** Carbon dioxide and ethanol (in plants and yeast)
63. How much energy is transferred?	A large amount	A small amount
64. What activity is it used for?	Endurance (e.g. long distance running)	Strength and power (e.g. sprinting)

Key term/question	Definition/answer
1. What happens to energy in chemical reactions?	Energy is conserved and is either released or taken in from surroundings
2. Exothermic reaction	Releases energy to surroundings. Temperature of surroundings increases.
3. Endothermic reaction	Takes in energy from surroundings. Temperature of surroundings decreases.
4. Examples of exothermic reactions (4)	Combustion, respiration, self-heating cans, hand warmers
5. Examples of endothermic reactions (4)	Thermal decomposition, photosynthesis, citric acid and sodium hydrogen carbonate, sports cold-packs
6. What does the collision theory state that the rate of reaction relies upon?	1. Frequency of collisions between reacting particles 2. Reacting particles collide with enough energy to be successful
7. Activation energy	The minimum amount of energy that particles must have to react
8. What is an exothermic reaction profile?	The reactants have more energy than the products
9. What is an endothermic reaction profile?	The reactants have less energy than the products
HIGHER TIER	
10. Unit of energy	J = Joules
11. How is energy transferred during a chemical reaction?	**1.** Energy is supplied to break bonds in the reactants **2.** Energy is released when bonds in the products are formed.
12. What type of reaction is bonding breaking?	Endothermic because energy is taken in to break bonds
13. What type of reaction is bond making?	Exothermic because energy is released when bonds are formed
14. Energy change =	Energy of bond breaking – energy of bond making

Exothermic Reaction Profile
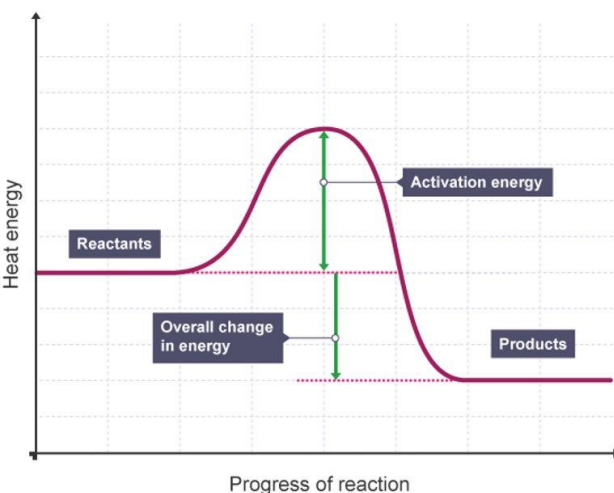
Endothermic Reaction Profile
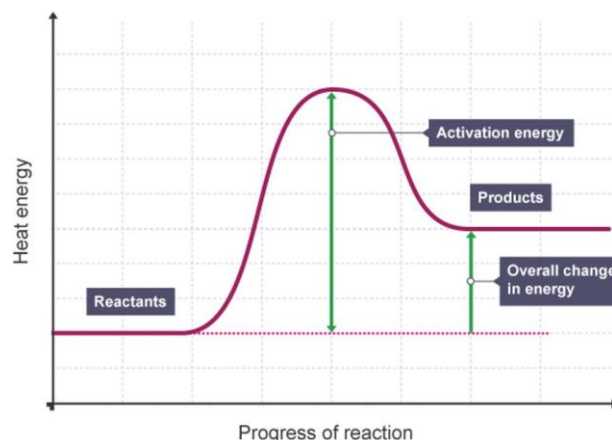
When labelling activation energy draw a straight line from reactants to the peak of curve.

When labelling overall change in energy draw a straight line from reactants to products

Temperature changes required practical

❹ Repeat steps ❷ and ❸ until a total of 40cm³ alkali is added.

❸ Stir until temperature stops changing – record temperature

❷ Add 5cm³ alkali

❶ Measure 30 cm³ acid using a measuring cylinder and add to polystyrene cup

Physic 5: Required practical 18 – Investigating Springs (Hooke's Law)

Key term/question	Definition/answer
1. What is elastic deformation?	When an object is stretched but can still return to its original size.
2. What is inelastic deformation?	When an object is stretched but does not return to its original size.
3. What is the relationship between the force applied and the extension of an elastic object? **(also known as Hooke's Law)**	The extension of an elastic object is directly proportional to the force applied.
4. Equation for Hooke's law	Force (N) = spring constant (N/m) x extension (m) **F = ke**
4. Spring constant	Describes the elasticity of a material (e.g. as stiffness of a spring increase, the spring constant also increases)
6. Limit of proportionality	The maximum applied force for which the extension will still increase proportionally.
7. Elastic potential energy	Anything that is stretched or compressed (e.g. spring, rubber band)
8. Elastic potential energy equation	Elastic potential energy (J) = 0.5 x spring constant (N/m) x extension^2 (m) $E_e = 0.5ke^2$
9. Independent variable	Increase in weight (N)
10. Dependent variable	Spring extension (m)
11. Control variables (3)	Same increment of weight added each time, same material of spring, same person reading the length of spring.
12. Why is it important to record the length of the spring at eye level?	To avoid random error
13. Why does using a pointer make the measurement of length more accurate?	It's easier to read the scale
14. How does the shape of the spring change when adding masses? (3)	**1.** Spring is stretched **2.** Length of coil increases **3.** Increased gap between coils

A) Method for investigating the extension of a spring

1. Secure a clamp stand to the bench
2. Measure the length of the spring in cm with no masses attached.
3. Attach the spring to the top clamp.
4. Add a mass with a known weight (N) to the spring and measure the length of the spring using a ruler.
5. Record the weight added and calculate the extension in m.
6. Repeat with more masses until the spring shows signs of reaching limit of proportionality.
7. Plot graph of weight (y-axis) against extension (x-axis)
8. Calculate the spring constant by calculating the gradient (change in y ÷ change in x)
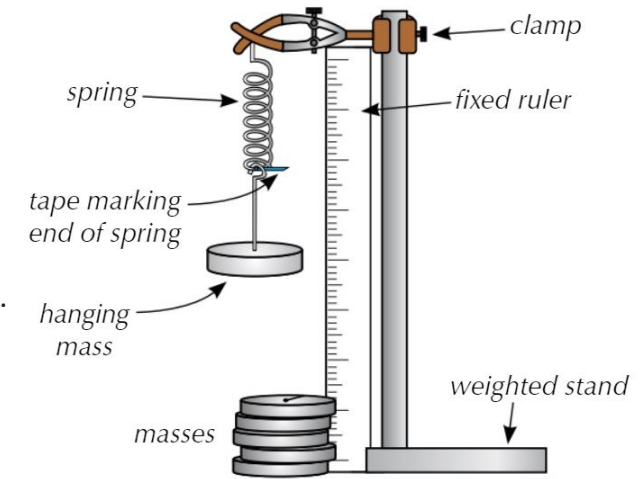
B) Analysing results

Directly proportional relationship
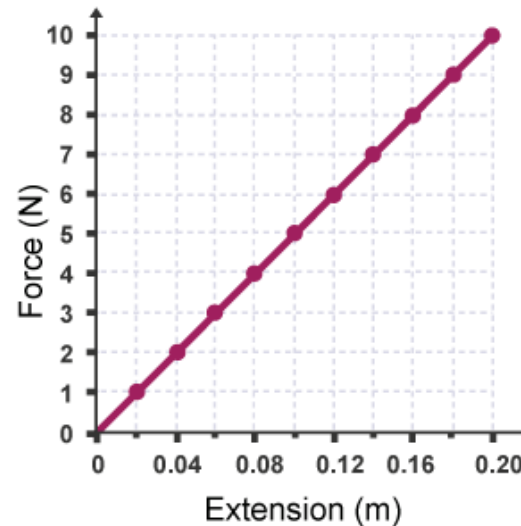
Calculating spring constant using the gradient
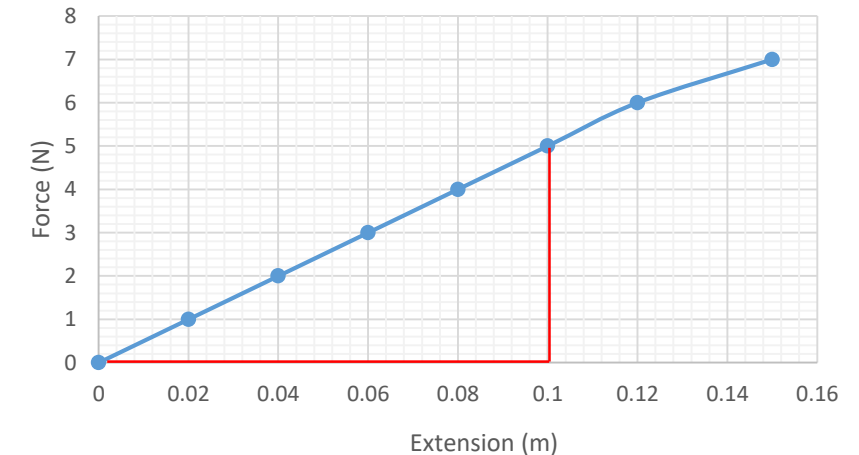
1. Spring constant = force ÷ extension
2. Therefore spring constant = Gradient = change in y ÷ change in x
3. To find the spring constant you need to work out the gradient of the straight line.

Example
1. Change in y = 5 - 0 = 5 N
2. Change in x = 0.10 – 0 = 0.10m
3. Gradient = 5 ÷ 0.10
4. Spring constant = 50 N/m

History – Year 10 Term 3
Weimar and Nazi Germany, 1918–39, Topic Hitler's Rise to Power and the Creation of a Dictatorship

BIG QUESTIONS

Hitler's Rise to Power and the creation of a dictatorship

Hitler's early years – How was a Monster made?

What happened when Hitler tried to seize power in 1923

How did the Nazi party change after the Munich Putsch?1924-28

What happened when Wall Street crashed?

Why did people support Hitler?

How was Hitler able to become chancellor?

Who started the Reichstag Fire and how did it benefit Hitler?

How did Hitler become dictator in Germany?

How did the Nazis use terror and the legal system to maintain control in Germany?

SUMMARY OF THE PERIOD
After the failed Munich Putsch of 1923 the Nazi party changed and Hitler decided that power needed to be acquired democratically. The Nazis remained in relative obscurity until the Wall Street Crash of 1929 which led to mass unemployment as part of the Great Depression. Many Germans turned to political extremes as the moderate centrist Weimar parties seemed unable to do anything to resolve the situation. By 1932 Hitler was leader of Germany's largest political party and following the political deal between von Papen and Hindenburg, Hitler was granted the title of chancellor of Germany in January 1933. By August 1934 Hitler managed to turn the constitutional position of chancellor into a dictator's role by capitalising on the Reichstag Fire to gain emergence powers, which helped him subsequently pass the Enabling Act, which allowed him to pass any laws he wanted without them being voted on in the Reichstag. He used this to ban other political parties and trade unions and when Hindenburg died in August 1934 he took the role of president as well as chancellor and became Fuhrer of Germany. A dictatorship had been established.

Key events and dates:
14th February 1926: Bamberg conference – Nazi party became more nationalist than socialist
29th October 1929: Wall Street Crash
31st July 1932: Nazis largest party in the Reichstag
30th January 1933: Hitler appointed Chancellor
27th February 1933: Reichstag Fire rips through the Reichstag building and Dutch Communist Van der Lubbe is arrested and executed for starting it.
28th February 1933: Reichstag Fire decree The Nazis use the fire to pass a decree banning the Communist Party and suspending some civil liberties.
23rd March 1933: The Enabling Act passes the Reichstag. The Enabling Act gives Hitler complete authority in Germany.
1st April 1933: Boycott of Jewish shops and businesses. The Nazis organise a boycott of Jewish shops and businesses. The SA are used to intimidate customers.
26th April 1933: Establishment of the Gestapo The official secret police of Nazi Germany is created by Hermann Göring.
20th July 1933: Concordat with the Catholic Church. The Nazis and Catholic Church sign an agreement to leave each other alone.
30th June 1934: Night of the Long Knives. Hitler removes enemies of the party through a purge of critics. Victims include Ernst Röhm (the Head of the SA) and other leading Nazis.
2nd August 1934: Death of President Hindenburg
Hindenburg dies of Lung Cancer. Hitler proclaims the merging of the roles of Chancellor and President. Hitler is undisputed ruler of Germany.

Key Vocabulary

Hitler's Rise to Power (Chancellorship) 1923-1933

Article 48: constitutional device allowing the president of Germany to pass laws at times of crisis

Nationalism: political view in which all policies are organised to make the nation stronger and more independent

Socialism: Political view that stresses that a country's land, businesses and wealth should belong to the workers

Putsch: Seizure of power/coup d'etat

Real Wages: Measure which reflects the buying power of wages rather than their stated monetary value

Chancellor: German head of government in his role as leader of the largest political party

Reichstag: German parliament

SA: Paramilitary Stormtroopers under the command of Ernst Rohm

Propaganda: Use of media to control public attitudes

25 Point programme: political manifesto of the Nazi party

Wall Street Crash: Stock market crash in 1929 in America which lead to the Great Depression

Hitler's Rise to Dictatorship - January 1933-August 1934

Dictator: ruler with absolute control

Enabling Act: Law passed by the Nazis in March 1933 allowing Hitler to pass laws without the approval of the Reichstag

Police State: use of terror and police/troops to scare population into obedience

Trade Union: organizations formed by workers from related fields that work for the common interest of its members e.g on pay and working condition. Banned by Hitler in May 1933

Night of the Long Knives: 30 June 1934 – Senior SA members including Rohm arrested and shot

Fuhrer: Supreme ruler of Germany – Hitler declared himself this following the Death of Hindenburg

Oath of Loyalty: All army soldiers were forced to swear loyalty and obedience to Hitler

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Links to support your understanding of the topic

https://www.bbc.co.uk/bitesize/guides/z3bp82p/revision/1 (a number of pages summarizing all key information for the Nazis' rise to power)
https://www.bbc.co.uk/bitesize/guides/zsvhk7h/revision/1 (a number of pages summarizing all key information for the creation of the dictatorship)
https://www.youtube.com/watch?v=a2YEUhHFMHY (good summary of the rise of the Nazis from 1923-1929)

BIG QUESTIONS

The Nazi Dictatorship and Life in Nazi Germany

To what extent were Hitler and the Nazis able to control the church?

How did the Nazis brainwash the German people?

How did the Nazis use sport as propaganda?

How did the Nazis control culture?

How much opposition was there to the Nazi regime?

How did the lives of women change under the Nazis?

What impact did the Nazis have on young people?

How successful were the Nazis' economic policies?

How were Jews persecuted in the 1930s?

