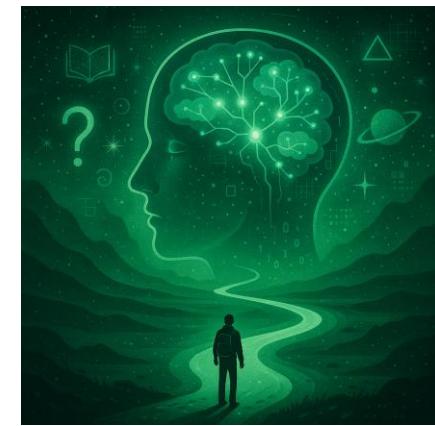


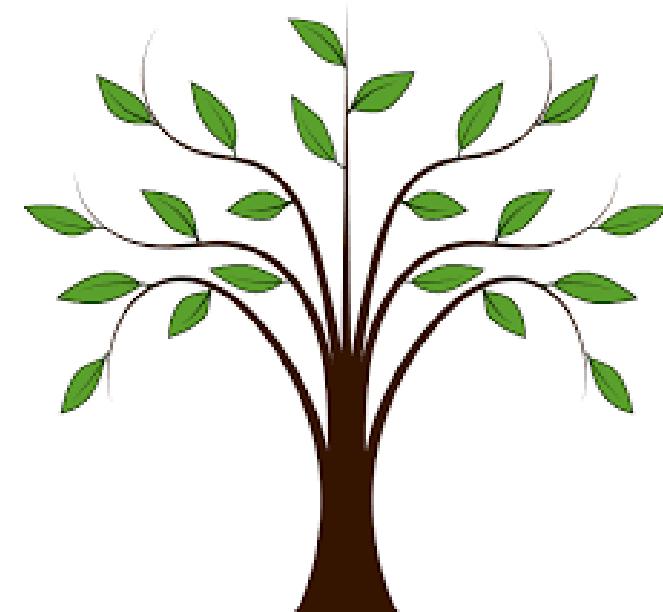
# YEAR 10



## BHA's

# Knowledge Quest

Spring 1  
(Jan - Feb)  
2025-2026



# How to use your Knowledge Quest Booklet

To support you in making progress in each of your lessons, your teachers have produced Knowledge Organisers which contain all of the main facts, knowledge and information that you need to know to be successful and make progress this half term. There are lots of ways to use these

Knowledge Organisers, but the most important thing is that you are revising the knowledge and you are able to recall it in your lessons. Please see below details of how to use this booklet; what your half termly homework looks like and how to secure lots of positive Class Charts points!

**English:** 1 Seneca assignment set per week (alternating between Language and Literature). Sparx Reader will be used to accompany the reading of Literature set texts. Additional revision may be provided by individual class teachers.

**Maths:** 1 hour of Sparx Maths, individualised homework set every week. Pinpoint booklets provided following assessments and additional revision provided by class teacher, where appropriate.

**Science:** 1 hour of Seneca homework, set every week.

**MFL:** 1 hour of vocabulary / listening / reading practice on Language Nut, every week and 30 minutes of learning vocabulary, ready to be quizzed in the following lesson.

**History:** 1 hour Seneca assignment set by class teacher, every week. Recap content using Knowledge Organiser and, when provided, complete practice exam questions.

**Geography:** 1 hour Seneca, each week. 1 x Core vocabulary booklet, using OMG revision across the year.

**DT:** Engineering: Seneca - core knowledge recap, as well as flip learning resources, both printed and or on teams. Reading and comprehension tasks with booklets on teams. Hospitality and Catering: Yr 11- revision workbook, revision tasks set on Teams. Re-cap content using Knowledge Organiser.

**Art:** To complete/refine work for portfolio or set task projects when required.

**Computer Science:** 1 hour of Smart Revise and/or individualised homework set weekly, based around previously taught topics and current topics.

**Film Studies:** The 15 or 10 marks 'Explore' exam question which focuses on an aspect of film language.

**Sociology:** 30 minutes of Seneca homework per week or an exam style question. **All other subjects:** Revise the information in this booklet using the revision sheets included with each subject.

**Sport:** Year 11, 1 hour of exam revision from the revision guide & resources in Teams.

**Child Development and Health & Social Care:** Year 11, 1 hour of exam revision from the revision guide & resources in Teams.

# Timetable

**Use this page to copy out your lessons and room numbers**

Enrichment and Intervention 2025-26 Term Two

Spring Term	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Breakfast</b> 7.45am – 8.30am	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open
<b>Lunch</b> 12.45pm – 1.15pm	MUGA Year 9 Library Year 11 Yr 7 Basketball LG Yr 7, 8, 9 Keyboard club- Room 36 SW Year 11 Open / MFL Subject Intervention Week 1; <b>B Block</b> Week 2; <b>C Block</b>	MUGA Year 11 Library Year 10 Yr 8 Basketball LG Year 11 English and Maths Intervention All years Netball (MUGA) GH <b>New</b>	MUGA Year 10 Library Year 9 Yr 9 Basketball LG All Years Vocal Group /Choir Room 36 SW Year 11 English and Maths Intervention DIO / AWI / FCA / LSI / LHA	MUGA Year 8 Library Year 8 Yr 10 Basketball LG Year 11 Geography /History Intervention NK	MUGA Year 7 Library Year 7 Yr 11 Basketball LG
<b>Period 7</b> Monday Thursday 3.30pm – 4.30pm	Year 9 football (Field) WT	Year 11 Science Intervention All years Basketball (Large Gym) WT	Year 7/8 Trampolining (Small Gym) KHA All years Dodgeball (Large Gym) WT <b>New</b>	Year 7 Football (Field) All years Legacy cohort Latin Club Room 60 AA	<b>Yr 10/11</b> <b>Engineering</b> coursework catch up intervention- By invitation only LN
Wednesday Friday 2.35pm – 3.35pm	All years Chess Club – Room 9 MAG All Years Debate Mate Room 23 BED Sparks Maths Club – Room 15 DHY / RMI	Year 7 and other beginners Latin Club Room 60 AA Year 8 football (Field) JS All years Dance Club (Dance studio) CG	Year 10 Football (Field) NK Year 7,8,9 Girls football WBA- Invite only MUGA All years Dance Club (Dance studio) JR	All years Handball (MUGA) JS <b>New</b> Year 9/10 Trampolining (Small Gym) GH All years <i>The hook and pen society</i> Room 53 JW/LOM	<b>Yr 10/11 Textiles</b> coursework Catch up intervention- By invitation only NB/KWK
		All years <i>Hooked on Bristol</i> Room 53 JW All years Girl's Football (MUGA) JS/NW All years Task Master Room 28 GEG All years Science Club Lab 49 SAM/BHO/RHA	All years Board Game Club Room 55 AK All years The Rep Theatre – Performing Arts Club Room 16 All years Geography Club Room 2 SBW All years Ultimate Uno Club Room 23 QSM	All Years Graphics club KWK 43 Year 7,8,9 Music Rock Band- Room 36 TW Russian Language Club for beginners Room 58 RMI	
		Year 7 / 9 Masterchef Room 45 ( <b>Limited to 15 pupils only</b> ) CCR/MSH/PCR	Basketfields Booster for Year 10 English Room 23 FBA	All years Scene Stealers Filmmaker Club Room 22 DLA	<b>SEND</b> Social Society CCR/CST Room 1
		<b>SEND</b> Y7 Reading Intervention ADI/LOM Room 2	Masterchef ( <b>SEND</b> ) Room 45 CCR/MSH/MCS Y8 Reading Intervention ADI/LOM 33	All years Act Up! Drama Club Room 24 SBS Yr 10 GCSE Computer Science and I Media students only: Room 62 JM / Room 10 HA	<b>SEND</b> Multisports /Football LK JRE/MPA Room 3 1
					<b>SEND</b> Y10 Direct Instruction Lit

Academic	Creative	Physical
<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Latin Club (new and legacy cohorts) <input type="checkbox"/> Chess Club <input type="checkbox"/> Sparx Maths Club <input type="checkbox"/> Geography Club <input type="checkbox"/> Science Club Lab 49 <input type="checkbox"/> Debate Mate <input type="checkbox"/> 'Beyond the Books' Reading Club <input type="checkbox"/> Russian Language Club for Beginners <input type="checkbox"/> Any other subject intervention	<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Scene stealers film maker club <input type="checkbox"/> Act up! Drama Club <input type="checkbox"/> Ultimate Uno <input type="checkbox"/> Hooked on Bristmall - Crochet club <input type="checkbox"/> The hook and pen society <input type="checkbox"/> The REP Theatre Performing Arts Club <input type="checkbox"/> Board Game Club <input type="checkbox"/> Dungeons and Dragons <input type="checkbox"/> Graphics Club <input type="checkbox"/> Digital Skills <input type="checkbox"/> Rock Band <input type="checkbox"/> Lunchtime keyboard club <input type="checkbox"/> Lunchtime vocal choir <input type="checkbox"/> Masterchef <input type="checkbox"/> The Articulators	<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Football <input type="checkbox"/> Basketball <input type="checkbox"/> Netball <input type="checkbox"/> Trampolining <input type="checkbox"/> Dance <input type="checkbox"/> Handball <input type="checkbox"/> Dodgeball

# Dates to remember this half term:

January

February

## Attendance record



Week	Attendance %
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	

# Sparx Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the XRP score that you achieved for each subject. Your form tutor will award you additional CC points for the more XRP points you achieve in addition to the set points for each weekly homework.