SUMMARY OF THE PERIOD:

Nazi Germany was a totalitarian state, meaning all aspects of Germans' lives were controlled by the government. It was also one in which those deemed 'enemies of the state' were ruthlessly persecuted. Young people were very important to Hitler and the Nazis. Hitler spoke of his Third Reich lasting for a thousand years and to achieve this he would have to ensure German children were thoroughly indoctrinated into Nazi ideology. Additionally. the Nazis had clear ideas of what they wanted from women. They were expected to stay at home, look after the family and produce children in order to secure the future of the Aryan race – the traditional role of the woman that had existed before the 1920s. The Nazis promised to stop the suffering many Germans had felt since the end of World War One and make the economy strong again. Unemployment would disappear and Germany would become an autarky – though neither of these things truly happened. Hitler and the Nazis also had very firm views on race, with gypsies, Slavs and especially Jews facing persecution throughout the 1930s

Key dates/events:

1933: Law for the Encouragement of Marriage passed
1934: Parade ground for rallies built in Nuremberg, designed by Albert Speer
1935: RAD made compulsory for all males
1935: Lebensborn Project began
1936: Berlin Olympics held – used as propaganda by the Nazis to demonstrate the superiority of the Aryan race
1937: Women with marriage loans now allowed to work
1939: Hitler Youth made compulsory
1939: Membership of the Hitler Youth is at 8 million, while membership of the opposition group the Edelweiss Pirates is 2000
1939: Military spending 8x more than in 1933

Timeline of Jewish persecution:

1933
Nazis organised a boycott of Jewish businesses.
Books by Jewish authors were publicly burnt.
Jewish civil servants, lawyers and teachers were sacked.
Race science lessons were introduced, teaching that Jews were sub-human.
1935
The Nuremberg Laws formalised anti-Semitism into the Nazi state by:
Stripping Jews of German citizenship.
Outlawing marriage and sexual relations between Jews and Germans.
Taking away from Jews all civil and political rights.
1938
Jews could not be doctors.
Jews had to add the name Israel (men) or Sarah (women) to their name.
Jewish children were forbidden to go to school.
Kristallnacht - 9 November. The SS organised attacks on Jewish homes, businesses and synagogues in retaliation for the assassination of the German ambassador to France by a Jew.

Key Vocabulary

The Nazi Dictatorship – the police state

Terror: Use of force to control people;

Concordat: agreement between the Nazis and Catholic church to not interfere with each other;

Concentration Camps: prisons created by the Nazis and run by the SA and SS;

People's Court: secret courts created to try treasonable offences with judges hand picked by the Nazis;

Reich church: protestant church formed in 1936 which combined all Nazi supporting protestant churches;

The Nazi Dictatorship – Controlling and influencing attitudes

Censorship: banning information or ideas across a variety of media;

People's Receiver: cheap radios sold to public to allow Nazi message to be easily spread;

Gleichschaltung: concept of consistency – all art, literature etc that was published had to be consistent with Nazi ideals;

Ministry of Propaganda; run by Goebbels and controlled the arts in Germany;

The Nazi Dictatorship – Opposition, Resistance and Conformity

Resistance: refusing to support something or speaking against it;

Opposition: actively working against something to remove it;

PEL: Pastors' Emergency League – group of protestant priests who opposed certain Nazi rules regarding the church

Life in Nazi Germany (Women)

Mother's Cross: Medal awarded to women for having 4 or more children. Women who had 8 received a gold medal;

Lebensborn: project aimed at supporting women who had children with SS men – later it encouraged single women to have children with SS men;

Law for Encouragement of Marriage; loans for couples to get married which could be paid off by having children

Mother's Cross: Medals given to women for having children – bronze for 4/5, silver for 6/7 and gold for 8

Life in Nazi Germany (Youth)

Hitler Youth; Nazi organisation for young boys;

League of German Maidens; girls' version of Hitler Youth;

Race studies: children were taught this in schools – how to categorise and rank different races

Life in Nazi Germany (economy and living standards)

Labour Service: paid employment for the unemployed young men. It became compulsory for all after 1935;

Autobahns: German word for motorways;

Invisible unemployment: leaving Jews and women off the unemployment statistics which made the Nazis' employment figures look more impressive;

DAF: Nazi trade union;

KdF: scheme which provided benefits for workers;

SdA: scheme by which workers could apply for better workplace facilities but in which much of the work had to be done by themselves;

Life in Nazi Germany (persecution of minorities)

Anti-Semitism: anti-Jewish ideas

Office for Jewish Emigration: government department set up for the deportment of Germany's Jews

Term 3 - homework

Week 2 – Revise for Term 1 Week 3 assessment

Week 4/5 – Complete the 8 (4) mark usefulness question below

Source B: From a private letter, written by a Hitler Youth member to a friend in Germany in 1936.

> What is life like in this camp, which is supposed to be the best example of all the Hitler Youth camps? There is little enthusiasm. We don't have a minute of the day to ourselves. This isn't camp life, no sir! It's army life. Drill starts right after a very small breakfast. We would like to have athletics but there isn't any. Instead we have military exercises, down in the mud, till our tongues hang out of our mouths. We have only one wish: sleep, sleep and more sleep.

Exam Style Question

3 (a) Study Sources

How useful is Sources B and C for an enquiry into the attitudes of young people towards the Hitler Youth movement?

Explain your answer, using Source B and your knowledge of the historical context.

Use the scaffold opposite to help structure your answer

Judgement *Relevance to the question.*	Source B is useful because …
Analysis of reliability *Nature Origin Purpose*	The source tell us…
Contextual **K**nowledge	From my own knowledge…
Link *An overall assessment of the source.*	Overall…

Links to support your understanding of the topic
https://www.bbc.co.uk/bitesize/guides/zsvhk7h/revision/2
(summary of all key aspects of the Nazi dictatorship)
https://www.bbc.co.uk/bitesize/guides/zqrfj6f/revision/1
(summary of key information regarding all aspects of life in Nazi Germany)
https://www.youtube.com/watch?v=cDFFis0j4JM (great video detailing life in Nazi Germany)

BIG QUESTIONS

1. How many people live in cities worldwide and why is this figure growing?

2. What is a megacity?

3. Sustainable Urbanisation: Would you like to be educated in a floating school?

4. How fast is Rio De Janeiro growing and why?

5. Why has Rio De Janeiro experienced such rapid population growth?

6. What opportunities are available if you live in Rio?

7. What are the challenges of living in Rio?

8. Should the informal economy be completely eradicated?

9. Should favelas be demolished or improved?

10. How safe is the water supply in Rio?

11. How easy is it to travel around Rio?

12. How has the Favela Bairro Project improved quality of life?

Urbanisation is the increasing proportion of people living in towns and cities. Reasons for urbanisation include:

- Migration
- Natural Increase
- Location
- Economic development

Push Factors
War   Poverty
Natural Hazards
Lack of crops / food / water
Disease / Lack of health care

PUSH FACTORS
What drives people away from a place

PULL FACTORS
What draws people to a new place
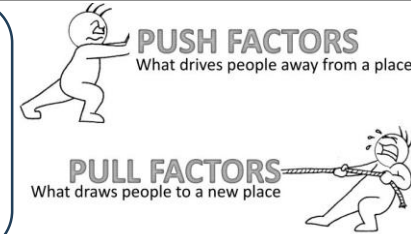
Pull Factors
Employment
Safer / Freedom
Fertile land / improved water supply / health care
Family

What is Rio like?

Rio de Janeiro is situated on Brazil's Atlantic coast at 23°S and 43°W. It has grown up around a large natural bay called Guanabara Bay (photo **A**). Until 1960 Rio was the capital of Brazil — it is now Brasilia. It is the cultural capital of Brazil, with over 50 museums, and its famous annual carnival is one of the world's biggest music and dance celebrations. It is a UNESCO World Heritage Site. The staging of the 2014 soccer World Cup and the 2016 Olympics have increased its global importance.

Brazil's second most important industrial centre, producing 5 per cent of Brazil's Gross Domestic Product (GDP).

A major port – main exports are coffee, sugar and iron ore.

The Statue of Christ the Redeemer is one of the Seven New Wonders of the World.

Sugar Loaf Mountain

A Some facts about Rio

Main service industries are banking, finance and insurance.

Stunning natural surroundings and amazing beaches make it one of the most visited cities in the southern hemisphere.

Guanabara Bay

Main manufacturing industries are chemicals, pharmaceuticals, clothing, furniture and processed foods.

Rio hosted matches during the 2014 World Cup and will host the 2016 Olympic Games.

BRAZIL
Rio de Janeiro
Atlantic Ocean
0 1000 km

What are Rio's environmental challenges?

The environmental challenges which affect the quality of life for people in Rio are caused by the physical geography of the city as well as by human activities (diagram **A**). The city authorities have developed solutions to many of these problems.

A Environmental challenges in Rio

New informal settlements on the edge of the city

Social inequality has led to high crime levels in some areas

Key
Urban area

Huge areas of sprawling squatter settlements (around 40% of Rio's population live in favelas)

Nova Iguaçu

Nilópolis

Guanabara Bay

International Airport

São Gonçalo

Niterói

Rio

Smog caused by slow-moving traffic

New areas of basic local authority housing

Heavy pollution in the bay due to increasing urbanisation and industrialisation

Problems of communication between different parts of the city across the bay

Dereliction due to de-industrialisation of heavy industries such as steel

Mountains limit space for building and make the development of an effective transport system difficult and costly

Extensive sprawl along beautiful coastal areas, such as Barra da Tijuca

Many squatter settlements built on hillsides and prone to landslips

Algal blooms and eutrophication in the Lagoa Rodrigo channel

0 15 km
N

Favela Bairro Project – improving life in the favelas

This is a *site and service scheme*, where the local authority provides land and services for residents to build homes. For example, Complexo do Alemão is a group of favelas in Rio's North Zone with more than 60,000 people. Here, the local authority have been responsible for many new improvements (figure **B**).

B Improvements in Complexo do Alemão

- Paved and formally named roads
- Access to a water supply and drainage system for improved **sanitation**
- Hillsides secured to prevent landslides, or people relocated where necessary
- Building of new health, leisure and education facilities

- Installation of a cable car system across the Complexo do Alemão hillsides – inhabitants are given one free return ticket a day
- Access to credit to allow inhabitants to buy materials to improve their homes
- 100 per cent mortgages available for people to buy their homes
- A Pacifying Police Unit (UPP) set up, with police patrolling the community to help reduce crime

Key vocabulary

Economic Inequalities – the disparity of wealth and income in a society.
Favelas – an area found on the outskirts of a city in Brazil, that has a high concentration of people living in poverty.
Integrated transport systems – different modes of transport are effectively linked with each other.
Mega-cities – a city with more than 10 million inhabitants.
Migration – the movement in or out of a city.
Natural increase – difference between the number of births and deaths.
Sanitation – provision of clean drinking water and adequate sewage disposal.
Social deprivation – the extent to which a person lacks what the require for adequate quality of life.
Social opportunities – a set of circumstances to improve quality of life in a society.
Squatter settlement – a place where the residents do not have legal rights over the land.
Traffic congestion – increased vehicle queueing, slower speeds and longer trips.
Urbanisation – the process of making an area more urban (building houses etc..)
Urban sprawl – the rapid expansion of towns and cities.

Homework

LOOK > COVER > WRITE > CHECK > REPEAT

For All Key Information and All Key Vocabulary.

> Listen to GCSE pods about this topic

> Use CGP revision guides and past papers to practice exam technique and knowledge application.

Urban growth in low income countries (LICs) - Urban issues and challenges in LICs and NEEs - AQA - GCSE Geography Revision - AQA - BBC Bitesize

Art Structures	Year: 10 Term: 3

Overarching Big Question

Select and hone skills acquired in Year 9 through the theme 'Structures' (2D/3D).

In **art**, the term **structure** pertains to the arrangement and mutual relation of the part of the body, object or composition. **Structure** refers to the relation of parts, to the relative proportions of the component elements. It also refers to the underlying skeleton which supports the whole figure, giving form to flesh. Investigate how artists use manmade and natural structures to inspire artwork. Use knowledge of the theme to select and develop personal and meaningful ideas.

Key Skills

RECORD

I will learn to record...

- images and information appropriate to a given theme
- using wet and dry media
- using drawing and photography
- building on my knowledge and understanding of how artists use materials and imagery to create meaningful work
- ideas for a work of art specialising in 2D or 3D

DEVELOP

I will learn how to develop...

- my observation skills using a range of media, techniques and processes.
- my knowledge and understanding of 2D/3D styles and techniques
- my drawing and planning skills
- ideas in response to a given theme, linking to artists work.
- my higher order thinking skills

REFINE

I will learn how to...

- select and experiment with a range of 2D/3D media and techniques
- select ideas to adapt and improve e.g. adjustments to size, colour and composition.
- develop a piece of work from one media into another

EVALUATE

I will learn how to...

- analyse and reflect on the development of my own work, through annotation making connections to artists and suggesting ways I could I improve.
- evaluate artists using analytical writing skills and forming opinions

PRESENT OUTCOUMES

I will learn how to...

Produce one or more finished outcomes in 2D or 3D

EVALUATING ARTISTS' WORK

1. Describe the piece of art you are looking at
2. What is the name of the artist or type of art?
3. What art movement or culture does the art link to?
4. Research and list 5 or more things about the artist or culture?
5. What important things have happened in the country that the art comes from?
6. What has influenced the art E.g. other artists, people, personal experiences, society, culture, politics, gender, colour, pattern, movement, religion, travel, places, objects etc.
7. Describe the materials used to make the art
8. How has the art been produced?
9. What is being communicated through the art?
10. Which of these words best describes the mood of the picture? EMOTIONAL/POWERFUL/BUSY/SLOW/PEACEFUL/WARM/COLD/HAPPY/SAD/CALM/INTENSE/SCARY can you think of any other words?
11. What do you like or dislike about the picture? Explain your reasons…

ANNOTATING YOUR OWN WORK

- In this artwork I was trying to…
- The artist/culture that has influenced my work is…
- The source I have used is…
- I found the source I used at…
- In this artwork I used the technique of...
- The media I have used is...
- I like/dislike this piece because...
- My idea links to the theme because…
- I can improve this piece by…
- I could develop this work further by...

Annotate means to explain your own creations
Artist evaluation is when you write about the artist
Project evaluation is written about the whole project at the end

END OF PROJECT EVALUATION

1. Describe each stage of the project from start to finish
2. What media did you use to produce your work? E.g. Paint/Pencil/Clay etc.
3. Describe how you used different techniques in your project? E.g. painting/drawing/modelling with clay etc.
4. Which artist's culture have you looked at?
5. Write down 2 or more similarities between your work and the artist's work.
6. Which piece of your work best shows the Artist's style or the influence of another culture and why?
7. Describe some of your own ideas…
8. Have you used a primary or a secondary source?
9. Have you included the secondary source in your work? Where did you find it?
10. Imagine your final piece was displayed in a public place…. Describe the effect looking at your work might have on people and society. E.g. relax them, make them feel sad, curious, happy, angry, thoughtful, surprised, confused, nostalgic etc. explain why e.g. because of your use of colour, images, content, arrangement? etc.
11. Explain any other influences on your work e.g. personalities *(including your own)*, places, memories, objects, politics, events, activities, religion, fact, fiction etc.
12. Describe how your work links to the project theme?
13. Explain what you have done well…
14. Explain how you could improve…
15. What would you do differently, if you were to repeat any part of this project?

Cambridge National Level 1 / 2 Sport Science
Unit: R180: Reducing the risk of sports injuries and dealing with common medical conditions

Years: 9, 10, 11
Terms: 1-6

Big Questions

1) How do different extrinsic factors influence the risk and severity of injury?

2) How do different intrinsic factors influence the risk and severity of injury?

3) What are the key components of a warm up?

4) What are the physiological and psychological benefits of a warm up?

5) What are the key components and physiological benefits of a cool down?

6) What are the types and causes of acute injuries?

7) What are the types and causes of chronic injuries?

8) How can you reduce the risk and severity of an injury or medical condition?

9) What are common responses and treatments to medical conditions?

10) What are the common causes, symptoms and treatments of medical conditions?

Topic Area 1: Different factors which influence the risk and severity of injury

Key Terms:

- ✓ **Extrinsic factors** – where the factor or risk of injury comes from outside the body
- ✓ **Intrinsic factors** – where the factor or risk of injury comes from within the body
- ✓ **Contact sports** – sports where physical contact between performers is an accepted part of play
- ✓ **Non-contact sports** – sports where participants compete alternately, or are physically separated, or the rules detail no contact.
- ✓ **Hypothermia** – a dangerous drop in body temperature below 35°C.
- ✓ **Veterans** – performers above a certain age that is specific to the sport.
- ✓ **Psychological factors** – mental factors that affect a performer.
- ✓ **Motivation** – the drive to do something.
- ✓ **Arousal** – level of activation or excitement.
- ✓ **Anxiety** – negative emotional state due to nervousness.
- ✓ **Stress** – the feelings we get when we find it difficult to cope with the demands placed on us.
- ✓ **Confidence** – belief in your own ability to master a situation.
- ✓ **Aggression** – Intention to cause harm.
- ✓ **Mental rehearsal** – going over a skill in the mind before performance.

Topic Area 2: Warm up and cool down routines

Key Terms:

- ✓ **Warm up** - exercises to prepare the body for exercise so that the chances of injury or ill effects are reduced.
- ✓ **Dynamic stretches** – active stretching exercises.
- ✓ **Adrenaline** - hormone that prepares the body for exercise.
- ✓ Lactic Acid - waste product of anaerobic exercise; it causes fatigue.
- ✓ **Anaerobic** – without oxygen; oxygen is not used to produce energy during high-intensity, short-duration anaerobic exercise.
- ✓ **Cool down** - easy exercise done after a more intense activity to allow the body to gradually move to a resting condition.
- ✓ **Maintenance stretches** - stretches designed to just maintain flexibility.
- ✓ **Static stretches** – stretches where the stretched position is held for many seconds in an attempt to improve flexibility.
- ✓ **Proprioceptive neuromuscular facilitation (PNF)** - advanced form of flexibility training, involving both the stretching and contracting of the muscles being targeted.
- ✓ **Delayed onset muscle soreness** – muscle pain that starts a day or two after an exercise workout.

Topic Area 3: Different types and causes of sports injuries

Key Terms:

- ✓ **Acute injuries** – injuries caused by impacts or collisions.
- ✓ **Chronic injuries** - injuries caused by continuous stress.
- ✓ **Soft tissue injuries** - injuries to muscles, tendons or ligaments.
- ✓ **Hard tissue injuries** – injuries to part of the skeletal system, such as fractures or dislocations.
- ✓ **Strains** - injuries to muscles.
- ✓ **Sprains** - injuries to ligaments.
- ✓ **Ligaments** - tissue that connects bone to bone and strengthens joints.
- ✓ **Abrasion** - surface damage to the skin; grazes.
- ✓ **Cut** - skin wound where the tissues of the skin become separated.
- ✓ **Laceration** - a torn or jagged wound caused by a sharp object.
- ✓ **Contusion** - bruise caused by blood leaking into the surrounding area.
- ✓ **Blister** - bubble on the skin caused by friction.
- ✓ **Fracture** - partial or complete break in a bone.
- ✓ **Dislocation** - when a bone is dislodged from its position in a joint.
- ✓ **Concussion** - head injury in which the brain is shaken inside the skull.
- ✓ **Tendonitis** - inflammation of the tendons.
- ✓ **Epicondylitis** - inflammation of an epicondyle of a bone.
- ✓ **Stress fracture** – tiny cracks in a bone caused by repetitive force, often from overuse.

Cambridge National Level 1 / 2 Sport Science
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Years: 9, 10, 11
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10) What are the common causes, symptoms and treatments of medical conditions?

Topic Area 4: Reducing risk, treatment and rehabilitation of sports injuries and medical conditions

Key Terms:

✓ **Hazard** - something that can cause harm.

✓ **Risk** - the likelihood of danger.

✓ **Risk assessment** – careful examination of what, in relation to a sports activity, could cause harm to people.

✓ **Electrocardiogram (ECG)** - technology used to detect the rhythm and electrical activity within the heart.

✓ **Emergency action plan (EAP)** - written document identifying what action to take in the event of an emergency at a sporting event.

✓ **SALTAPS** - acronym for see, ask, look, touch, active, passive, strength.

✓ **DRABC** - acronym for danger, response, airway, breathing and circulation.

✓ **Recovery position** – position for an unconscious person that keeps their airway clear and open.

✓ **PRICE** - acronym for protection, rest, ice, compression, elevation.

✓ **Ultrasound** - use of high frequency sound waves to diagnose and treat injuries.

✓ **Electrotherapy** - use of electrical energy to treat injuries.

✓ **Hydrotherapy** - use of water to improve blood circulation, relieve pain and relax muscles.

✓ **Cryotherapy** - use of cold temperatures to treat injuries.

✓ **Contrast therapy** – use of quickly changing temperatures from hot to cold and back again to treat injuries.

✓ **Analgesics** – medication used to relieve pain.

✓ **Cast** - hard fibreglass or plaster casing designed to prevent broken bones from moving.

✓ **Splint** - plastic or fibreglass support for a limb injury.

✓ **Sling** - support, usually of folded cloth, designed to immobilise and rest the arm.

Topic Area 5: Causes, symptoms and treatment of medical conditions

Key Terms:

✓ **Asthma** - a condition in which the airways narrow and swell, which can make breathing difficult.

✓ **Inhaler** - device that allows medicine to be breathed in.

✓ **Nebuliser** - machine that allows medicine to be breathed in.

✓ **Glucose** - simple sugar found in blood used as an energy source.

✓ **Insulin** - a hormone that lowers blood glucose levels.

✓ **Diabetes** - condition in which blood sugar levels are not regulated by the body effectively.

✓ **Ketones** – chemicals produced by the liver during fat breakdown.

✓ **Diabetic ketoacidosis (DKA)** - a condition caused by excess ketones in the blood.

✓ **Insulin-dependent** - another name for Type 1 diabetes.

✓ **Insulin-resistant** – another name for Type 2 diabetes.

✓ **Hypoglycaemia** - low blood sugar level.

✓ **Hyperglycaemia** – high blood sugar level.

✓ **Epilepsy** – abnormal brain activity that causes recurring seizures.

✓ **Seizures** - bursts of electrical activity that temporarily affect how the brain works.

✓ **Triggers** - things that make epileptic seizures more likely.

✓ **Fatigue** - a feeling of overwhelming tiredness.

✓ **Anti-epileptic drugs (AEDs)** - medicine taken to help control seizures.

✓ **Ketogenic diet** - a diet high in fats and low in carbohydrates and proteins.

✓ **Sudden cardiac arrest (SCA)** - a condition in which the heart suddenly and unexpectedly stops beating.

✓ **Commotio cordis** – a sudden trauma, such as a blow to the chest directly over the heart at certain points in the heartbeat cycle, that can cause sudden cardiac arrest.

✓ **Electrolytes** – minerals found in blood, urine and sweat that carry an electric charge when dissolved in water.

Cambridge National Level 1 / 2 Sport Science
Unit: R181: Applying the principles of training: fitness and how it affects skill performance

Years: 9, 10, 11
Terms: 1-6

Big Questions

1) How are components of fitness relevant to different sports?

2) Can you justify why different components of fitness are relevant for different sports?

3) What fitness tests are used for each component of fitness?

4) Can you apply the components of fitness to a skilled performance?

5) What are the principles of training?

6) What are SMART goals?

7) What are methods of training and their advantages/ disadvantages?

8) What factors should you consider when designing a fitness training programme?

9) How do you apply the principles of training to a fitness training programme?

10) How do you plan a fitness training programme?

11) How do you record your results from a fitness training programme?

12) What are the strengths and areas for improvement for your fitness training programme?

Topic Area 1: Components of fitness applied in sport

Key Terms:

✓ **Cardiovascular endurance** - the ability of the heart and lungs to get oxygen to the working muscles for use by the body.

✓ **Muscular endurance** - the ability of a muscle to sustain repeated contractions.

✓ **Aerobic** - with oxygen; oxygen is used to produce energy during low intensity, long-duration aerobic exercise.

✓ **Speed** - the maximum rate at which an individual is able to perform a movement.

✓ **Strength** - the extent to which a muscle or muscle group can contract against resistance.

✓ **Power** - the exertion of rapid muscular strength; it can be remembered as strength × speed.

✓ **Agility** - the ability to move and change direction quickly while maintaining control.

✓ **Balance** - the ability to maintain a position; this involves maintaining the centre of mass over the base of support.

✓ **Flexibility** - the range of movement possible at a joint.

✓ **Co-ordination** - the ability to use two or more body parts together (simultaneously) smoothly and efficiently.

✓ **Reaction time** - the time taken from the onset of a stimulus to the start of the reactive movement.

✓ **Maximum oxygen uptake (VO2 Max)** – maximum volume of oxygen that can be consumed per minute / unit of time.

✓ **Protocol** - the accepted or established procedure for conducting a test.

✓ **Validity** - refers to how well a fitness test measures the component of fitness that it aims to test.

✓ **Reliability** - a fitness test is reliable if it can be repeated and gives similar results each time.

✓ **Maximal tests** – fitness tests that require maximal effort in order to produce a valid, comparable result.

✓ **Sub-maximal tests** - fitness tests that do not require maximal exertion.

✓ **PAR-Q** - physical activity readiness questionnaire.

Topic Area 2: Principles of training in sport

Key Terms:

✓ **SPOR** - principles of training: specificity, progression, overload and reversibility.

✓ **Specificity** - making training specific to the movements, skills and muscles that are used in the activity.

✓ **Progression** – gradually making training harder as it becomes too easy.

✓ **Overload** - working harder than normal.

✓ **Reversibility** – 'use it or lose it'. If you stop training, you will lose fitness.

✓ **FITT** - principles of overload: frequency, intensity, time and type.

✓ **SMART** - principles of goal setting: specific, measurable, achievable, realistic and time bound.

✓ **Continuous training** - any activity or exercise that can be continuously repeated without suffering undue fatigue.

✓ **Aerobic training zone** – the optimal zone of training to make aerobic gains in the body to improve cardiovascular endurance and stamina.

✓ **Fartlek training** - 'speed play', which generally involves running, combining continuous and interval training with varying speed and intensity.

✓ **Interval training** – any training that involves periods of work and rest.

✓ **Circuit training** - a series of exercises performed at work stations with periods of work and rest.

✓ **Plyometric training** - repeated exercises such as bounding, hopping or jumping over hurdles, which are designed to create fast, powerful movements.

✓ **Eccentric contraction** - when a muscle contracts and lengthens.

✓ **Concentric contraction** - when a muscle contracts and shortens in length.

✓ **Resistance training** - training that involves working against some kind of force that 'resists' the movement.

✓ **Hypertrophy** - an increase in muscle size as a result of training.

✓ **High-intensity interval training (HIIT)** – training that involves periods of very high-intensity work and rest.

Cambridge National Level 1 / 2 Sport Science
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12) What are the strengths and areas for improvement for your fitness training programme?

Topic Area 3: Organising and planning a fitness training programme

Key Terms:
- ✓ **One rep max** – the maximum weight that can be lifted once (one repetition).
- ✓ **Adaptability** - flexibility to adapt a programme if, for any reason, the session being performed cannot be followed precisely.
- ✓ **Objective measures** – facts that provide figures/ numbers, which can allow a performer to monitor improvement.

Figure 2.36 One rep max refers to the maximum weight that can be lifted once

Topic Area 4: Evaluate own performance in planning and delivery of a fitness training programme

Figure 2.38 Stretching forms a vital part of warm up and cool down routines

Target area	Suitable activity
Cardiovascular endurance/ stamina	**Specific exercises:** any aerobic activity, for example cycling, swimming, jogging, walking, rowing **Overload intensity:** 60–80 per cent of maximum heart rate (220 – age) **Time:** 20 minutes or more of activity, three to four times per week
Muscular strength	**Specific exercises:** use of high resistance, for example weights, resistance machines, body weight **Overload intensity:** 70 per cent or more of one rep max (maximum lift); three sets of six to eight repetitions **Time:** 30 minutes or more
Muscular endurance	**Specific exercises:** use of low resistance, for example weights, resistance machines, body weight **Overload intensity:** less than 70 per cent of one rep max (maximum lift); three to four sets of 10–15 repetitions **Time:** 30 minutes or more
Agility	**Specific exercises:** shuttles or circuits that involve speed work while changing direction, for example sprinting round cones, ladder running **Overload intensity:** work : rest ratio of 1 : 3 (30 seconds work with 90 seconds rest between different exercises) **Time:** 30 minute sessions, two or three times per week
Speed	**Specific exercises:** use speed ladders, sprints, interval sprints **Overload intensity:** work : rest ratio of 1 : 3 (30 seconds work with 90 seconds rest between different exercises) **Time:** 30 minutes or more
Power	**Specific exercises:** interval training – high-intensity, short sharp activities; acceleration sprint training; plyometric training, for example box jumping and hurdle jumps **Overload intensity:** for example, box jumps with three to six sets of 8–15 repetitions, depending upon the stress of the exercise being done; sprints with a work : rest ratio of 1 : 3 (30 seconds work with 90 seconds rest between sprints) **Time:** 30 minutes or more
Balance, flexibility, co-ordination or reaction time	**Specific exercises:** use of predesigned circuit to include flexibility stretches, co-ordination drills or balancing exercises **Overload intensity:** two to three sets of 12 reps with 30-second recovery intervals **Time:** 30 minutes or more

Cambridge National Level 1 / 2 Sport Science
Unit: R182: The body's response to physical activity and how technology informs this

Years: 9, 10, 11
Terms: 1-6

Big Questions

1) What is the function and role of the cardio-respiratory system?

2) How is technology used to inform us about the cardio-respiratory system?

3) What are the components and role of the musculo-skeletal system?

4) How is technology used to inform us about the musculo-skeletal system?

5) What are the short-term effects of exercise on the cardio-respiratory system?

6) What are the short-term effects of exercise on the musculo-skeletal system?

7) What are the long-term effects of exercise on the cardio-respiratory system?

8) What are the long-term effects of exercise on the musculo-skeletal system?