	Sparx Reader Points:	Sparx Maths Points:
<b>Week 1</b>		
<b>Week 2</b>		
<b>Week 3</b>		
<b>Week 4</b>		
<b>Week 5</b>		
<b>Week 6</b>		
<b>Total this half term:</b>		

# Seneca Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the titles of the assignments that you complete for each subject and your overall percentage scores. Your form tutor will award you additional CC points for the highest percentages you achieve in addition to the set points for each weekly homework.

	English Assignments:	Science Assignments:	History Assignments:	Geography Assignments:
<b>Week 1</b>				
<b>Week 2</b>				
<b>Week 3</b>				
<b>Week 4</b>				
<b>Week 5</b>				
<b>Week 6</b>				
<b>Total assignments completed this half term:</b>				

# Language Nut Check!

Remember to click:  
'Login with Microsoft'  
using your academy  
email address and  
password!

In the boxes below, write out what % you have achieved from your weekly homework. Your form tutor will award you additional CC points for the highest scores you achieve in addition to the set points for each weekly homework.

	<b>MFL Homework:</b>
<b>Week 1</b>	
<b>Week 2</b>	
<b>Week 3</b>	
<b>Week 4</b>	
<b>Week 5</b>	
<b>Week 6</b>	
<b>Total assignments completed this half term:</b>	

# Independent Study Check!

Your form tutor and your parent/carer will also check that you are completing your independent study within this booklet. Additional positive CC points will be awarded for beautiful presentation and your ability to demonstrate a strong recall of the knowledge within this booklet.

	End of Half term Form Tutor Check:	Parent/Carer Check:
<b>Independent Study Completed?</b>		
<b>Beautiful Presentation?</b>		
<b>Recall of Knowledge?</b>		

**Personal Reflection:** What are you most proud of within your Independent Study Booklet?

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## Homework Log

Use this page to record any homework this half term

## Homework Log

Use this page to record any homework this half term

## Look, Cover, Write, Check

## Definitions to Key Words

## Flash Cards

## Self Quizzing

## Mind Maps

## Paired Retrieval

Step 1

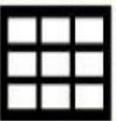
Look at and study a specific area of your knowledge organiser.



Write down the key words and definitions.



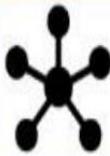
Use your knowledge organiser to condense and write down key facts and or information on your flash cards.



Use your knowledge organiser to create a mini quiz. Write down questions using your knowledge organiser.



Create a mind map with all the information you can remember from your knowledge organiser.



Ask a partner or family member to have the knowledge organiser or flash cards in their hands.



Step 2

Cover or flip the knowledge organiser over and write down everything you remember.



Try not to use your knowledge organiser to help you



Add pictures to help support. Then self quiz yourself using the flash cards.. You can write questions on one side and answers on the other.



Answer the questions and remember to use full sentences.



Check your knowledge organiser to see if there were any mistakes with the information you have made.



They can test you by asking you questions on different sections of your knowledge organiser.



Step 3

Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat.



Use your green pen to check your work.



Use a parent/carer or friend to help quiz you on the knowledge.



You can also use family to help quiz you. Keep self quizzing until you get all questions correct.



Try to make connections that links information together.

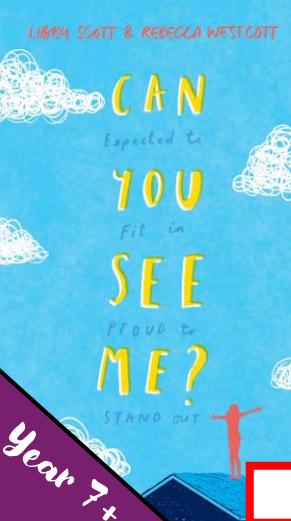


Write down your answers.