Topic Area 1: The cardio-respiratory system and how the use of technology supports different types of sports and their intensities

Key Terms:
- ✓ **Atria** - upper chambers of the heart that collect blood from veins.
- ✓ **Ventricles** – lower chambers of the heart that pump blood out through arteries.
- ✓ **Valves** - prevent the backflow of blood.
- ✓ **Deoxygenated** – venous blood (in veins) that does not carry oxygen.
- ✓ **Oxygenated** - arterial blood (in arteries) that carries oxygen.
- ✓ **Arteries** - blood vessels that mainly carry oxygenated blood away from the heart.
- ✓ **Capillaries** - tiny, thin walled blood vessels that join arteries (which carry blood away from the heart) and veins (which carry blood back to the heart).
- ✓ **Alveoli** - tiny air sacs in the lungs.
- ✓ **Veins** - blood vessels that mainly carry deoxygenated blood back to the heart.
- ✓ **Trachea** - tube connecting the mouth and nose to the lungs.
- ✓ **Lungs** - large spongy organs in chest; used for gas exchange.
- ✓ **Bronchi** - airways that lead from the trachea into the lungs.
- ✓ **Bronchioles** - air passages inside the lungs that connect the bronchi to the alveoli.
- ✓ **Diaphragm** - dome-shaped muscle causing inhalation and exhalation.
- ✓ **Radial pulse** - heart rate that can be felt at the wrist.
- ✓ **Carotid pulse** - heart rate that can be felt at the neck.
- ✓ **Vasoconstriction** – reduction in the diameter of a blood vessel to reduce blood flow through that vessel.
- ✓ **Vasodilation** - widening in the diameter of a blood vessel to increase blood flow through that vessel.
- ✓ **Cardiac output** – the volume of blood that the heart is able to pump out in one minute.
- ✓ **Stroke volume** – the volume of blood that leaves the heart during each contraction.

Topic Area 2: The musculo-skeletal system and how the use of technology supports different types of sports and their movements

Key Terms:
- ✓ **Clavicle** - the collarbone.
- ✓ **Scapula** - the shoulder blade.
- ✓ **Humerus** - bone in the upper arm.
- ✓ **Radius** - bone of the forearm; attaches to the thumb side of the wrist.
- ✓ **Ulna** - bone of the forearm; forms the point of the elbow.
- ✓ **Cranium** - skull bone, which surrounds the brain.
- ✓ **Ribs** - bones surrounding the heart and lungs, forming the chest cavity.
- ✓ **Sternum** - flat bone at the front of the chest, sometimes called the breastbone.
- ✓ **Vertebrae** - many single bones joined together to form the backbone.
- ✓ **Femur** - long bone of the thigh or upper leg, which extends from the hip to the knee.
- ✓ **Tibia** - the shin bone; forms knee joint with the femur.
- ✓ **Fibula** - bone in the lower leg that forms the ankle.
- ✓ **Patella** - the kneecap; covers the knee joint.
- ✓ **Deltoids** - muscles on shoulder joint that move the upper arm.
- ✓ **Trapezius** - muscle at the top of the back that moves the scapula and head.
- ✓ **Latissimus dorsi** – muscle at the side of back that moves the upper arm.
- ✓ **Pectorals** - muscles in the chest that move the upper arm.
- ✓ **Biceps** - muscles at the front of the upper arm.
- ✓ **Triceps** - muscles at the back of the upper arm.
- ✓ **Abdominals** – stomach muscles that protect internal organs.
- ✓ **Gluteals** - buttock muscles, which are used when running.
- ✓ **Hamstrings** - muscles at the back of the upper leg.
- ✓ **Quadriceps** - muscles at the front of the upper leg.
- ✓ **Gastrocnemius** - one of the calf muscles; used in walking.
- ✓ **Soleus** - one of the calf muscles; used in walking.

Cambridge National Level 1 / 2 Sport Science
Unit: R182: The body's response to physical activity and how technology informs this

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Big Questions

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8) What are the long-term effects of exercise on the musculo-skeletal system?

Key Terms (continued Topic 1):
- ✓ **Systolic blood pressure** - blood pressure when the heart is contracting.
- ✓ **Diastolic blood pressure** - blood pressure when the heart is relaxed.
- ✓ **Inhalation** - breathing in.
- ✓ **Exhalation** - breathing out.
- ✓ **Intercostal muscles** - muscles located between the ribs.
- ✓ **Diffusion** - the movement of a gas from an area of high concentration to an area of low concentration.
- ✓ **Wearable technology** - technology worn on the body during exercise to provide data.
- ✓ **Laboratory-based technology** - the use of technology inside a laboratory to provide data.
- ✓ **Field-based technology** - technology that can be used to provide data outside of a laboratory in the setting where sports take place, for example a football pitch.
- ✓ **Spirometer** - machine that produces a spirometry trace of breathing volumes.
- ✓ **Vital capacity** – amount of air expelled from your lungs when you take a deep breath and then exhale fully.
- ✓ **Pulse oximeter** – device used to measure how efficiently oxygen is being carried to the extremities by the heart (blood oxygen level).

Figure 3.10 Smartwatch

Topic Area 3: Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

Key Terms:
- ✓ **Anticipatory rise** – slight increase in heart rate before exercise.
- ✓ **ROM** - range of movement.

Key Terms (continued Topic 2):
- ✓ **Synovial joint** - a freely moveable joint.
- ✓ **Ball and socket joint** - ball shaped end of bone fits into the socket of another, for example the hip.
- ✓ **Hinge joint** - end of bone fits against another bone allowing movement in only one direction, for example the knee.
- ✓ **Gliding joint** - one bone can slide over another, for example the carpals in the wrist.
- ✓ **Pivot joint** - rounded end of one bone fits into a ring formed by the other bone, for example the vertebrae of the neck, which allow head rotation.

Topic Area 4: Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

Key Terms:
- ✓ **Fast twitch fibres** – muscle fibres that contract quickly and/or with high force; used during high-intensity work.
- ✓ **Slow twitch fibres** – muscle fibres that contract with a low force but do not fatigue quickly.
- ✓ **Bradycardia** – decrease in the resting heart rate because of training.
- ✓ **Goniometer** - device used to measure flexibility (range of movement at a joint).
- ✓ **Lung capacity** - the amount of air the lungs can hold.
- ✓ **Tidal volume** - the amount of air breathed in and out at rest.
- ✓ **Bone density** - the amount of bone mineral in bone tissue.
- ✓ **Capillarisation** – an increase in the number of capillaries as a result of endurance training.
- ✓ **Heart disease** - when the heart's blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries that supply the heart with blood.
- ✓ **Heart attack** – medical emergency in which the supply of blood to the heart is suddenly blocked.

Religion	Year: 10
Relationships + family	Term: 3

Big Questions
1. Should we be allowed to love who we want?
2. What is gender?
3. What is family?

Is it okay to have sex outside marriage?

Some Christians believe that sex outside of marriage is wrong as you are only meant to have sex within marriage for children.

Other Christians believe sex outside marriage is okay as long as you are going to marry that person.

Buddhists believe that sex outside marriage is okay as long as it is consensual.

Both Buddhist and Christians believe that you shouldn't be promiscuous (have multiple partners)

Should we use contraception?

Some Christians believe contraception is wrong as it stops you from having a child. If you are having sex you should only be having sex in marriage and for children. Other Christians say it is okay to use it but only if you are going to marry that person. Buddhists suggest that contraception is good because you need to reduce suffering. If unwanted children are born this leads to suffering, so contraception is good to prevent this.

What is sexuality?

Sexuality is about your sexual feelings, thoughts, attractions and behaviours towards other people. You can find other people physically, sexually or emotionally attractive, and all those things are a part of your sexuality. Sexuality is diverse and personal, and it is an important part of who you are.

Heterosexual – someone who is attracted to the opposite sex (straight).

Homosexual - Someone who is attracted to the same sex (Gay).

Bisexual - Someone who is attracted to both males and females.

Lesbian – A female who is attracted to a female.

Asexual – someone who is not attracted to anyone.

Pansexual – someone who is not attracted to gender but the person, emotion, character etc.

This is not a full list, just some of the terms you may have heard.

Is it okay to be gay?

In the UK it became legal to be gay in 1967 – prior to this you would have been put into prison. In 2005 same sex couples could get a civil partnership and in 2013 same sex marriage became legal.

There are 69 countries in the world that have laws against same sex couples, where you can be arrested or even killed.

Some Christians believe that you can be gay but you should not act on your desires. Instead, you should be celibate. This is because you cannot make children and this is the purpose of sex.

Other Christians believe that it is acceptable to be gay and have a relationship.

Buddhist believe that as long as it is a loving and consensual relationship it doesn't matter.

Key words:

Adultery – having an affair, a sexual relationship with someone you are not married to.

Age of consent – the age at which a person is considered old enough to be able to decide to have sex, according to the law.

Celibacy – not having sexual relationships.

Chastity – keeping oneself pure – waiting to get married before having sex.

Contraception – precautions taken to prevent pregnancy and to protect against sexually transmitted infections.

Covenant – an agreement based on promises between two sides, often linked to religion, so includes an agreement before and with God.

BIG QUESTIONS

What is characterisation?

How can physical performance skills and vocal skills be incorporated into a performance?

How can drama techniques be incorporated into a performance?

Why is discipline important in a performance?

What are the differences between the two styles – Naturalism and Abstract Theatre?

What is the difference between devising and a scripted performance?

Performance Skills

Planned Movement	Physical actions that are organised prior to the performance and then rehearsed.
Positioning	Arranging an actor in a place/way. Where the actor is facing.
Posture	How the body is held.
Body Language	Movements with the body, that communicate feeling.
Eye Contact	Where the actor is looking.
Space	How the environment is used.
Levels	How high or low an actor is positioned on stage.
Vocal Skills	How the voice is used to communicate emotion and character.
Gestures	Using your hands to further express meaning or emotion.
Facial Expressions	Showing mood through the movement of your face.

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Physical performance skills are the ways the use body can be used to communicate character or meaning.

Always remember to remain disciplined when performing.

Vocal Skills

Pitch	How high or low your voice is.
Pace	How fast or slow you speak.
Pause	A moment of silence.
Projection	How far and clearly you speak enable your voice to travel across the room.
Tone	Using your voice to show mood.
Emphasis	Exaggerating particular words or phrases in a sentence.
Accent	A distinctive pronunciation which shows location. This can be linked to country or area.
Volume	How loud or quiet you are speaking.

4P'STEAV

The way in which the voice is used to communicate. Vocal skills can be used to communicate character. The more the audience can understand about a character, the greater the understanding of the narrative of the performance.

Drama Techniques	What would it look like on stage?
Thought Track	Character telling their thoughts to the audience
Monologue	A speech spoken by one character
Choral Speaking	A group of actors speaking at the same time
Slow motion	Slowing movement down
Flashback	A scene from the past
Cross Cutting	Mixing up the order of scenes
Narration	A spoken commentary for the audience about the action on stage
Organic Sound	A sound made by the actors (not recorded)
Synchronisation	Actors moving at the same time
Canon	Moving one after the other
Multi-role	One actor playing more than one role
Hot Seating	Questioning an actor in role
Still Image	A frozen moment in a scene
Physical Theatre	Using your body to create objects
Mime	Performing an action with no props
Mirroring	2 actors facing each other moving at the same time
Split Role	One role that is played by more than one actor
Flash forward	A scene from the future
Tableau	A still image that captures the whole scene/story
Repetition	A sound/movement that is repeated
Marking the Moment	When a moment in a scene is emphasised

Style: Naturalism

Naturalism uses realistic acting and in-depth characterisation.

- Subtext
- Relationships
- Personality
- Situation
- Motivation

Movement is planned carefully, making sure every action has a meaning behind it.
Set/costume/props/sound are used as part of a Naturalistic performance however drama techniques are **NOT** used!

Style: Abstract Theatre

Theatre that is non-naturalistic.
Drama techniques are included in performances to present a narrative or theme in an alternative or unconventional way.
Drama techniques are used to enhance an abstract performance, making it more engaging for the audience.

BIG QUESTIONS

How does the lighting contribute to the audience's understanding of the choreographic intent of E of E?

How does the costume contribute to the audience's understanding of the choreographic intent of E of E?

How does the set design contribute to the audience's understanding of the choreographic intent of E of E?

How does the music contribute to the audience's understanding of the choreographic intent of E of E?

How does the choreographic approach support our understanding of E of E?

How does the aural setting support our understanding of E of E?

How does the choreographic content support our understanding of E of E?

How does the structure support our understanding of E of E?

How does the dance style support our understanding of E of E?

Why has the choreographer made the decisions regarding each component? What is the impact of that decision?

Choreographer: Kenrick H20 Sandy
Performed by: Boy Blue Entertainment
Performance: May 2013
Dancers: : 17 dancers (8 female / 9 male)
Kenrick is one of the dancers in the performance and several of the dancers feature in key solos and have leading roles.
Structure: 4 sections

Stimulus:
- Til Enda *[the music for Section 4]*
- Freedom of expression through hip hop movement
The importance of being free to express ourselves both as individuals and through the use of hip hop movement vocabulary are central to Kenrick's initial ideas for the work.

Choreographic Approach:
- Exploring hip hop movement in a contemporary way
- Musicality and the relationship between movement and music
- Exploring and abstracting hip hop movement and 'signature' company movements in a contemporary way.
Working closely with the accompaniment and paying particular attention to musicality.
- Whilst the choreographer and the dancers created material for the work, Kenrick very specifically selects certain movement vocabulary and 'signature' motifs (Ninja Walk, Ninja Glide, Ninja Static and Chariots of Fire), choreographic devices, formations and use of space.

Choreographic Intent:
- An emotional journey
- Order and chaos
- Kenrick seeks to express himself by using hip hop as a tool to create art that affects an audience in a theatrical setting. He wants the audience to feel that they are witnessing and sharing an emotional journey through the piece and appreciating hip hop dance as an art form. Each section is a scene, a moment in life, and the whole work is a journey. The theme of order and chaos highlights the restrictions of an individual style of hip hop dance. Kenrick seeks to create variations within these parameters in order to create a sense of chaos in contrast with the potential limitations of set styles. Often individual dancers split from the ensemble and at other times the ensemble are all in unison. Kenrick uses these contrasts to show different relationships between order and chaos.

Dance Style:
Hip hop including popping, locking, krumping, animation, waving, waacking, breaking

Hip hop dance is closely associated with hip hop music and has a very specific vocabulary of dance moves, which fall under a range of styles known as breaking, locking and popping. It appeals to many people because it is both fun and physically demanding. Hip hop dance evolved along with hip hop music, in the 1970s within groups of African American street gangs from the streets of South Bronx and Brooklyn, NY.

Costume:

- Pale blue T shirt
- Stonewashed denim jeans
- Grey hi top trainers with white sole
- The costume was designed to represent the company – casual, enhance the shape of the dancers and create a 'clean' look. Kenrick wanted the dancers' hair tied back where necessary to ensure facial expressions were clearly visible. Some dancers wear everyday jewellery to enhance both the individuality and everyday qualities of the piece.

Aural Setting:

Genesis:
music in two parts.
1: laser sounds & electronic rhythms with 'heartbeat' pulse
2: strong repetitive beat with scratch- ing sounds [Ninja Walk.]

Growth & Struggle:
a peaceful song with the lyric 'I feel you're the one'. Pulsating electronic drum rhythm.

Flow & Connection :
2 melodies: 1: rapid running violin notes underneath
2: high pitched violin playing long piercing notes over the top.

Empowerment:
Soft piano begins - then harsh, 'gun like', aggressive electronic rhythm. Two violin melodies:
1: punchy, staccato accents 2: smoother & fluid

Staging and Set:

A black backcloth lifts to reveal a white cyclorama behind

Smoke/fog is used

Proscenium arch

No set

Lighting:
- *Genesis:* Pale blue circles of light on the floor, snapping to intense blue wash.
- *Growth & Struggle*: White side- light offstage right. Low intensity blue wash upstage left.
- *Flow & Connection Between People*: Pale blue wash fading to low intensity white sidelighting.
- *Empowerment*: Blue wash
- Co-Designed by Kenrick Sandy with the Sadler's Wells Theatre lighting team.
  A prominent feature is the lighting from above the stage casting an intense blue colour on the dancers. Some are spotlights from above the stage used to highlight individual dancers and groups of dancers (each in their own light) and some create a wash of blue across the stage. The edges of the stage are not lit creating a very central focus. The lighting is designed to create moods and different moments as well as work with both the formations and the accompaniment. It is also used to highlight particular transitions. A pair of white lights from off-stage right feature in the second section and are significant in the focus of the dancers and relationship between the soloist, the group entering the stage space and the ideas of adversity and confronting the trials and tribulations of life.
- Sometimes the lighting fades and at other times snaps to black out for dramatic effect and to create distinction between sections and transitions. The intensity of the lighting varies considerably in the different sections.

Structure:

The dance is in 4 sections and although not titles, Kenrick describes them as being based around the following ideas:

1. Genesis (start - 2min 12sec) - the start of life and a feeling starts to grow and create from the womb of expressionism. There is a sense of an electrical current affecting the dancers. He explores ideas of struggling to be free, find individual expression, conformity and order. Kenrick says 'section one I would say is.... the birth or maybe the genesis. It is the start. It is that moment where the impulse of a feeling or a movement starts to grow and create. So at the very beginning when you see the guys in the spot lights they are all moving like an electrical current is hitting them and that to me is like them back in the womb, the womb of... Expressionism'.

2. Growth and struggle (2min 12sec - 3min 21sec) - starting with an individual dancer's expression contrasted by others entering from stage right. What may appear aggressive suggests the struggle for the recognition of individual passion and expression. It ends in a rugby scrum inspired formation with an ensemble supporting the individual dancer. Kenrick says 'section two, for me is about growth and about struggle. It's about... in that piece where you see the people walking past and one guy is expressive into the light. To me that was about everyday life, we tend to want to express ourselves and people just walk by and we're just living our life, but sometimes there is a bit of a struggle and people want to hold you back or stop you from what it is, so there is a level of aggression that comes out within your passion. And that piece was about, you know, how passion can grow and become very, very, very strong to a point where it does look aggressive. But what it is, is that you are just really, really passionate about what you do'.

3. The connection and flow between people (3min 21sec - 6min 30sec) - developing from a duet to a full ensemble. There are aspects of memory, manipulation, flow, merge and play between individuals in a relationship. An energy flows through the dancers, sometimes controlled by an individual and sometimes in group unison. Kenrick says 'section three is about flow, it's about relationships it's about connection. The duet at the beginning is about this energy and it flows from one person to another. That's what happens sometimes in a relationship where you express yourselves, you know, you may have an argument where you express yourself, you may have a memory or a moment where you express yourself. It's also about how the relationship can easily manipulate each other... as well as … gel, merge, play that's that first section'.

4. Empowerment (6min 30sec - 10min 39 sec) - The energy is captured and released with a new found raw, super human power. The release of individual energy (now more chaotic) continues to contrast with the powerful order of group unison. Within the idea of empowerment, this section also showcases the individual skills and expressionism of the core dancers. The contrasting lyrical qualities and frenetic percussive elements of the accompaniment are echoed in the contrasting actions and dynamics. There is an incessant quality as the section builds to a crescendo where the dancers are fully empowered. The section finishes with the dancers huddling together in unity before a final black- out and bow. The last section, which is *Til Enda*, is about empowerment, it's about .... superpowers, super human powers it's about letting yourself go to the fullest. That is where the true feeling of the emancipation of expressionism is for me. I am always about empowerment, pushing people, motivating people. I don't believe that all dancers should just do choreography, and just "five , six seven, eight". You also need to have an individualisation within our work and in that piece you see that the core dancers are all showcasing their skills... and to me it is important that they do that because it's growth, it grows them as a dancer. So that last section is about empowerment which then creates the whole piece to have a journey, from the beginning up until the point, the crescendo, that moment where you feel fully empowered.

Dance	Year: 10
Dance Technique – Skills for Performance	Term: 3

BIG QUESTIONS

Can you identify and offer specific movement examples of the 5 basic body actions?

How do expressive skills contribute to the overall performance of a piece of dance?

How do physical skills contribute to the overall performance of a piece of dance?

What is the difference between mental skills for process and mental skills for performance?

How might a dancer improve their expressive skills?

How can a physical skill be improved over time?

Physical Skills: aspects enabling effective performance

Posture – The way the body is held

Alignment – Correct placement of body parts in relation to each other

Balance - A steady or held position achieved by an even distribution of weight

Coordination – The efficient combination of body parts

Control – The ability to start and stop movement, change direction and hold a shape efficiently

Flexibility - The range of movement in the joints (involving muscles, tendons and ligaments)

Mobility – The range of movement in a joint; the ability to move fluently from action to action

Stamina – Ability to maintain physical and mental energy over periods of time

Extension – Lengthening of one or more muscles or limbs

Isolation: an independent movement of part of the body

Expressive Skills: aspects that contribute to performance artistry and that engage the audience.

Projection – The energy the dancer uses to connect with and draw the audience in

Focus – The use of the eyes to enhance performance or interpretative qualities

Spatial awareness – Consciousness of the surrounding space and its effective use

Facial expressions – use of the face to show mood, character or feeling

Phrasing – The way in which the energy is distributed in the execution of a movement phrase

Musicality – the ability to make the unique qualities of the accompaniment evident in performance

Sensitivity to other Dancers – Awareness of and connection to other dancers

Mental Skills: skills in preparation for a performance

Systematic repetition – repeating something in an ordered way

Mental rehearsal – thinking through or visualising the dance

Rehearsal discipline – attributes and skills required for refining a performance – effective use of a rehearsal and time

Planning of rehearsal – organisation of when to go over material

Response to feedback – implementing changes and making improvements based on feedback/opinion given to you

Capacity to improve – willing to make changes and better, relearn, implement or adapt to make something better

Mental Skills: skills needed during a performance

Movement memory – the automatic recall of learned movement material without conscious thought

Commitment – dedication to a performance

Concentration – the power to focus all of one's attention

Confidence – the feeling or belief that one can have in one's performance or work

Technical Skills: the accuracy of content

- **Action Content**; 5BBA, use of different body parts
- **Spatial Content;** size, direction, level, pathway
- **Dynamic Content**; flow, speed, force
- **Relationship Content;** lead and follow, mirroring, action and reaction, accumulation, complement and contrast, counterpoint, contact, formations
- **Timing Content**
- **Rhythmic Content**

The Five Basic Body Actions: 5BBA
Jump, Turn, Travel, Stillness and Gesture

Can you define each of the 5 basic body actions?

What is the overall impact of technical skills in a performance?

What is the acronym to remember physical skills/expressive skills/technical skills and mental skills?

Homework Links

https://www.aqa.org.uk/resources/dance/gcse/dance/teach/subject-specific-vocabulary

Key Vocabulary

You must be able to identify and define ALL vocabulary listed.

You must be able to distinguish what category each skill falls under

EG: strength is a physical skill NOT a mental skill

BIG QUESTIONS

How can a motif be developed through action content?

How can a motif be developed through spatial content?

How can a motif be developed through dynamic content?

How can a motif be developed through relationship content?

Can you identify and define each content category?

What is action content?

What is dynamic content?

What is relationship content?

What is spatial content?

What is rhythmic content?

Technical Skills: These include accuracy of action, timing, dynamic, rhythmic and spatial content and the reproduction of movement in a stylistically accurate way.
There are 6 technical skills. Each category is followed by the word 'content'.
1. **Action content**
2. **Dynamic content**
3. **Spatial content**
4. **Relationship content**
5. **Timing content**
6. **Rhythmic content**

Action Content: the movement
A range of action content must be used in your practical work.

You must show variation of the 5 Basic Body Actions; travel, turn, gesture, stillness and jump
You may choose to develop a motif through action content using the checklist below.
- Adding an action to a phrase
- Taking an action away
- Repeating an action
- Performing an action on a different body part
- Re-order motif
Example:
Motif = jump, turn, seat roll, reach arms to ceiling, fall
Motif developed = jump, jump, seat roll, reach arms to ceiling, fall handstand (jump repeated, turn taken away, new action added)

Dynamic Content: how an action is performed
A range of dynamic ontent must be used in your practical work.

Fast/slow – **speed**
Sudden/sustained – **execution**
Acceleration/deceleration – **tempo**
Strong/light – **force**
Direct/indirect – **route**
Flowing/abrupt - **flow**

A range of dynamics must be included in your practical work. When describing a movement always refer to a dynamic.
Example:
- jump slowly
- abruptly turn to face the front and then reach your arms out to the sides in a strong motion

Rhythmic Content: repeated patterns of sounds or movements
A range of rhythmic content must be used in your practical work.

Relationship Content: with who the action is performed
A range of relationship content must be used in your practical work.

Mirroring – reflecting the actions of another dancer as if there is a mirror line
Example: dancer 1 extends right arm whilst leaning to the right but dancer 2 extends left arm to the left

Action and reaction – a dancer responds to the action of another dancer's action
Example: dancer 1 elbows to left, dancer 2 falls to floor after dancer 1 has performed their action

Accumulation – the movements are added to existing movements in a successive manner
Example: A, AB, ABC = jump, jump + turn, jump + turn + slide

Complementary – perform actions or shapes that are similar but not exactly the same as another dancer's actions
Example: dancer 1 performs seat roll whilst dancer two performs an elevated turn

Contrast – movements or shapes that have nothing in common
Example: fast dynamics of sharp elevated actions vs slow fluid arm gestures

Counterpoint – when dancers perform different phrases simultaneously
Example: floor phrase in one place vs elevation

Contact – a moment of physical contact which could be in the form of a counterbalance, touch or lift
Example: fan lift, hand on shoulder, and sacrifice lift

Formations – where the dancers stand in the space
Example: zig zag, circular, vertical line, diagonal line, horizontal line, cluster, sporadic

Spatial Content: where an action is performed
A range of spatial content must be used in your practical work.

Pathways; circular, linear, diagonal, zig – zag

Levels; floor work, mid-level, standing, elevation

Direction; left, right, front, back, diagonal front, diagonal back

Size of movement; small, medium and large

Spatial design; upstage, centre stage, downstage, stage right, stage left

You may choose to develop a motif through spatial content using the checklist above.

Example:
Change of levels
Version 1: Reach right arm to ceiling, left arm up to ceiling whilst jumping in the air.
Version 2: The dancer could kneel and perform the same arm actions.

Timing Content: The use of time or counts when matching movements to sound and/or other dancers
A range of timing content must be used in your practical work.

BIG QUESTIONS

- Do you know the different methods of market research undertaken by businesses?

- Can you explain the advantages and disadvantages of different methods of research?

- Can you interpret quantitative and qualitative research?

Before a business starts, it is important that the owners know exactly who their customers are likely to be.

Homework: Design a questionnaire on a new type of energy bar, 'Zonetime', an exciting combination of exotic fruits and nuts with a new energy formula.

Primary	Pros	Cons
Questionnaire	▪ Cheaper than interviews ▪ Easily target certain people	▪ Difficult to predict how many will be completed ▪ people may not understand the questions
Interviews	• Questions can be explained • Customers can be easily targeted	• Expensive • Customers may feel uncomfortable
Trials	• Save money before making products widely available	• Costly to set up
Focus groups	• Data is accurate to the target market	• Only small groups that take part so expensive

Target market
The group of customers who a business aims to sell its products to

Primary research
Data collected first-hand (field research)

Secondary research
Data collected by others (desk research)

Qualitative data
Data based on opinions of those being asked

Quantitative data
Data based on facts or numbers

Business	Year 10
Marketing Mix - Product	Term: 3

BIG QUESTIONS

- Can you identify the different parts of the marketing mix?

- Can you explain why branding is so important to many businesses?

- What are the stages of the Product Life Cycle?

- Can you recommend how a business could extend its Product Life Cycle?

The product is a vital element of the marketing mix. The product or service must be something customers actually want.

Advertising a new product more widely can increase sales and extend the life of a product.

Reducing the price of a product can help to maintain sales and extend the life of a product.

Selling in new markets i.e. abroad, opens the product up to a wider range of new customers and so extends the life of the product

Product Life Cycle
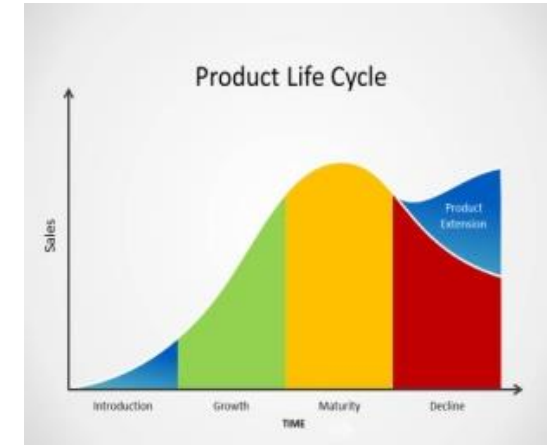
Introduction
A product is first made available for sale
Growth
Sales are growing strongly
Maturity
Sales are at their highest level
Decline
Sales are falling

BIG QUESTIONS

- Can you list the different pricing strategies that a business may use?

- Can you explain the importance of place in marketing?

- Can you explain the difference between physical and digital distribution?

The price charged by other businesses

The costs to produce the product or service

The business. If new, customers may not know the name and will be reluctant to pay high prices

The income of the target market

Factors affecting the price
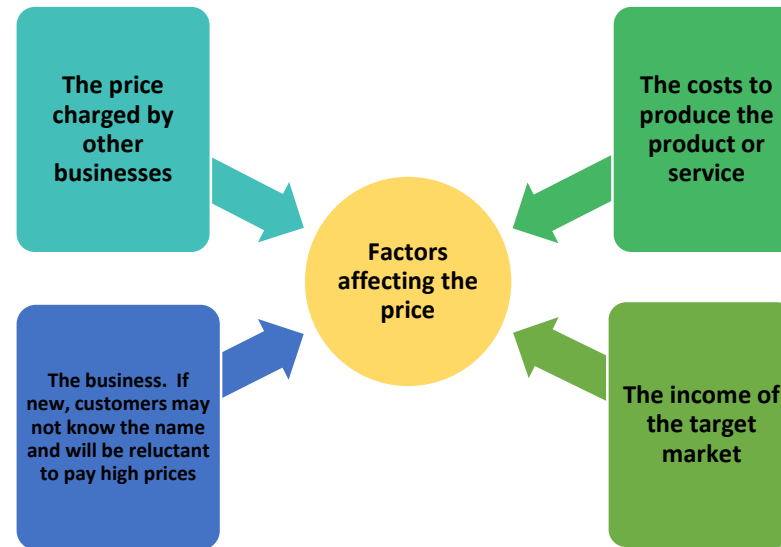
Physical distribution
Distribution of goods using a physical presence

Digital distribution
Distribution of goods and services digitally by downloading from a website

Competitor pricing
A price is set based on prices charged by competitors

Cost-plus pricing
Adding a percentage of profit onto the total costs of making a product

Penetration pricing
A price is set lower than competitors

Skimming
A high price is charged initially for those customers who want the latest products

Promotional pricing
Prices are reduced to give sales a boost

Selling Directly to Consumers

Producer → Consumer

Selling through Retailers

Producer → Retailer → Consumer

Selling through Wholesalers

Producer → Wholesaler → Retailer → Consumer

BIG QUESTIONS

- Can you list a range of promotional methods used by businesses?