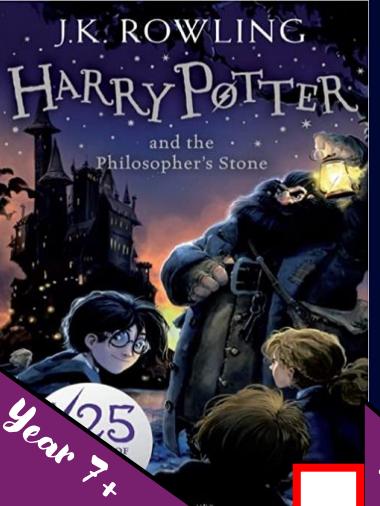


## WORLD MAP





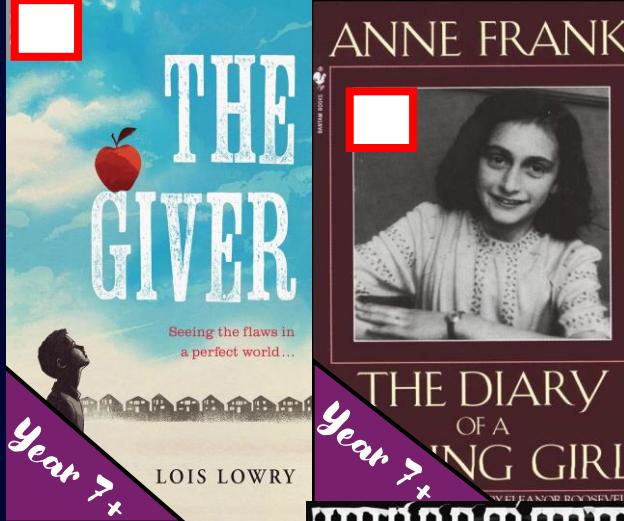
Year 7+



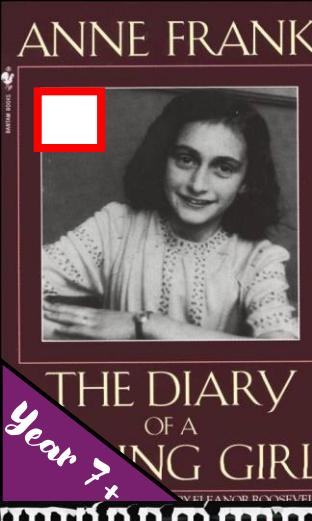
Year 7+



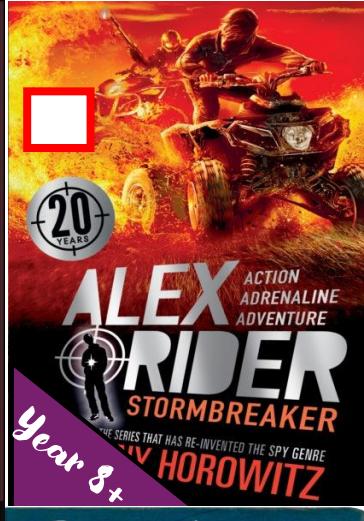
Year 8+



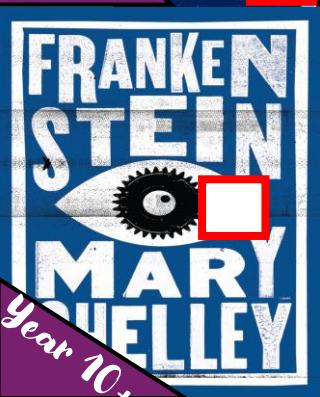
Year 7+



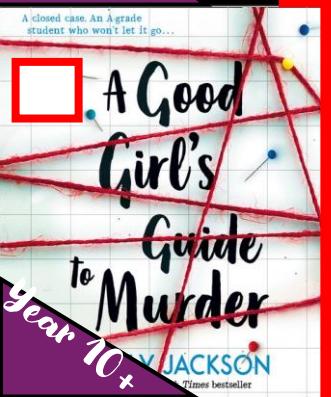
Year 8+



Year 8+



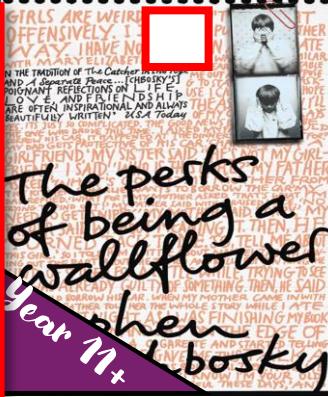
Year 10+



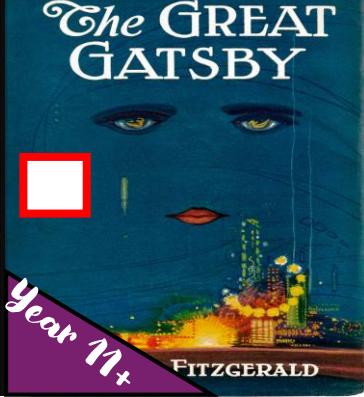
Year 10+



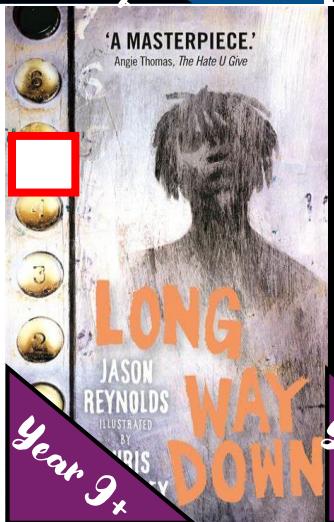
Year 8+



Year 11+



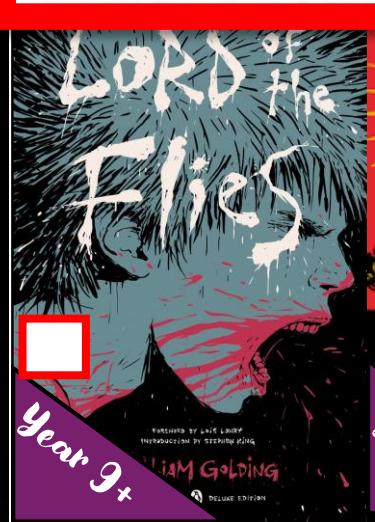
Year 11+



Year 9+



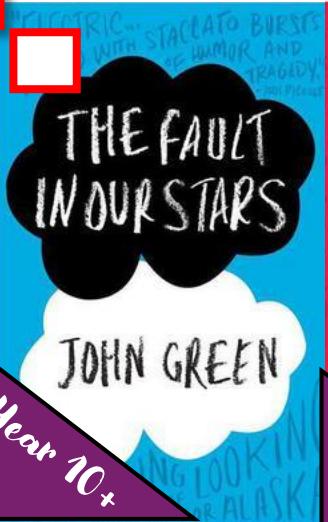
Year 8+



Year 9+



Year 9+



Year 10+

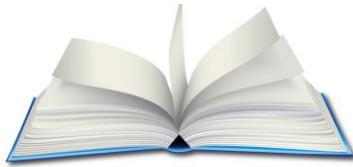


Year 11+

'Tom Sawyer meets Cider with Rosie on route to India via Wolverhampton. A wonderful book - treat yourself.'  
Ben Elton

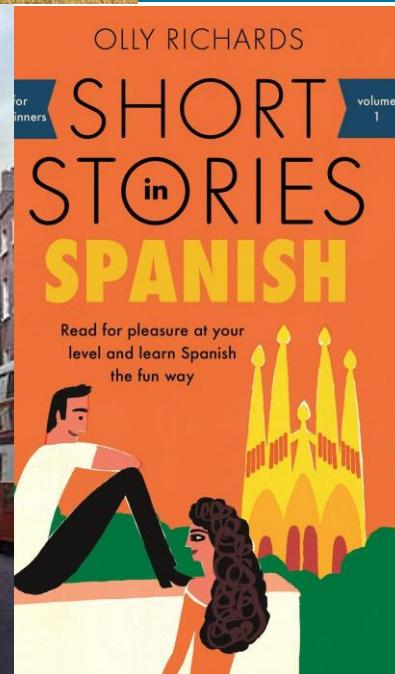
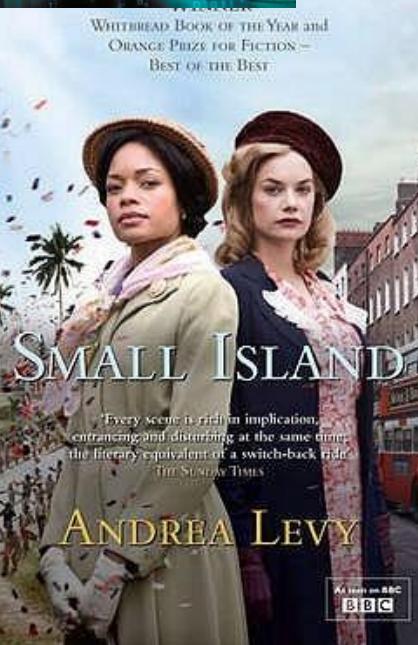
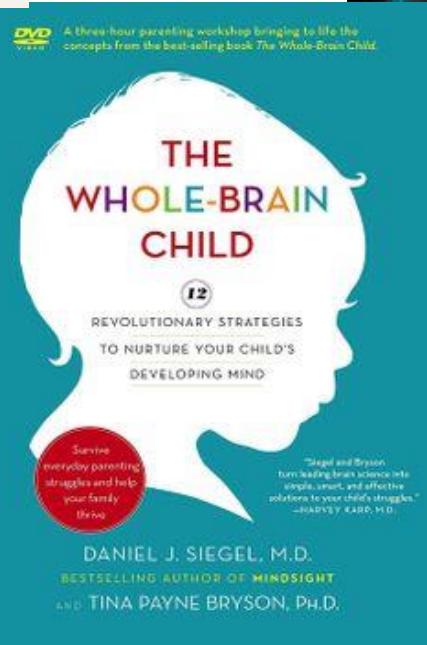
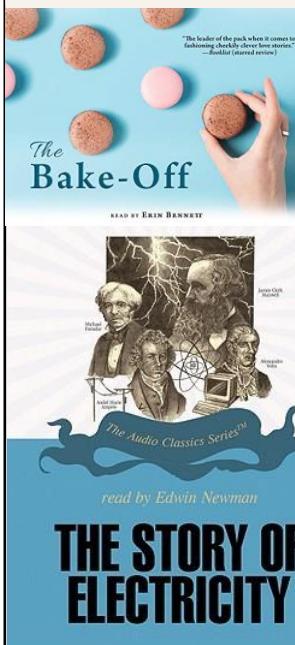
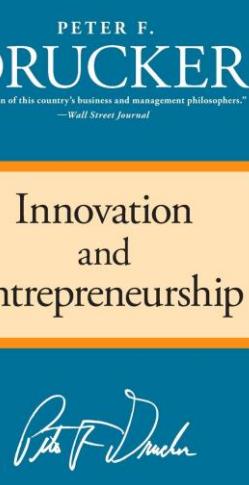
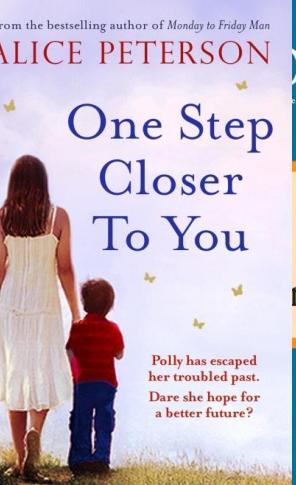
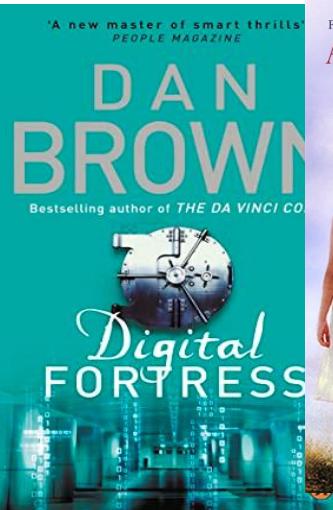
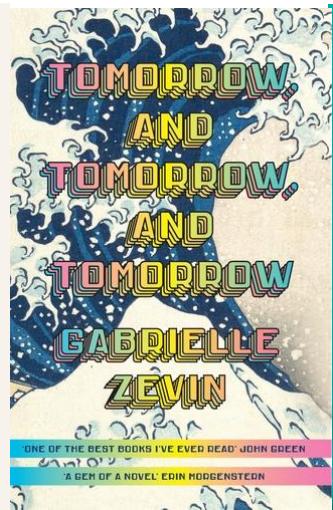
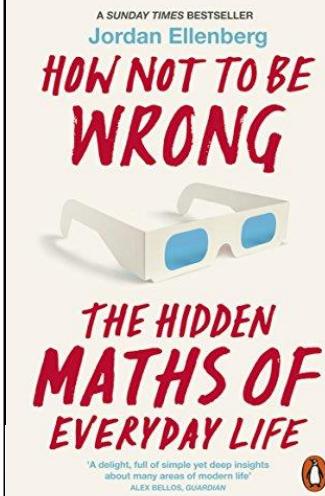
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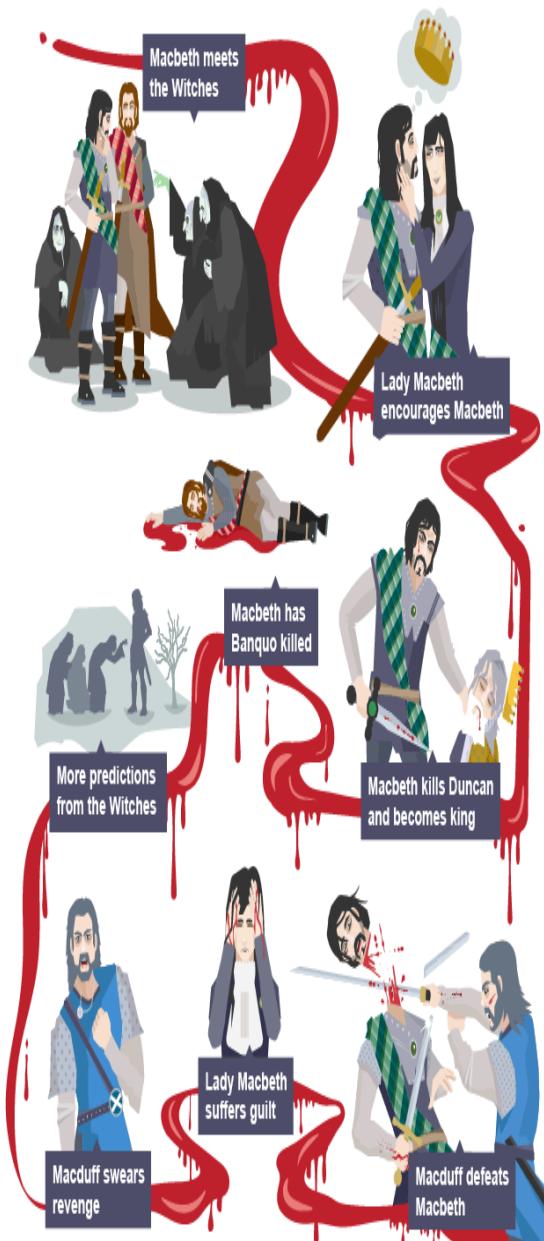
# Further Reading List