- Can you explain how point of sale promotion is used by different businesses?

Aims of promotion

- To inform customers about a product or service

- To keep a business ahead of its competitors

- To create or change the image of a business, its products and services

- To maintain or increase sales

Homework: Read the Dixons Carphone case study and answer the three Data Response questions.
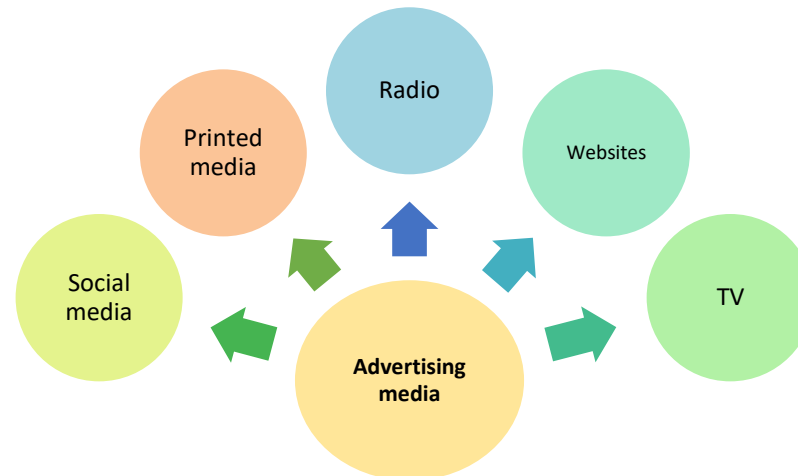
Point of sale promotions
Price reductions, loss leaders, competitions, free samples
Advertising campaign
A series of advertisements often using different advertising media
Advertising media
The methods by which a business can advertise a product

Printed media

Radio

Websites

Social media

TV

Advertising media

Business Studies GCSE	Year 10 & 11
	Term: Whole Year

BIG QUESTIONS

- How do I answer the 9 mark GCSE question?

THINK DACE!

Definition

Application

Counter-argument

Evaluation

Definition - Is there a term in the question that can be defined? (if no, do not force a definition, go straight into Application.)

Example – Analyse the effectiveness of a partnership as a form of business ownership?
'A partnership is when two or more people come together to start a business......'

Application
- Apply your understanding/knowledge
- Link the answer to the case study **(A02)**
- What are the **advantages**?
- Make sure to **explain** all knowledge applied

Example – One advantage of a business taking the form of a partnership would be................This is an advantage because......

Counter-argument (A03a)
- Are there **disadvantages**?
- Link answer to counteract the advantages. **(A02)**
- No disadvantages? *What would happen to the business without it?*

Example – However, a disadvantage of this business ownership would be................This is a disadvantage because......

Evaluation (A03b) - Summarise the advantages against the disadvantages! State your opinion, make sure you explain why you have come to this decision? Relate back to the business and the effects it would have.

Example – *In conclusion, I think a partnership is an effective form of ownership because...*

Big Question – How do I achieve A02 (application) marks?

A number of questions in the exam will ask you a direct question about a particular business from the case study. You need to make sure that you always **APPLY** your knowledge to that particular business in your answer. This will allow you to achieve an additional AO2 mark (APP) every time.

Here's an example….

Question - Analyse one way in which Redrow Homes could use Group Activities when selecting new apprentices? (3 marks)

Answer 1 - Redrow Homes could use group activities as it would allow them to see how well potential apprentices work together on a task. ✅ This will highlight if they have good communication skills. ✅ **(Only 2 marks have been awarded here as the answer was not applied specifically to the business).**

Answer 2 - Redrow Homes can assign a task where all the applicants work together ✅ to solve a problem relating to a scenario on a building site. ✅ This allows the interviewers to observe candidates' interpersonal skills ✅ **(3 marks have been awarded as the answer is applied to Redrow Homes and a scenario using a building site).**

Don't forget the TESCO TEST!

Remember that the application mark (A02) is more than just writing the name of the business. If you can put TESCO in your answer and it still makes sense, you have not specifically applied it to the business from the case study.

*Answer 2 would not make sense if you replaced Redrow Homes with Tesco. This is because the answer specifically talks about a building site. Application mark secured! ✅

ICT	Year: 10
Develop and review a user interface	Term: 3

BIG QUESTIONS

1. How can you ascertain (find out) the intended audience of a product and understand its purpose?

2. Why is it important to get feedback on your work?

3. What are the three best ways to gain feedback on your product?

4. Why should you evaluate your work?

5. What are the key points to consider when evaluating your work?

Project Requirements

These define the specific requirements for the system itself. | We can split this into four areas.

User Requirements
- What the user expects the system to be able to do.

Output Requirements
- The response provided to the user after performing a task.

Input Requirements
- The type of data/commands the system should be able to accept.

Accessibility Requirements
- Features required to support the individual needs of users.

Constraints

We must identify the things that will limit our ability to achieve all our goals for the project.

Time
- Developing a system takes time. The less time we have, the less we can do.

Resources
- Are we missing some skilled employees, software or hardware that is needed?

Task Dependencies
- Are there certain tasks that if held up will seriously delay our project?

Security
- Are we handling any data that must be protected from misuse?

Risks

We must identify things that could occur that might affect the success of the project.

Potential Risks to the Project
- What might occur that could prevent the successful completion of the project?
- E.g. initial task deadline estimates were inaccurate.

Contingency Planning
- We should identify some steps we can put in place to minimise the impact of the risk.
- E.g. ensure additional time is assigned to key bottleneck tasks in the project.

The Design Specification

This is a detailed document that describes the system being developed.

Your design specification should meet your project requirements.
- The design must implement the user, input, output & accessibility requirements defined in the project plan.
- The design specification will be signed off by the client to say they agree it meets their needs.

Your design specification must allow for:
- Increased user confidence/familiarity.
- Reduced learning time of new interfaces/features.
- Reduced time to complete tasks.
- Increased user attention.
- Reduced need for specialised knowledge.

Storyboards
- Show the process users follow to perform tasks.
- Helps ensure the interface is intuitive to the end users.

Screen sketches
- More detailed drawings of an interface.
- Shows the layout/style of elements in the interface.

Testing Strategy

How we can ensure the interface functions as expected.

Why test
- Without testing, our interface may not actually work.
- This might be buttons that don't work, or errors that occur when invalid inputs are entered.

Test plans
- This is a document used to design our testing strategy.
- It's a table that defines how we'll test each element (e.g. button) of the interface.

Test Plan

Below is an example of a simple test plan for part of an interface.

Test No.	Test Description	Expect Outcome	Actual Outcome	Notes
1	Click on the OPTIONS link on the main menu.	The option menu displays.		
2	Click on the EXIT link on the main menu.	The game closes down.		
3	Click on the START link on the main menu.	The menu closes & game screen shows.		
4	Click on the RIGHT arrow on the difficulty option on the options menu.	The difficulty level increases & displays.		

Refining Your Interface

You should always review your interface with users. | This will help you to identify & mark improvements.

Repeat until Complete

Present to Users

Refine Based on Feedback

Meeting User Requirements

How well does your interface meet the project requirements?

Have you met the:
- User requirements?
- Input requirements?
- Output requirements?
- Accessibility requirements?

If any aren't met
- Are they partially met?
- What reasons do you have for not meeting them?

Refine Based on User Feedback

User feedback is of no use unless acted on. | This might not mean implementing all changes.

Identifying improvements
- Analysing feedback should identify popular improvements.
- Don't let personal opinion affect decisions.

Making changes
- Once improvements are identified changes can be made.
- Make sure any changes are retested to prevent errors occurring.

Areas for Improvement

Are there any areas that could be developed better to meet user needs or design principles?

Are any project requirements not met or partially met?
- How could you alter the interface to meet these requirements?

Are any of the design principles not fully implemented?
- What changes to the interface could be made to better meet these principles?

- Colour
- Font style & size
- Language
- Amount of information
- Layout
- User perceptions
- Retaining attention
- Intuitive design

Key Vocabulary

Audience

Purpose

Ease of use

Suitability

Refine

Feedback

Iteration

Big Questions

**What is
a moodboard?
How do you use
colour effectively?
How do you use
typography
effectively?
How do you use a
colour wheel?
How do you sketch
page layouts?
How do you
create mock ups?
How do you create
a logo?
How do you write
copy for an article?**

WHAT TO INCLUDE ON YOUR **MOOD BOARD**

COLOUR WHEEL

A mood board is great way to collate ideas you have found from other people to give you inspiration for your own work. Look for images, colour pallets, text, fonts and anything else that catches your eye. The more the better!

Colour theory is essential to know when selecting a colour scheme for your media work. You need to know how to select colours that work together. Search 'Colour Theory Basics' on YouTube to learn more.

Ensure you have completed the tutorials on Sue Farrimond's YouTube Channel on how to use PhotoPea. This is an excellent free resource
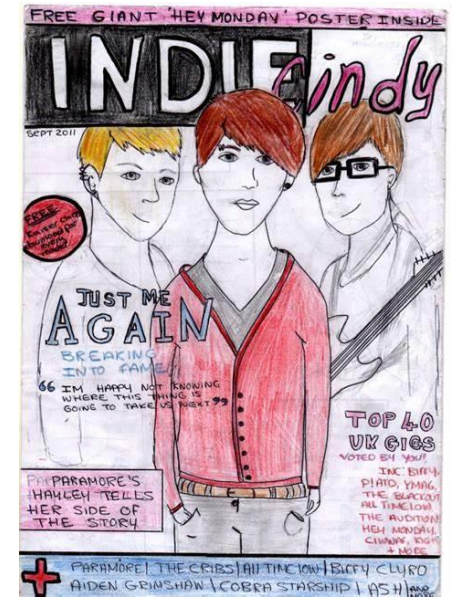
Drawing and sketching will become an essential skill this term. You must ensure that you are practicing drawing people (both in long shot and close up). Utilise face drawing tutorials on YouTube to help aid your development and practice practice practice practice!

BIG QUESTIONS

1. **Où vas-tu en vacances normalement?**
   Where do you normally go on holiday?

2. **Comment voyages-tu?**
   How do you travel?

3. **Avec qui pars-tu?**
   With whom do you go?

4. **C'est comment?**
   What is it like?

5. **Je peux vous aider?**
   Can I help you?

6. **Tu aimes voyager comment?**
   How do you like to travel?

7. **Tu veux rester où?**
   Where do you want to stay?

8. **Quelle sorte de chambre voulez-vous?**
   What sort of room do you want?

Les pays — Countries

le Danemark	Denmark	la Belgique	Belgium
le Pakistan	Pakistan	l'Espagne	Spain
le pays de Galles	Wales	l'Italie	Italy
le Royaume-Uni	the UK	la Pologne	Poland
l'Algérie	Algeria	la Russie	Russia
l'Allemagne	Germany	la Suisse	Switzerland
l'Angleterre	England	les États-Unis	the USA
l'Autriche	Austria	les Pays-Bas	the Netherlands

Les vacances — Holidays

Où vas-tu en vacances? — Where do you go on holiday?
Je vais … — I go …
  en France — to France
  au pays de Galles — to Wales
  aux États-Unis — to the USA
Comment voyages-tu? — How do you travel?
Je voyage … — I travel …
  en avion/en bateau — by plane/by boat
  en car/en train — by coach/by train
  en voiture — by car
  à vélo — by bike
Où loges-tu? — Where do you stay?
Je loge dans … — I stay in/on …
  un camping — a campsite
  un hôtel — a hotel

une auberge de jeunesse — a youth hostel
une caravane — a caravan
Avec qui pars-tu en vacances? — Who do you go on holiday with?
Je pars … — I go …
  avec ma famille — with my family
  avec mes copains/copines — with my friends
  avec mes grands-parents — with my grandparents
  seul(e) — alone
C'est comment? — What's it like?
C'est … — It's …
  extra/formidable — amazing/great
  bien — good
  ennuyeux/nul — boring/rubbish
Ce n'est pas mal. — It's not bad.

Les hôtels — Hotels

un hôtel — a hotel
des chambres d'hôtes — guest rooms (i.e. in a B&B/ guest house)

Nous proposons des chambres avec … — We offer rooms with …
  un grand lit — a double bed
  un lit simple — a single bed
  une salle de bains — a bathroom
  une douche — a shower
  un micro-ondes — a microwave
  une télévision à écran plat — a flat-screen TV
  une vue sur la mer — a sea view

un balcon — a balcony
la climatisation — air conditioning
Nous avons aussi … — We also have …
  une aire de jeux — a games area
  un parking — a car park
  une piscine — a swimming pool
  un restaurant — a restaurant
  le Wi-Fi — Wi-Fi
Nos chambres sont bien équipées. — Our rooms are well equipped.
Le petit-déjeuner est inclus/compris. — Breakfast is included.
Notre hôtel est situé/se trouve … — Our hotel is located …

Réserver une chambre — Booking a room

Nous voulons/Je voudrais réserver une chambre … — We want/I would like to book a room …
  pour une/deux personne(s) — for one person/two people
  avec un lit simple/un grand lit — with a single/double bed
  pour une nuit/deux nuits — for one night/two nights
Est-ce que vous avez … — Do you have …
  une piscine? — a swimming pool?
  la climatisation? — air conditioning?

Votre chambre est … — Your room is …
  au rez-de-chaussée — on the ground floor
  au premier étage — on the first floor
  au deuxième étage — on the second floor
Je voudrais payer avec ma carte bancaire. — I would like to pay with my debit/ credit card.

Subject:	MFL – French	Year / Group:	10
Topic:	Mod 5 – Le grand large – *How do I talk about holidays?*	Term: 3 & 4	

BIG QUESTIONS

1. **Où vas-tu en vacances normalement?**
   Where do you normally go on holiday?

2. **Comment voyages-tu?**
   How do you travel?

3. **Avec qui pars-tu?**
   With whom do you go?

4. **C'est comment?**
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   What sort of room do you want?

Voyager / Travelling

l'aéroport (m)	airport	l'autoroute (f)	motorway
le billet	ticket	la ceinture de sécurité	seatbelt
le conducteur/la conductrice	driver	la circulation	traffic
le contrôle des passeports	passport control	la douane	customs
le guichet	ticket office/counter	la gare	station
le/la pilote	pilot	la route	road
le quai	platform	les bagages	luggage

Au guichet / At the ticket counter

Je peux vous aider?	Can I help you?	C'est quel quai?	Which platform is it?
Je voudrais un aller simple/ un aller-retour pour (Lyon), s'il vous plaît.	I would like a single/a return to (Lyon), please.	Le train part à quelle heure?	What time does the train leave?
		Le voyage dure combien de temps?	How long does the journey last?
En quelle classe?	In which class?	Est-ce qu'il faut changer?	Do I/we have to change?
En première/deuxième classe.	In first/second class.	C'est un train direct.	The train is direct.