Year 10



Challenge yourself by reading these topic-related books!

## KS4 Knowledge Organiser



Context	
<p>The most influential writer in all of English literature, William Shakespeare was born in 1564 to a successful middle-class glove-maker in Stratford-upon-Avon, England. Shakespeare attended grammar school, but his formal education proceeded no further. In 1582 he married an older woman, Anne Hathaway, and had three children with her. Around 1590 he left his family behind and traveled to London to work as an actor and playwright.</p>	<p>The Gunpowder Plot. In 1605, a group of rebels, including Guy Fawkes, attempted regicide by plotting to blow up Parliament. Shakespeare shows how those who commit regicide will be tormented by guilt and ultimately meet a tragic end.</p>
<p><b>King James I - James</b> I had been James VI of Scotland before he succeeded to the English throne in 1603. In focusing on Macbeth, a figure from Scottish history, Shakespeare paid homage to his king's Scottish lineage. Additionally, the witches' prophecy that Banquo will establish a line of kings is a clear nod to James' family's claim to have descended from the historical Banquo.</p> <p><b>Witchcraft and Daemonologie</b> - King James was convinced that a group of witches were plotting to bring about his death and played an active role in the North Berwick witch trials. He later published Daemonologie in 1597. Charges of witchcraft continued in Great Britain, with Scotland in particular experiencing a number of witch hunt crazes throughout the 17th century.</p>	<p>Religious thinkers in the middle ages had come up with the idea of 'The Great Chain of Being'. This was a belief held by many, that God had designed an orderly system for both nature and humankind. Everything had its place in the great chain of being. It was considered a sin against God for anybody to try and alter their station in the chain.</p> <p>The Divine Rights throughout Shakespeare's time and beyond, monarchs were seen as being God's deputies on earth, having a 'Divine Right' to rule; the monarch had absolute power and an attack on him or her, even a verbal one was, considered to be a treason.</p>
Threshold Concepts	
<p> <b>Tragedy:</b> a true Shakespearean tragedy follows the structure of Freytag's pyramid. Macbeth is Shakespeare's shortest tragedy, and the most bloody. It includes all of the 9 key elements that make it a tragedy.</p> <p>A Shakespearean tragedy is different to any other one because it always ends with the main character being mentally, physically or emotionally scarred beyond repair.</p>	<p> <b>Tragic Hero, Hamartia and Hubris:</b> These three features all intertwine in a tragedy. The protagonist is a 'tragic hero' because they always have a great deal of 'hubris' which leads to their ultimate death and destruction. This is always brought about by their 'fatal flaw' or hamartia being exposed and leading them down a sinful pathway. Macbeth fits this description perfectly as the protagonist in Macbeth.</p>
<p><b>Vocabulary:</b></p> <p><b>Macbeth:</b> ambitious, courageous, deceitful, impulsive, tyrannical, zealous.</p> <p><b>Lady Macbeth:</b> cunning, dominant, malevolent, transgressive, duplicitous.</p> <p><b>Banquo:</b> devoted, loyal, trustworthy, intuitive.</p> <p><b>Duncan:</b> benevolent, faithful, honest, naïve.</p> <p><b>Witches:</b> corrupt, manipulative, subversive.</p>	<p><b>The audience feel:</b></p> <p>Astonished Unsettled Distressed Surprised Unnerved</p> <p>Perturbed Scandalised Bewildered Disgusted Nonplussed</p>