Moyens de transports préférés et raisons / Favourite means of transport and reasons

Je voyage toujours (en train, etc.) parce que c'est …	I always travel (by train, etc.) because it's …	plus aventureux	more adventurous
plus rapide/plus confortable	faster/more comfortable	mieux pour la planète	better for the planet
		moins ennuyeux/fatigant	less boring/tiring
plus pratique/plus vert	more practical/greener	moins cher	less expensive

Les activités en vacances / Holiday activities

Je fais de la planche à voile.	I go windsurfing.	Je joue à la pétanque.	I play French bowls.
Je fais de la voile.	I go sailing.	Je me baigne.	I swim (in the sea).
Je fais de l'accrobranche.	I do a tree-top adventure.	Je me promène.	I go for a walk.
Je fais du ski.	I go skiing.	Je me repose.	I rest.
Je visite les musées.	I visit the museums.	Je me lève (tôt/tard).	I get up (early/late).
Je visite les monuments.	I visit the monuments.	Je m'habille.	I get dressed.
Je vais à la pêche.	I go fishing.	Je ne m'ennuie pas.	I don't get bored.
Je vais à la plage.	I go to the beach.	Je sors au restaurant.	I go out to a restaurant.

Au restaurant / At the restaurant

Voici la carte.	Here is the menu.	Qu'est-ce que vous avez comme desserts?	What desserts do you have?
Le plat du jour, c'est …	The daily special is …		
Vous avez fait votre choix?	Have you made your choice?	Vous avez besoin d'autre chose?	Do you need anything else?
Pour commencer, je vais prendre …	To start, I am going to have …	On a besoin de l'addition.	We need the bill.
Comme plat principal, je voudrais …	As a main course, I would like …	J'ai faim.	I am hungry.
Je vais prendre le menu (à 30 euros).	I am going to have the (30 euro) set menu.	J'ai soif.	I am thirsty.
		J'ai envie d'un dessert.	I want a dessert.
Et comme boisson?	And to drink?		

BIG QUESTIONS

1. **Où vas-tu en vacances normalement?**
   Where do you normally go on holiday?

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   What sort of room do you want?

Les plats / Dishes

French	English
les entrées	starters
les brochettes de crevettes	prawn skewers
les escargots	snails
la soupe à la tomate	tomato soup
la tarte à l'oignon	onion tart
les plats principaux	main dishes
l'épaule d'agneau	shoulder of lamb
la cuisse de canard	duck leg
les lasagnes végétariennes	vegetarian lasagne
le loup de mer	sea bass
le poulet basquaise	Basque-style chicken
le rôti de veau	roast veal
les desserts	desserts
la crème brûlée	crème brûlée
la mousse au chocolat	chocolate mousse
le roulé au chocolat	chocolate roll
le sorbet	sorbet
la tarte au citron	lemon tart
la tarte aux pommes	apple tart
l'eau gazeuse	sparkling water

Critiques / Reviews

French	English
J'y suis allé(e) pour le déjeuner/le dîner.	I went there for lunch/dinner.
Le service était lent/exceptionnel.	The service was slow/exceptional.
Le serveur/La serveuse était/n'était pas (très) poli(e).	The waiter/waitress was/wasn't … (very) polite.
C'était …	It was …
délicieux/bien cuit.	delicious/well cooked.
La nourriture était froide/trop salée.	The food was cold/too salty.
La nourriture n'était pas cuite.	The food wasn't cooked.
Je recommande/Je ne recommande pas ce restaurant.	I recommend/I don't recommend this restaurant.

Des vacances catastrophiques / Catastrophic holidays

French	English
J'ai oublié mon passeport.	I forgot my passport.
J'ai pris un coup de soleil.	I got sunburnt.
J'ai cassé mon appareil photo.	I broke my camera.
J'ai été malade.	I got sick.
On m'a volé mon sac.	Someone stole my handbag.
Il a plu tous les jours.	It rained every day.
Il y avait des cafards dans notre chambre.	There were cockroaches in our room.
J'ai raté l'avion.	I missed the plane.
J'ai dû aller chez le médecin.	I had to go to the doctor.
J'ai perdu mes photos.	I lost my photos.
J'ai vomi.	I vomited.
J'ai dû aller au commissariat.	I had to go to the police station.
Il n'y avait rien à faire.	There was nothing to do.
On a dû chercher un autre hôtel.	We had to look for another hotel.
La prochaine fois, je vais …	Next time, I am going …
faire plus attention	to be more careful
mettre de la crème solaire	to put on sun cream
loger dans un camping	to stay on a campsite

Les mots essentiels / High-frequency words

French	English
d'habitude	usually
normalement	normally
tous les ans	every year
le lendemain	the next day
à l'avenir	in future
toujours	always/still
parfois	sometimes
un peu	a bit
plutôt	rather, quite
enfin	finally
évidemment	obviously
malheureusement	unfortunately
y	there
gratuit	free

BIG QUESTIONS

1. **¿Qué hay en tu ciudad?**
   What is in your town/city?

2. **¿Dónde está el / la…?**
   Where is the…?

3. **¿Cómo es tu zona?**
   What is your región like?

4. **¿Qué se puede hacer?**
   What can you do there?

5. **¿Tiene información sobre…?**
   Do you have information about…?

6. **¿Cuál es lo mejor de tu ciudad?**
   What is the best thing about your town/city?

7. **PAST: ¿Cómo era la ciudad antes?**
   What was the town/city like before?

8. **¿Qué más necesita la ciudad?**
   What do you need most in your town/city?

En mi ciudad / In my town

Hay… / There is/are…

Spanish	English
un ayuntamiento	a town hall
un bar / muchos bares	a bar / lots of bars
un castillo	a castle
un cine	a cinema
un centro comercial	a shopping centre
un mercado	a market
un museo / unos museos	a museum / a few museums
un parque	a park
un polideportivo	a sports centre
un puerto	a port
muchos restaurantes	lots of restaurants
un teatro	a theatre
una biblioteca	a library
una bolera	a bowling alley
una iglesia	a church
una piscina	a swimming pool
una playa / unas playas	a beach / a few beaches
una plaza Mayor	a town square
una pista de hielo	an ice rink
(una oficina de) Correos	a post office
una tienda / muchas tiendas	a shop / lots of shops
(No) hay mucho que hacer.	There is (not) a lot to do.

Vivo en un pueblo… / I live in a… village
Vivo en una ciudad… / I live in a… town

histórico/a / moderno/a	historic / modern
tranquilo/a / ruidoso/a	quiet / noisy
turístico/a / industrial	touristy / industrial
bonito/a / feo/a	pretty / ugly

Está en… / It is in…

el norte / el sur	the north / the south
el este / el oeste	the east / the west
del país	of the country

¿Por dónde se va al / a la…? / How do you get to the…?

¿Dónde está el / la…?	Where is the…?
¿Para ir al / a la…?	How do I get to the…?
Sigue todo recto	Go straight on
Gira…	Turn
a la derecha / izquierda	right / left
Toma la…	Take the…
primera / segunda / tercera	first / second / third
calle a la derecha	road on the right
calle a la izquierda	road on the left

Pasa… / Go over…
| el puente / los semáforos | the bridge / the traffic lights |

Está… / It is…
| cerca / lejos | near / far |
| enfrente de (la piscina) | opposite (the swimming pool) |

¿Cómo es tu zona? / What is your area like?

Está situado/a… / It is situated…
| en un valle | in a valley |
| al lado del río / mar | by the river / sea |

Está rodeado/a de sierra / volcanes / It is surrounded by mountains / volcanoes

entre	between
el desierto	the desert
los bosques	the woods
las selvas subtropicales	subtropical forests
los lagos	lakes

Tiene… / It has
| un paisaje impresionante | an impressive landscape |
| lo mejor de una ciudad | the best things of a city |

El clima es… / The climate is…
| soleado / seco / frío / variable | sunny / dry / cold / variable |

Llueve a menudo. / It rains often.

Hay mucha marcha. / There is lots going on.

Es… / It is…
mi ciudad natal	my home town
mi lugar favorito	my favourite place
famoso/a por…	famous for…
un paraíso	a paradise

Se puede… / You/One can…
pasar mucho tiempo al aire libre	spend lots of time in the open air
apreciar la naturaleza	appreciate nature
subir a la torre	go up the tower
disfrutar de las vistas	enjoy the views
alquilar bolas de agua	hire water balls

Se pueden… / You/One can…
practicar ciclismo y senderismo	do cycling and hiking
try local dishes	probar platos típicos
practicar deportes acuáticos	do water sports

practicar ciclismo y senderismo	do cycling and hiking
try local dishes	probar platos típicos
practicar deportes acuáticos	do water sports

BIG QUESTIONS

1. **¿Qué hay en tu ciudad?**
   What is in your town/city?

2. **¿Dónde está el / la…?**
   Where is the…?

3. **¿Cómo es tu zona?**
   What is your región like?

4. **¿Qué se puede hacer?**
   What can you do there?

5. **¿Tiene información sobre…?**
   Do you have information about…?

6. **¿Cuál es lo mejor de tu ciudad?**
   What is the best thing about your town/city?

7. **PAST: ¿Cómo era la ciudad antes?**
   What was the town/city like before?

8. **¿Qué más necesita la ciudad?**
   What do you need most in your town/city?

En la oficina de turismo — **At the tourist office**

Spanish	English
¿Tiene…?	Do you have…?
más información sobre la excursión a…	more information about the trip to…
un plano de la ciudad	a map of the town / city
¿Cuándo abre…?	When does… open?
¿Cuánto cuesta una entrada?	How much is a ticket?
para adultos / niños	for adults / children
¿Dónde se pueden comprar las entradas?	Where can you buy tickets?
¿A qué hora sale el autobús?	What time does the bus leave?
cada media hora	every half an hour

¿Qué harás mañana? — **What will you do tomorrow?**

Spanish	English
Visitaré la catedral.	I will visit the cathedral.
Sacaré muchas fotos.	I will take lots of photos.
Subiré al teleférico.	I will go up the cable car.
Nadaré en el mar.	I will swim in the sea.
Descansaré en la playa.	I will relax on the beach.
Iré al polideportivo.	I will go to the sports centre.
Jugaré al bádminton.	I will play badminton.
Haré una excursión… en barco / en autobús	I will go on a… trip boat / bus
Veré delfines.	I will see dolphins.
Iré de compras.	I will go shopping.
Compraré regalos.	I will buy presents.
El primer día	On the first day
El segundo día	On the second day
Otro día	Another day
El último día	On the last day
Si…	If…
hace sol	it's sunny
hace calor	it's hot
hace mal tiempo	it's bad weather
hace viento	it's windy
llueve	it rains
hay chubascos	there are showers
¡Qué bien!	How great!
¡Qué guay!	How cool!
¡Buena idea!	Good idea!
De acuerdo.	OK.

Las tiendas — **Shops**

Spanish	English
el banco	bank
el estanco	tobacconist's
la carnicería	butcher's
la estación de trenes	train station
la frutería	greengrocer's
la joyería	jeweller's
la librería	book shop
la panadería	bakery
la pastelería	cake shop
la peluquería	hairdresser's
la pescadería	fish shop
la zapatería	shoe shop
sellos	stamps
horario comercial	hours of business
de lunes a viernes	from Monday to Friday
abre a la(s)…	it opens at…
cierra a la(s)…	it closes at…
no cierra a mediodía	it doesn't close at midday
cerrado domingo y festivos	closed on Sundays and public holidays
abierto todos los días	open every day

Recuerdos y regalos — **Souvenirs and presents**

Spanish	English
¿Me puede ayudar?	Can you help me?
Quiero comprar…	I want to buy…
el abanico	fan
el llavero	key ring
el oso de peluche	teddy bear
los pendientes	earrings
la gorra	cap
las pegatinas	stickers
Es para…	It is for…
¿Tiene uno/a más barato/a?	Do you have a cheaper one?
¿Cuánto es?	How much is it?

Quejas — **Complaints**

Spanish	English
Quiero devolver…	I want to return…
Está roto/a.	It is broken.
Es demasiado estrecho/a / largo/a.	It is too tight / long.
Tiene un agujero / una mancha.	It has a hole / a stain.
¿Puede reembolsarme?	Can you reimburse me?
Podemos hacer un cambio.	We can exchange (it).
Aquí tiene el recibo.	Here is the receipt.
¿Qué me recomienda?	What do you recommend?
¿Qué tal…?	How about…?
¿Qué te parece(n)…?	What do you think of…?
¿Me puedo probar…?	Can I try on…?
una talla más grande	a bigger size
Me lo/la/los/las llevo.	I'll take it / them.

BIG QUESTIONS

1. **¿Qué hay en tu ciudad?**
What is in your town/city?

2. **¿Dónde está el / la…?**
Where is the…?

3. **¿Cómo es tu zona?**
What is your región like?

4. **¿Qué se puede hacer?**
What can you do there?

5. **¿Tiene información sobre…?**
Do you have information about…?

6. **¿Cuál es lo mejor de tu ciudad?**
What is the best thing about your town/city?

7. **PAST: ¿Cómo era la ciudad antes?**
What was the town/city like before?

8. **¿Qué más necesita la ciudad?**
What do you need most in your town/city?

¿Te gusta ir de compras?	Do you like going shopping?		
(No) me gusta ir de compras.	I (don't) like going shopping.	por Internet	on the internet
Normalmente voy…	Usually I go…	porque…	because…
Suelo ir…	I tend to go…	es muy divertido	it's a lot of fun
al centro comercial	to the shopping centre	es mucho más cómodo	it's much more convenient
Prefiero / Odio comprar…	I prefer / I hate buying…	hay más variedad	there's more variety
en grandes almacenes	in department stores	puedes encontrar gangas	you can find bargains
en tiendas de moda	in fashion shops	se puede comprar de todo	you can buy everything
en tiendas de segunda mano	in second-hand shops	la ropa alternativa	alternative clothing
en tiendas de diseño	in designer shops	artículos de marca	branded items
en línea	online	hacer cola	to queue
		esperar	to wait

Los pros y los contras de mi ciudad	The pros and cons of my town/city		
Lo mejor de mi ciudad es que…	The best thing about my city is that…	hay pocos espacios verdes	there are few green spaces
hay tantas diversiones	there are so many things to do	En el campo…	In the countryside…
el transporte público es muy bueno	the public transport is very good	la vida es más relajada	life is more relaxed
las tiendas están tan cerca	the shops are so close	no hay tanta industria	there's not as much industry
hay muchas posibilidades de trabajo	there are lots of job opportunities	hay bastante desempleo	there is quite a lot of unemployment
Lo peor es que…	The worst thing is that…	la red de transporte público no es fiable	the public transport network is not reliable
es tan ruidoso/a	it's so noisy	no hay tantos atascos	there are not as many traffic jams
hay tanto tráfico	there is so much traffic	Necesitamos más…	We need more…
hay tantas fábricas	there are so many factories	zonas verdes	green spaces
		zonas peatonales	pedestrian zones
		rutas para bicis	cycleways

Destino Arequipa	Destination Arequipa		
Vi sitios de interés.	I saw some sights.	La ciudad era muy acogedora.	The city was very welcoming.
Hicimos una visita guiada.	We did a guided tour.	La gente era abierta.	The people were open.
Visité el centro a pie.	I visited the centre on foot.	La comida estaba muy buena.	The food was very good.
Alquilé una bici de montaña.	I hired a mountain bike.	Me gustó (el clima).	I liked (the climate).
Subí a…	I went up to…	No me gustaron (los taxis).	I didn't like (the taxis).
Aprendí mucho.	I learned a lot.	¡Qué miedo!	What a scare!
Comí pollo y patatas.	I ate chicken and potatoes.	Volveré algún día.	I will go back some day.
Probé el rocoto relleno.	I tried stuffed peppers.	Visitaré otras ciudades.	I will visit other cities.
Había vistas maravillosas.	There were amazing views.	Iré a (Trujillo).	I will go to (Trujillo).