Theme and dual coding symbol	Killer Quotations that connect	Explanation and inferences
Power	<p>“Unsex me here”      “I'll give thee a wind”      “Though his bark cannot be lost, Yet it shall be tempest-tossed.”      “unseamed him from the knave to the chops”      “butcher”      “tyrant”      “fiend”.</p>	<ul style="list-style-type: none"> <li>Lady Macbeth tries to gain power over the throne. This would be seen as disrupting the natural order and upsetting the Great Chain of Being – the idea that you were born with a status/place in the society and this could not be changed. The play can be seen as a warning against this.</li> <li>The witches have power over nature, they can alter the weather and control people's fate.</li> <li>Macbeth shows power through violence, first as a soldier then as a king.</li> </ul>
Kingship and hierarchy	<p>“The king-becoming graces - / As justice, verity, temp'rance, stableness”</p>	<ul style="list-style-type: none"> <li>Shakespeare shows a range of ways to be leaders . Duncan is fair but weak. Macbeth is strong but becomes a violent dictator. Malcolm seems to be a balance between the two and ends up as king at the end, suggesting that power will be kept by someone who deserves it.</li> <li>Macbeth</li> </ul>
Supernatural	<p>“Fair is foul and foul is fair”      “take my milk for gall, you murdering ministers”      “Hover through fog and filthy air”.      “If a man were porter of hell-gate, he should have old turning the key.”</p>	<ul style="list-style-type: none"> <li>The play opens with the witches establishing the supernatural as a key theme and the witches as key characters. Macbeth first line (“So fair and foul a day”) – linking Macbeth to the supernatural and the witches' chant.</li> <li>Lady Macbeth appears to be aligning herself with the dark spirits and supernatural, especially through this soliloquy on her need for power.</li> <li>Rhyme is used in speeches by the witches to identify them as ‘other’. Banquo chooses to ignore the witches, showing how people should respond to the supernatural. This makes him Macbeth's foil.</li> <li>The Porter in Act 3, scene 1 describes the entrance to Macbeth's castle as the entrance to Hell when he hears the knocking of Macduff. This is after the King's death and appears to evoke images of evil in this place.</li> </ul>
Ambition	<p>“stars, hide your fires, let not light see my black and deep desires”      “vaulting ambition which o'erleaps itself And falls on th'other”      “too full o' the milk of human kindness.”      “The Thane of Fife he had a wife where is she now?”</p>	<ul style="list-style-type: none"> <li>Macbeth's fatal flaw is his ambition. This quote again connects him to evil and supernatural elements, where he seems to be asking the very Earth to keep his terrible secret.</li> <li>The play can be seen as a warning against ambition, the Divine Right of Kings placed the king as chosen by God. Macbeth by following his ambition is portrayed as going against God (AO3 Writer's intentions). This does not end well!</li> <li>Lady Macbeth is initially very ambitious but worries Macbeth is not strong enough to go through with his plans.</li> <li>As the play progresses she is tormented by guilt at her part in Macbeth's violence . This guilt drives her mad and she eventually takes her own life. This can be seen as a punishment for her ambition.</li> </ul>
Duplicity (Appearance vs Reality)	<p>“look like th' innocent flower, but be the serpent under't”      “Is this a dagger I see before me”      “Macbeth doth murder sleep”</p>	<ul style="list-style-type: none"> <li>Lady Macbeth suggests Macbeth hides his true identity, connecting him once again to the devil through the idea of the Snake.</li> <li>Things are rarely as they seem in Macbeth. Macbeth's vision of the dagger is his guilt causing hallucinations.</li> <li>Both Macbeths have trouble sleeping after the murders – this would've been seen as a sign of possession or disturbed minds.</li> </ul>

#### Example PEZEL and critical verbs:

Shakespeare uses the tragic hero, Macbeth, to illustrate the tragic consequences that develop from being influenced by the supernatural. This comes at a time when King James I wrote Daemonologie and explored the devastating influence he believed the supernatural and witchcraft specifically, could have on him as King. Shakespeare's portrayal of Macbeth as the 'valiant' leader at the beginning, contrasted with his 'butcher' like behaviour at the end, clearly conveys that Shakespeare wanted to illustrate that Divine Right was not to be challenged; particularly through the 'evil' means of the 'witches'. In the beginning, Shakespeare portrays Macbeth as loyal and he is referred to as 'Brave Macbeth'. The continuous capitalization of 'Brave' almost makes this adjective a proper noun; it becomes his title. Thus emphasising how well respected and dedicated he was. It is essential in the exposition of the play for Shakespeare to embed this thought for the audience as they need to be aware of how easily the supernatural can influence even the most loyal person.

Critical Verbs				
Shakespeare wrote the play because he was influenced by what was going on in the world he was living in. <u>Society</u> , <u>religion</u> , <u>politics</u> , <u>stereotypes</u> , <u>beliefs</u> and personal experiences will all have impacted on <u>what</u> Shakespeare was writing and <u>why</u> he was writing it. Use the structure below to create points.				
Writer	Uses	Character/setting/event	Critical Verb	Theme/concept/context
Shakespeare	uses	Macbeth The battlefield The death of Lady Macbeth	to advocate to criticise to celebrate to warn to teach to expose to personify	The effect of absolute power corrupting what was a once 'innocent' and loyal man.



1 hour



# GCSE Language Paper 1 Section A – Reading

## Explorations in creative reading and writing

English

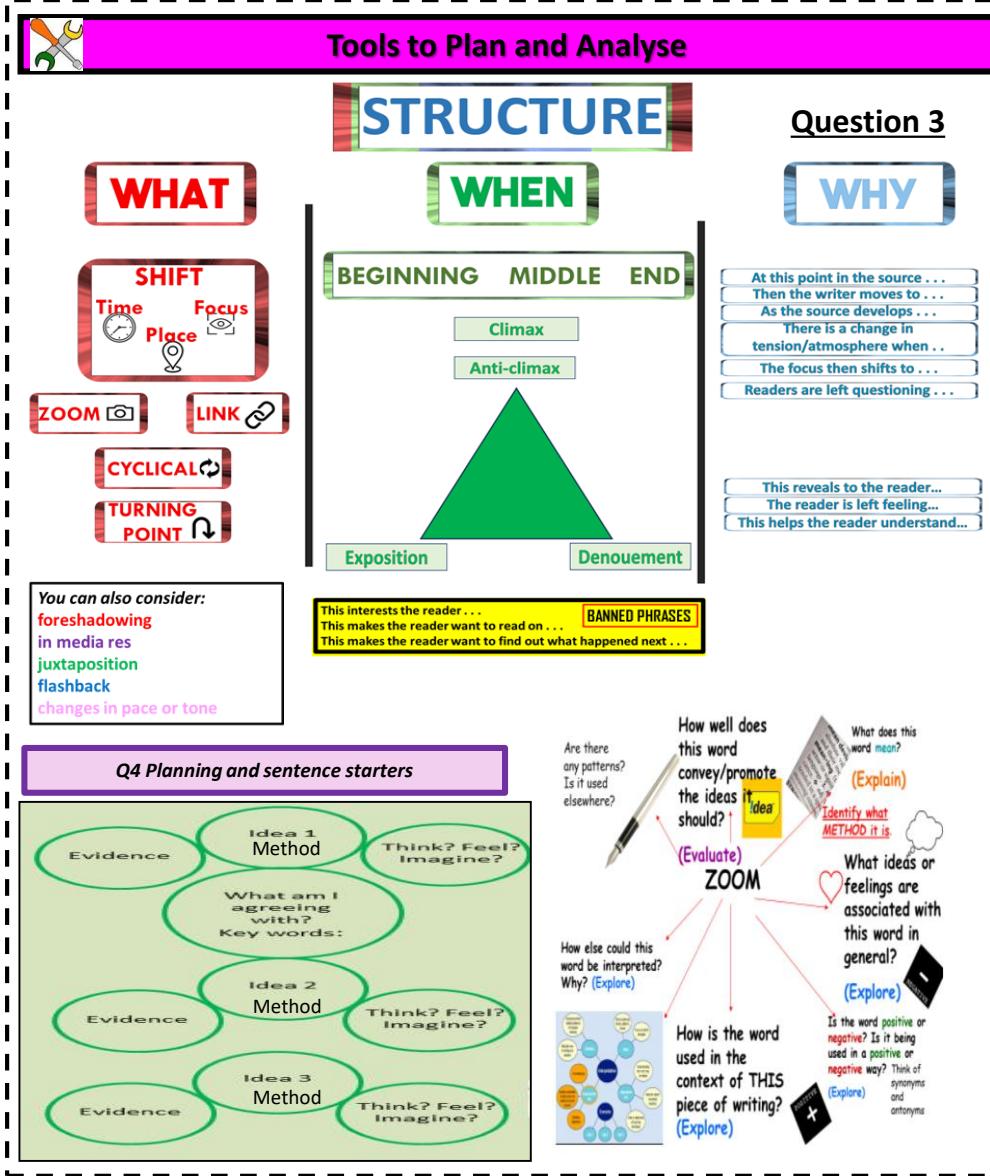


This paper has five questions to answer and you will need to complete all of them to achieve your target grade. Questions 1-4 are based on a fiction text and are worth 25% of your overall GCSE English Language grade (40 marks). Question 5 is a writing task where you will be instructed to write a fiction text. Again, it is worth 25% of your overall grade (40 marks).

15 Minutes Reading Time	
Start by reading the blurb for of the text.	<input type="checkbox"/>
Read the source.	<input type="checkbox"/>
Identify the GAP of the source.	<input type="checkbox"/>
Read and highlight the key information in the questions.	<input type="checkbox"/>

5	4
Four multiple choice questions	<input type="checkbox"/>
• Make sure you're selecting from the right lines.	<input type="checkbox"/>
• Do not choose more than one answer	<input type="checkbox"/>
• Retrieve explicit or implicit information directly from the text	<input type="checkbox"/>

12	8
Analyse the language that the writer has used and the impact that it has on the reader in the given extract.	<input type="checkbox"/>
Identify the key focus of the question and refer to it throughout.	<input type="checkbox"/>
Use short, embedded quotes.	<input type="checkbox"/>
Identify the method used and why it has been used. What is the effect?	<input type="checkbox"/>
World level rainbow analysis of key word. Why did the writer choose that word?	<input type="checkbox"/>
Method: PEZEL X3	<input type="checkbox"/>
Challenge: can you spot a pattern?	<input type="checkbox"/>



12	8
This requires you to analyse the writer's use of structure to create specific effects: <b>Spot and highlight the question focus</b> (this could be tone, atmosphere, setting or character)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Embed a short, brief quotation.	<input type="checkbox"/>
Identify the structural method used and why it has been used. What do we learn/understand by placing it there?	<input type="checkbox"/>
There will always be a <b>shift</b> in mood/tone/atmosphere – aim to spot that and discuss why it happens.	<input type="checkbox"/>
Method: <b>What - Where/When - Why?</b>	<input type="checkbox"/>

25	20
An opinion/statement about the text and you will be asked to <b>what extent</b> you agree with it.	<input type="checkbox"/>
Unpick the <b>key words</b> in the statement. 5 minutes to plan.	<input type="checkbox"/>
Use <b>SYNONYMS</b> of the key opinions in the statement.	<input type="checkbox"/>
<b>Method: PEZEL X3.</b> Look at both sides of the argument but have a final response that explicitly states how far you agree/disagree.	<input type="checkbox"/>
You can focus on <b>language AND structural</b> methods.	<input type="checkbox"/>
<b>Embedded evidence</b> to support.	<input type="checkbox"/>
Link every paragraph back to the statement in the question.	<input type="checkbox"/>



45  
minut  
e



# GCSE Language Paper 1 Section B - Writing

## Explorations in creative reading and writing



English

OPTION: Describe a picture OR write a STORY (it could be the start or ending of one). You are marked on **SPAG** (16 marks) and Content and Organisation (24 marks).

### Question 5

Identify the GAP of the writing task.

Plan your response using one of the planning methods.

Use a range of language devices.

Link your start and end.

Use a range of punctuation.

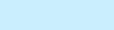
Use a range of sentence types.

Use structural devices from Q3 in your own writing.

### Tools to Plan

#### Planning Method

##### Drop



Begin by dropping the narrative voice into the text. Establish the setting and weather.

##### Shift



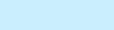
Shift to another time, contrasting mood or alternative place based on the stimulus.

##### Zoom



Return to the original point in time or location and mood and/or zoom in on a tiny detail in a way that illuminates the character's feelings.

##### Link



Zooming out and leaving the location (like a bird's eye view).

##### Tips



Try to use a **motif** (a recurring element that has symbolic significance in a story) at least twice. It could be at the start of the end.

##### Link



Try to **link** your start and end together.

##### Contrast



Create contrast by having a different atmosphere at the start and end.

**ISPACED** to help you vary sentence openers (Q5)

Try starting with:

**I** – an **'ing'** word such as 'Screaming ...'

**S** – a **SIMILE** such as 'Like a thunderstorm, the issue ...'

**P** – a **PREPOSITION** such as 'Behind the eyes of onlookers ...'

**A** – an **ADVERB** ('ly' word) such as 'Savagely'

**C** – a **CONNECTIVE** such as 'Meanwhile ...'

**E** – an **'ed'** word such as 'Panicked, I ...'

**D** – **DIALOGUE** such as "Listen!" I screamed."

### Writing Checklist

One sentence paragraph.

One word sentence.

Varied paragraph lengths.

Ten different types of punctuation

Start sentences with present continuous tense ('ing' verbs).

Start sentences with adverbs (ly).

Start sentences with prepositions (e.g. over time).

### Ambitious Vocabulary

**Sanguine:** optimistic, especially in an apparently bad situation.

**Amplify:** to make larger, greater, louder.

**Repugnant:** ugly.

**Discombobulate:** confuse someone.

**Formidable:** inspiring fear or respect.

**Conceal:** keep from sight/hide.

**Euphoric:** intense excitement or happiness.

**Warp:** to become twisted bent, out of shape.

**Crestfallen:** sad and disappointed.

**Epitomise:** perfect example of/ give a summary of.

**Incensed:** very angry/enraged.

**Bolster:** to support or strengthen.

**Monochromatic:** containing/using one colour.

**Explicate:** develop a problem/explain.

### TiPToP

Start a new paragraph when there is a change in:



**TIME**



**PLACE**



**TOPIC**



**PERSON/SPEAKER**

Have you used ten types of punctuation?

? , ! " " " ... - ( ) : ;



1 hour



## GCSE Language Paper 2 Section A - Reading

### Writers' viewpoints and perspectives

English



This paper has five questions to answer and you will need to complete all of them to achieve your target grade. Questions 1-4 are based on two non-fiction texts and are worth 25% of your overall GCSE English Language grade (40 marks). Question 5 is a writing task where you will be instructed to write a non-fiction text. Again, it is worth 25% of your overall grade (40 marks).

#### 15 Minutes Reading Time

- Start by **reading the blurb** for each text.
- BUG** each question.
- Read** each source.
- Read and highlight** the key information in the questions.

#### Question 1 4

- Identify the **four** pieces of information, which are **TRUE** from the list.
- Read the statements carefully – it might not be obvious.
- Only shade in 4 answers.

#### Question 2 8

**Compare and summarise** what you learn from two texts about a particular topic.

- Highlight similarities/ differences
- Point, Evidence, Inference, Development (of inferences) - **COMPARE**
- Method: PEID-C-PEID x2**

#### Tools to Plan and Analyse

##### Q3 and 4 LAYERED ANALYSIS

**What are the connotations of the word?**  
**What does it reveal about the writer's thoughts and feelings?**



USE CONNECTIVES to compare

Contrasting	Adding
However	Furthermore
Whereas	In addition
On the other hand	Similarly
In contrast	Both

In Source A we are told \_\_\_\_\_: '\_\_\_\_\_'. This suggests that the \_\_\_\_\_ (try to include a triple inference). However, in Source B we are told as it says '\_\_\_\_\_. This suggests that the \_\_\_\_\_ (try to include a triple inference).

##### Adjectives to describe the writer's tone of voice

Authoritative	Nostalgic
Bored	Objective
Calm	Proud
Desperate	Questioning
Excited	Romantic
Friendly	Sombre
Grateful	Tired
Humorous	Uneasy
Indignant	Vehement
Joyful	Wistful
Kindly	Yearning
Light-hearted	Xenophobic
Mocking	Zealous

Both writers \_\_\_\_\_. However, Q4 Source A the writer feels \_\_\_\_\_ about \_\_\_\_\_ as they say '\_\_\_\_\_. The writer uses (method) in order to \_\_\_\_\_. The word '\_\_\_\_' has connotations of \_\_\_\_\_. Therefore, implying \_\_\_\_\_. Whereas, in Source B the writer is not as \_\_\_\_\_ as it says '\_\_\_\_\_. The writer uses (method) in order to \_\_\_\_\_. The word '\_\_\_\_' has connotations of \_\_\_\_\_. Therefore, implying \_\_\_\_\_.

Q1	Acronym
Q1	PEID-C-PEID
Q2	PEZE
Q3	VEZE-C-VEZE
Q4	Intro Reason 1 ISPACE Reason 2 Shutdown Resolution
Q5	

#### Question 3 12

Analyse the language that the writer has used.

- Spot and highlight the question focus.
- Embed a short, brief quotation.
- Identify the method used and why it has been used. What is the effect?
- World level rainbow analysis of key word. Why did the writer choose that word?
- Method: PEZE x3**
- Challenge: can you spot a pattern?

#### Question 4 16

Compare the writers' viewpoints or attitudes AND the **language/ structural methods**.