BIG QUESTIONS

Learning aim B: Investigate how individuals deal with life events

1. What is a life event?

2. Why do people react differently to the same life event?

3. How can people be supported to help them adapt to changes?

B2: Coping with change caused by life events

a. How people may react differently to the same life events

b. How individuals can adapt to changes caused by life events

Types of support:

a. Emotional

b. Information and advice

c. Practical help, e.g. financial assistance, childcare, transport

Informal sources of support:

a. family, friends, partners and types of support they can provide

Formal sources of support:

a. professional carers and services and types of support they can provide

b. Sources of voluntary support:

c. community groups

d. voluntary services and faith-based organisations and types of support they can provide
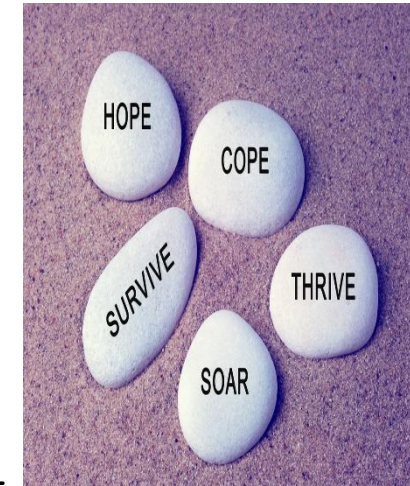
Tasks that need to be completed for this assignment

Your information pack should explain how your two, chosen individuals adapted to the life event using support from agencies, families other organisations, giving examples of the sources of support used by each individual..

Then you need to assess how well each individual adapted to the selected life event, the role support played in helping each one to adapt and how valuable this was and you should also compare the ways in which each individual adapted to the changes brought about by the life event.

Task 2

A. Explain the impact of a life event on the development of two individuals.

B. Explain how two individuals adapted to a life event, using support.

C. Compare the ways that two individuals adapted to a life event and the role that support played

D. Assess how well two individuals adapted to a life event and the role and value of support in this.

Health and Social Care

Key Terms LA-B

Life events- are expected or unexpected events that can affect development

Expected- is a belief that something is likely to happen

Unexpected- long-or short-term changes that is not thought likely to happen

Bereavement- is the process of coming to terms with the death of someone close

Physical events- make changes to your body, physical health or mobility

Relationship changes- impact on informal and intimate relationships

Life circumstances- impacts on day-to-day life and the choices you make

Adapt-is to adjust to new conditions or circumstances

Respite care- involves temporary care of an individual with ill health to provide relief for their parents or carers

Professional-describes a member of a profession who is trained and skilled in their area of work

Child Development	Year: 10
Component 2: Learning through Play	Term: 3

BIG QUESTIONS

To understand the way that children learn through play

✓ How can children be supported through play

✓ What type of activities are there to support play?

✓ How can children's learning through play support the 5 areas of development?

Learning outcome B: Understand how children's learning can be supported through play
B2 Cognitive/intellectual play
Learning promoted through cognitive/intellectual play:
- problem-solving skills
- creativity
- use of imagination
- listening and attention skills
- numeracy skills
- exploration of environments inside and outside
- confidence using technology
- understanding of others' experiences – cultural experiences, religious festivals.

Activities and resources to support cognitive and intellectual play and learning:
- counters, weights, play money
- shape sorters, puzzles, matching-pair card games
- trips and visits
- digging and building
- computer games, apps, PCs, tablets
- writing – wipe boards
- small-world toys.
- **B3 Communication and language play**

Learning through communication and language play:
- listening skills – including refining speech sounds through interaction with others the process of following instructions
- vocabulary and literacy skills, including speaking and questioning skills
- how to express and discuss feelings appropriately having conversations with other children/adults.

Activities and resources to support communication and language play and learning:
- books – lift-the-flap books, textured, stories, talking books, story sacks
- role play
- nursery rhymes, songs, dances
- listening/action games

Actual Assignment

Learning outcomes-

A- Understand the principles of growth and development
B- Understand how factors impact on children's overall development.

The assignment for this component consists of three tasks.

➢ Task 1, - learners will demonstrate their knowledge and understanding of growth and development of a child of a given age

➢ Task 2,- learners will demonstrate their knowledge and understanding of development and factors affecting development of a child based on a case study.

➢ Task 3,- learners will demonstrate their knowledge and understanding of development and factors affecting development of a child based on a case study.

The assignment will take approximately 6 supervised hours to complete

Key Terms LA-A

Body management-skills used to control the body

Bodily Coordination– movement of different areas of the body

Accurate- free from mistakes

Manipulating-handling or control over objects

Attention skills-noticing or concentration on something

Repetition- repeating something

Listening Walks- being silent whilst walking in order to hear what is going on around you.

Emotion face-showing different emotions on your face. This can be done by a child or adult, or shown through images, or videos

BIG QUESTIONS

Describe the process of development in artists work.

Explain why primary sources are the richest form of research.

How can Secondary sources enrich the development of 3D ideas?

Show different ways of recording your observations

Why should you plan a wide range of ideas before selecting a final one?

How can the refining process help you to fully realise intentions?

Why is it important to evaluate?

What is a prototype?

Client Brief- *Design and make a prototype model for a sculpture to be place at the entrance of a DIY Homeware store*

Vitra | 04 - Balancing Tools

On the seventieth birthday of Willi Fehlbaum, Vitra's founder, his children presented him with the sculpture "Balancing Tools". Erected on the grounds between the main road and the complex of buildings, it depicts the tools of the furniture maker juxtaposed with one another on an oversized scale. *It was in Claes Oldenburg's studio that Vitra Chairman Rolf Fehlbaum met Frank Gehry for the very first time.*

'Balancing Tools' 1984

Key Skills

RECORD

I will learn to record...
- images and information appropriate for the Tools theme
- using 2D & 3D media
- using technical; drawing and photography
- building on my knowledge and understanding of how artists/designers use materials and imagery to create meaningful work
- ideas for a sculpture inspired by tools

DEVELOP

I will learn how to develop...
- my observation skills using a range of media, techniques and processes.
- my knowledge and understanding of 3D styles and techniques
- my drawing and planning skills
- ideas in response to a given theme, linking to artists work.
- my higher order thinking skills

REFINE

I will learn how to...
- select and experiment with a range of 3D media and techniques
- select ideas to adapt and improve e.g. adjustments to size, colour and composition.
- develop a piece of work from one media into another

EVALUATE

I will learn how to...
- analyse and reflect on the development of my own work, through annotation making connections to artists and suggesting ways I could I improve.
- evaluate artists using analytical writing skills and forming opinions
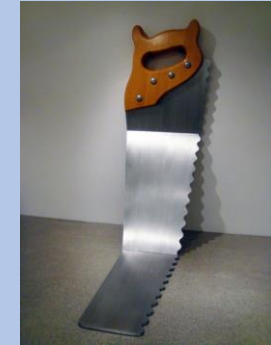
PRESENT OUTCOUMES

I will learn how to...
Produce one or more finished prototypes in 3D

© Claes Oldenburg Coosje van Bruggen

EVALUATING ARTISTS'/DESIGNERS' WORK

1. Describe the piece of art/design you are looking at

2. What is the name of the artist/designer or type of art/design?

3. What part of the world does the art/design come from?

4. Research and list 5 or more things about the artist/designer?

5. Describe the materials used to make the art/design

6. How has the artist/designer made the work?

7. What is being communicated through the art/design?

8. Which of these words best describes the mood of the picture/artefact? EMOTIONAL/POWERFUL/HUMEROUS/USEFUL/SERIOUS/BUSY/SLOW/PEACEFUL/WARM/COLD/HAPPY/SAD/CALM/INTENSE/ SCARY can you think of any other words?

9. What do you like or dislike about the picture/artefact? Explain your reasons…

ANNOTATING YOUR OWN WORK

- In this piece of work I was trying to…
- The artist/designer that has influenced my work is…
- In my work I used the technique of...
- The source I have used is…
- The media I have used is...
- I like this piece because...
- My idea links to the brief because…
- I can improve this piece by…
- Next, I'm going to……

Annotate means to explain your own creations
Artist evaluation is when you write about the artist
Project evaluation is written about the whole project at the end

END OF PROJECT EVALUATION

1. Describe each stage of the project from start to finish
2. What media/materials did you use to produce your work? E.g. Paint/Pencil/Clay etc.
3. Describe how you used different techniques in your project? E.g. painting/drawing/modelling with clay etc.
4. Which artist/designer/culture have you looked at?
5. Write down two or more similarities between your work and the artist/designers' work.
6. Which piece of your work best shows the Artist/Designers' style or the influence of another culture and why?
7. Describe some of your own ideas…
8. Have you used a primary or a secondary source?
9. Have you included the secondary source in your work? Where did you find it?
10. Imagine if your final piece was displayed in a public place…. Describe the effect looking at your work might have on people and society. E.g. relax them, make them feel sad, curious, happy, angry, thoughtful, surprised, confused, nostalgic etc. explain why e.g. because of your use of colour, images, content, arrangement? etc.
11. Explain any other influences on your work e.g. personalities *(including your own)*, places, memories, objects, politics, events, activities, religion, fact, fiction etc.
12. Describe how your work links to the project brief?
13. Explain what you have done well…
14. Explain how you could improve…
15. What would you do differently, if you were to repeat any part of this project

BIG QUESTIONS

What is Visual Language?

What are the three main techniques for hand-building clay?

Can you demonstrate your ability to create 3D forms in clay using: pinching, coiling and slabbing methods?

Why is Kate Malone such a successful studio potter?

Can you present a personal response to meet the 'teapot' brief?

Overarching Big Question

Continue to work with the Design Process to create prototypes for 'Fruits of the Earth' brief.

Research and evaluate work by ceramic designers.

Learn about the processes and techniques involved in creating ceramic designs.

Continue to develop your understanding of 'Visual Language'

Ceramic art is art made from ceramic materials, including clay. It may take forms including artistic pottery, including tableware, tiles, figurines and other sculpture. As one of the plastic arts, ceramic art is one of the visual arts. While some ceramics are considered fine art, as pottery or sculpture, most are considered to be decorative, industrial or applied art objects. (Wikipedia)

Fruit and vegetables have inspired ceramic designers and craftspeople for centuries. They continue to provide colourful and fascinating subject matter for functional and decorative objects.

RECORD **I will learn to record...** • my design ideas in one and 2 point perspective • my observations and insights through drawing, making and annotation • my knowledge and opinions about the work of other designers in an articulate way	**DEVELOP** **I will learn how to develop...** • my knowledge about 3D Design and Designers • my understanding of the Design Process • My understanding of 'Visual Language' • my communication skills through drawing • my skills working with 3D materials • ideas in response to a brief
REFINE I will learn how to... • explore and exploit the properties of 3D materials, techniques and processes • select and improve initial ideas for a final outcome through self and peer evaluation	EVALUATE I will learn how to... • evaluate the work of other artists and designers, forming my own opinions and using analytical writing skills • analyse and reflect on the development of my own work, in order to realise the potential of my ideas.
PRESENT OUTCOMES I will learn how to... • produce and present one or more finished outcome(s) in 3D	

PSHE
Personal Social Health Education

WPD
WIDER PERSONAL DEVELOPMENT
THE ABBEY SCHOOL

Big Questions PSHE

What do I already know about County Lines?

What is this and how are young people being exploited?

How do gangs groom young people?

Should we legalise drugs?

Screen time – How much is too much and why does it matter?

WPD – Wider Personsal Development How can I get involved with our community project? What skills do I have? How do I plan and organise a fund raising event?

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3 Health and Wellbeing
Substances, County Lines and Screen time
- County lines/gangs
- Drug abuse
- Exploitation
- Grooming
- Impact of drugs on our society
- Seeking support
- Legalisation of drugs
- Screen time/electronic devices/online behaviours

Wider Personal Development COMMUNITY PROJECT – charity and fundraising Project
- Our community
- Charitable causes – research specific charity
- How to get involved in a charity
- Deciding on a good idea for fundraising
- Planning fund raising events
- Details of event(s)
- Assigning roles
- Preparing for fund raising task

Careers Employability Skills Builder: Listening
Industry Focus – Health and Social Care
- Health and Social Care industry
- Why listening is so important in the health and social care industry
- Critical listening skills developed
- Use of questioning to evaluate different perspectives
Identification of potential bias
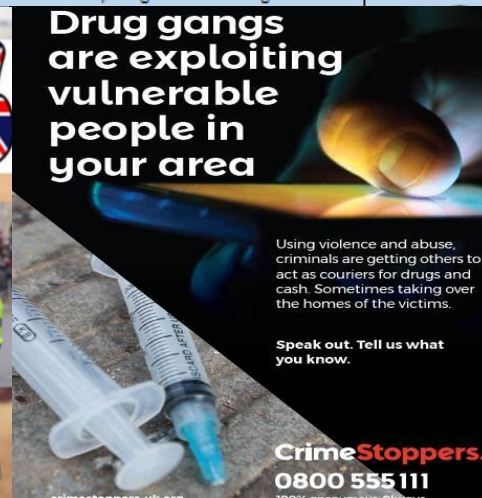

HOUSE COMPETITION:

Design a poster to promote your House and to encourage students to a) work towards achieving more house points and b) get involved with house activities, events and competitions. The best one for each house will be printed and put up on display around school and there will be a small prize and house points for the winners.

We respect and uphold the **Rule of Law**

We can live **safely** and **fairly** in British Law and feel **strengthened** by our justice system

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Drug gangs are exploiting vulnerable people in your area

Using violence and abuse, criminals are getting others to act as couriers for drugs and cash. Sometimes taking over the homes of the victims.

Speak out. Tell us what you know.

CrimeStoppers.
0800 555 111
crimestoppers-uk.org
100% anonymous. Always.

Gang life reality– Don't risk it

Child Sexual Exploitation
Megan aged 12:
"I thought Stephen was special, I liked him and his friends, but they used me. I never wanted to get my friends involved, I had no choice. They filmed everything and now we're trapped. It's not just strangers who can hurt you."

Grooming
Mrs Walker, mum to Lewis aged 16
"The first time Lewis went missing for five days, the police found him with extremely violent gang members. "Now he disappears all the time, I never sleep and we know he's selling drugs. His only escape is to be sent to prison."

Prison
Aiden aged 17
"There's a long list of stuff I've stolen and people I've hurt, but my prison sentence is longer. All I have now is a criminal record."

Knife crime
Dean aged 17
"I'm in hospital. They stabbed me in the neck from behind, it's a warning. They told me I won't be so lucky next time. I'm scared how this could end. I don't want to die."

Drugs
Kelly aged 15
"I've been hanging out with older guys for four years. They say I owe them, so I'm now selling their drugs to settle the debt. I have no idea how long it will take, I'll just keep selling until it's cleared. It's not like I have a choice."

Protected Characteristics
- Age
- Disability
- Sex
- Gender Reassignment
- Race
- Religion or Belief
- Sexual Orientation
- Marriage and Civil Partnership
- Pregnancy and Maternity

BRITISH VALUES
Individual liberty
Mutual respect
The rule of law
Democracy
Tolerance