- Identify what both writers think about the subject.
- 3 quotations from each source that display the writers' viewpoints.
- Method: VEZE – C – VEZE x2**
- Comparative connectives

45  
minutes

## GCSE Language Paper 2 Section B - Writing

### Writers' viewpoints and perspectives

English



You will be asked to write either a **letter, speech, leaflet or article**. You are marked on **SPAG** (16 marks) and Content and Organisation (24 marks).

#### Question 5

- Identify the **TAPS** of the writing task.
- Plan five-six points. Use the writing frame to help.
- Write five-six paragraphs.
- Use **DAFORREST**.
- Link your start and end.
- Use a range of punctuation.
- Use a range of sentence types.

#### Have you used DAFORREST?

**D**irect address

**A**lliteration/ anecdote

**F**act/ figurative language

**O**pinion

**R**hetorical question

**R**epetition

**E**motive language

**S**tatistic/simile/satire

**T**riple

**Introduction:** State whether you agree or disagree with the statement and why you believe the issue is important one in the 21<sup>st</sup> century.

Include:

Triple adjective colon  
Rhetorical question  
Statistic  
X2 ambitious vocabulary  
State why it's an issue.

**Reason 1:** Explain your FIRST reason why you **AGREE** or **DIAGREE** with the statement.

Include:

Metaphor  
Anecdote (personal story)  
X2 ambitious vocabulary  
State why it's an issue and why you agree or disagree.

**Reason 2:** Explain your SECOND reason why you **AGREE** or **DIAGREE** with the statement.

Include:

Pick another reason.  
Expert at the door (a person linking to the topic)  
X2 ambitious vocabulary  
Direct address  
Emotive language

**SHUTDOWN:** Acknowledge what the **OPPOSING** point of view to yours and **SHUT IT DOWN** to show why it might be **WRONG**.

Include:

Mention the opposing view.  
X2 ambitious vocabulary  
Simile  
Semi-colon

**Solution:** How could this issue be solved? Give clear examples and decide on at least ONE action that could be taken to help solve the problem.

Include:

The solution  
Rhetorical question  
Alliteration  
X2 ambitious vocabulary

**Conclusion:** End your argument strongly and refer to what you wrote at the start of your piece.

Include:

Link back to beginning.  
Use a dash (-)  
X2 ambitious vocabulary  
Triple  
Imperative sentence (command)

#### Tools to Plan

Argue/Persuade/Explain/Advise/Inform

Lang Paper 2 Section B: Writing to express an opinion

Letter/Speech/Article/Leaflet/Essay

##### Imperative phrases

Action must be taken.

It is undeniably time for a change.

We can no longer ignore this issue.

Stand up and make your voice heard.

Don't tolerate this any longer.

Let's put a stop to this issue, once and for all.

It is time to pay attention.

##### Experts to quote

Prime Minister – Keir Starmer  
Health Secretary – Wes Streeting  
Education secretary – Bridget Phillipson  
Ofsted Chef Inspector – Sir Martyn Oliver  
A former USA President – Barack Obama  
Current USA President – Joe Biden  
Footballer and campaigner – Marcus Rashford  
Police Commissioner – Sir Mark Rowley  
Broadcaster, biologist and activist – David Attenborough  
Activist – Greta Thunberg

##### Structure for writing

1. Spell out your point of view clearly  
*I firmly believe that...*
2. Give an anecdote that explains your feelings  
*I feel like this because...*
3. Give at least three other reasons  
*There are other good reasons for my point of view.*
4. Quote an expert  
*Don't just take my word for it.*
5. Facts/statistics to support your point of view  
*It's the truth.*
6. Relate the issue to the reader  
*It could affect you too.*
7. Describe what needs to happen  
*So, we need to...*
8. One-sentence paragraph, repeating your 1.  
*I firmly believe that...*

45 minutes – 5 minutes to plan, 35 minutes to write, 5 minutes to proof-read

##### Instead of 'important', say...

Crucial  
Essential  
Vital  
Significant  
Urgent  
Critical  
Momentous

##### Instead of 'good', say...

Outstanding  
Beneficial  
Superb  
Exceptional  
Worthy  
Magnificent  
Faultless

##### Instead of 'bad', say...

Disastrous  
Dire  
Unacceptable  
Inadequate  
Harmful  
Invalid  
Shocking

##### Rhetorical questions

How much longer can we sit back and ignore this issue?  
Ask yourself this: how would you feel?  
Do you want your children to grow up in a world where this continues to happen?  
Have we not tolerated this for long enough?  
If not you, then who? If not now, then when?  
Are you ready to change the world?

#### ISPACED to help you vary sentence openers (Q5)

##### Try starting with:

I – an 'ing' word such as 'Screaming ...'  
S – a SIMILE such as 'Like a thunderstorm, the issue ...'  
P – a PREPOSITION such as 'Behind the eyes of onlookers ...'  
A – an ADVERB ('ly' word) such as 'Savagely'  
C – a CONNECTIVE such as 'Meanwhile ...'  
E – an 'ed' word such as 'Panicked, I ...'  
D – DIALOGUE such as " 'Listen!' I screamed."

##### Vocabulary Bank 1: Disgusting

revolting  
repulsive  
ghastly  
nauseating  
horrendous  
Atrocious

##### Vocabulary Bank 2: Wrong

erroneous  
immoral  
depraved  
corrupt  
unethical  
flawed

##### Vocabulary Bank 3: Unfair

Biased  
Prejudiced  
Imbalanced  
One-sided  
Misleading

Have you used ten types of punctuation?

?, ! " " ... - ( ) : :

# English. Revisiting vocabulary and summarising the plot of Macbeth.

## 12 VOCABULARY QUESTIONS

Which noun means 'excessive pride or confidence'?	Which adjective describes a social system where men hold the power and influence??
1. Hubris. 2. Hamartia. 3. Machiavellian. 4. Villainy.	1. Paternal. 2. Patriarchal. 3. Maternal. 4. Matriarchal.
Which noun is a strong desire to do or achieve something?	What is chivalry?
1. Hamartia. 2. Ambition. 3. Catharsis. 4. Desire.	1. Cowardice, diplomacy, courtesy. 2. Bravery, military skill, courtesy. 3. Wicked or criminal behaviour. 4. Unfair, unjust and cruel rule.
Which noun means manliness?	What is duplicity?
1. Femininity 2. Masculinity. 3. Matriarchal. 4. Patriarchal.	1. Honesty and straight-forwardness. 2. Excessive pride or confidence. 3. A strong desire or wish for someone. 4. Deceitfulness or being two-faced.
Which adjective means cunning and sly?	Which noun is a worry that you are being persecuted or picked on?
1. Machiavellian. 2. Patriarchal. 3. Ambitious. 4. Chivalrous.	1. Cowardice. 2. Tyranny. 3. Catharsis. 4. Paranoia.
Femininity is...	Which verb means to take someone's place illegally or by force?
1. The quality of being male. 2. Being a weak man. 3. Rejecting your womanliness. 4. The quality of being female.	1. Usurp. 2. Prophesise. 3. Tyrannise. 4. Desire.
A prophecy is...	Tyranny is...
1. Encouragement to do bad things. 2. Encouragement to do good things. 3. Interpreting events in the past. 4. A prediction of the future.	1. Wicked or criminal behaviour. 2. A belief in the supernatural. 3. A serious disagreement or argument. 4. An unfair, unjust or cruel governance.
A soliloquy is...	Hamartia is...
1. A speech given to the audience. 2. A release from strong emotions. 3. A belief in the supernatural. 4. Another name for the royal family.	1. A fatal flaw leading to a hero's downfall. 2. Releasing strong emotions. 3. A worry you're being victimised. 4. Deceitful behaviour.

## Recap the Plot

Who is travelling with Macbeth when he first encounters the three sisters?	When he sees them the second time, what four things do the witches show Macbeth?
a) Macduff b) Lennox c) Banquo d) Duncan	a) A head, a blood child, a crown and a serpent b) An armed child, a bloody child, a crowned child with a tree in his hand, eight kings followed by Banquo's ghost with a mirror c) Armed head, visions, crowned child with a tree in his hand and a battlefield d) An armed head, a bloody child, a crowned child with a tree in his hand, eight kings followed by Banquo's ghost with a mirror
What is Macbeth Thane of at the start of the play?	Why does Macbeth have Macduff's family and servants killed?
a) Scotland b) Cawdor c) England d) Manchester	a) Macduff is not loyal and Macbeth wants to kill his family as they could kill him b) Macduff is not loyal to Macbeth, and Macbeth is angry c) Macduff is angry with Macbeth and he is afraid d) Macduff is not loyal and Macbeth is happy
What prophecy do the sisters give Banquo in Act 1?	Towards the end of the play, which words best describe Lady Macbeth's behaviour in this Act?
a) That he will be made Thane of Cawdor b) That his son will be made Thane of Cawdor c) That his sons will be made princes d) That his sons will be made kings	a) Confident, egotistical and boastful b) Ambitious, power-driven and determined c) Psychotic, unstable and melodramatic d) Obsessive, paranoid and unhinged
What 'sign' convinces Macbeth to kill Duncan?	Macbeth does not fear death at the hands of the rebels because he has...
a) An apparition of one of the Weird Sisters b) A nightmare about one of the Weird Sisters c) An apparition of a floating dagger d) The ghost of his dead father visits him	a) Extensive battle experience b) Faith in the witches' prophecies c) Little reason to go on living d) No awareness of the rebels' strength
What does Macbeth accidentally take with him after murdering the king?	In the last scene, Macbeth fights to the death because he...
a) The murder weapons b) The king's crown c) The bible d) The King's bloody pillow	a) is given no other choice b) thinks that Macduff can be easily defeated c) does not believe Macduff's claims about his birth d) prefers an honourable defeat to a humiliating surrender
Which characters run away shortly after Duncan's death?	
a) Banquo and Fleance b) Macbeth and Lady Macbeth c) Malcolm and Donalbain d) Macduff and his family	
What does Macbeth hire men to do?	
a) Protect him from assassins b) Kill Macduff and his family c) Find the witches so he can talk to them again d) Kill Banquo and his son	



# YEAR 10 — GEOMETRY

## Maths

# Working with circles

### What do I need to be able to do?

By the end of this unit you should be able to:

- Recognise and label parts of a circle
- Calculate fractional parts of a circle
- Calculate the length of an arc
- Calculate the area of a sector
- Understand and use volume of a cone, cylinder and sphere
- Understand and use surface area of a cone, cylinder and sphere

### Keywords

**Circumference:** the length around the outside of the circle – the perimeter

**Area:** the size of the 2D surface

**Diameter:** the distance from one side of a circle to another through the centre

**Radius:** the distance from the centre to the circumference of the circle

**Tangent:** a straight line that touches the circumference of a circle

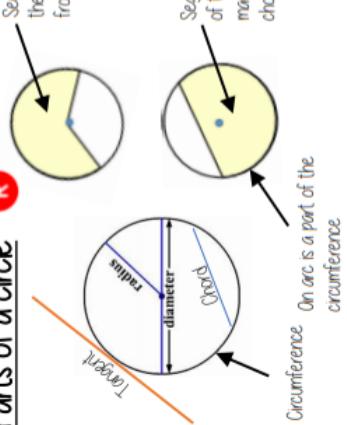
**Chord:** a line segment connecting two points on the curve

**Frustum:** a pyramid or cone with the top cut off

**Hemisphere:** half a sphere

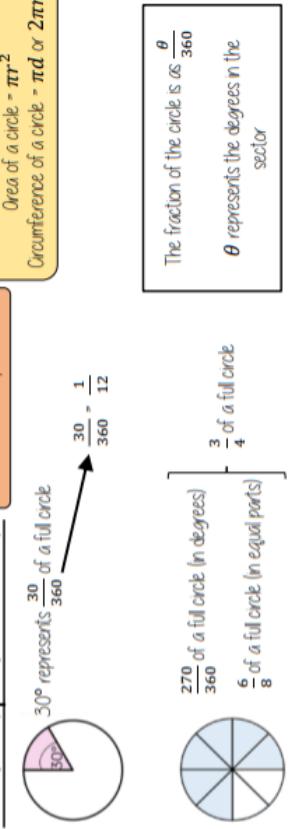
**Surface area:** the total area of the surface of a 3D shape

### Parts of a circle



Circumference On an arc is a part of the circumference

### Fractional parts of a circle



The fraction of the circle is  $\frac{\theta}{360}$

$\theta$  represents the degrees in the sector

Formula to remember

Area of a circle =  $\pi r^2$

Circumference of a circle =  $\pi d$  or  $2\pi r$

$$\text{Circumference} = \pi d = \pi \times 2r = 2\pi r$$

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

$$\text{Volume} = \frac{1}{3} \pi r^2 h$$

$$\text{Surface area} = 2\pi r^2 + 2\pi r h$$

$$\text{Surface area} = 4\pi r^2$$

$$\text{Volume} = \frac{4}{3} \pi r^3$$

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$$\text{Surface area} = 4\pi r^2$$

Look out for the use of Pythagoras to calculate the length  $l$

Total surface area Cone =  $\pi r l h$

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# YEAR 10 — GEOMETRY

## Maths

## Vectors

### What do I need to be able to do?

By the end of this unit you should be able to:

- Understand and represent vectors
- Use and read vector notation
- Draw and understand vectors multiplied by a scalar
- Draw and understand addition of vectors
- Draw and understand addition and subtraction of vectors

### Keywords

Direction: the line our course something is going

Magnitude: the magnitude of a vector is its length

Scalar: a single number used to represent the multiplier when working with vectors

Column vector: a matrix of one column describing the movement from a point

Resultant: the vector that is the sum of two or more other vectors

Parallel: straight lines that never meet

### What do I need to be able to do?

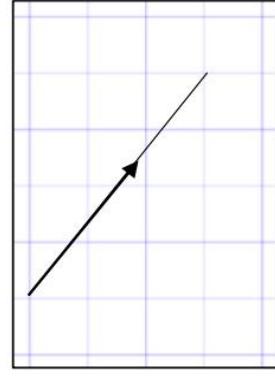
### Keywords

- Understand and represent vectors
- Use and read vector notation
- Draw and understand vectors multiplied by a scalar
- Draw and understand addition of vectors
- Draw and understand addition and subtraction of vectors

### Understand and represent vectors

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

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



### Understand and represent vectors

Parallel vectors are scalar multiples of each other

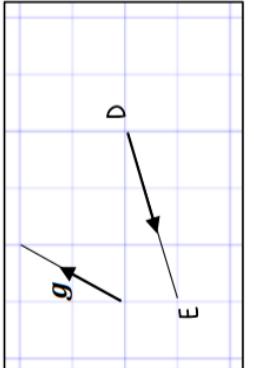
The arrow is pointing in the direction from starting point to end point of the vector.	The direction is important to correctly write the vector
The magnitude is the length of the vector (This is calculated using Pythagoras theorem and forming a right-angled triangle with auxiliary lines)	The magnitude stays the same even if the direction changes

### Understand and represent vectors

Vector notation  $\overrightarrow{DE}$  is another way to represent the vector joining the point D to the point E

$$\overrightarrow{DE} = \begin{pmatrix} -3 \\ -1 \end{pmatrix}$$

The arrow also rotates the direction from point D to point E



Vectors can also be written in bold lower case so  $\mathbf{g}$  represents the vector

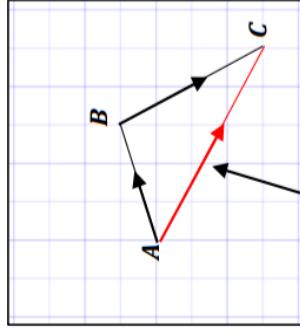
$$\mathbf{g} = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$$

### Addition of vectors

$$\overrightarrow{AB} = \begin{pmatrix} 3 \\ 1 \end{pmatrix}$$

$$\overrightarrow{BC} = \begin{pmatrix} 2 \\ -4 \end{pmatrix}$$

$$\overrightarrow{AC} = \begin{pmatrix} 5 \\ -3 \end{pmatrix}$$



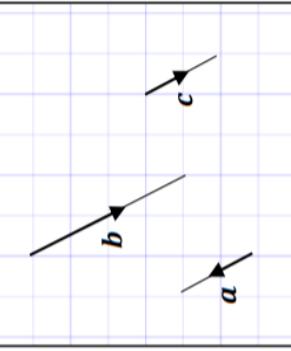
Look how this addition compares to the vector  $\overrightarrow{AC}$

$$\overrightarrow{AB} + \overrightarrow{BC} = \overrightarrow{AC} = \begin{pmatrix} 5 \\ -3 \end{pmatrix}$$

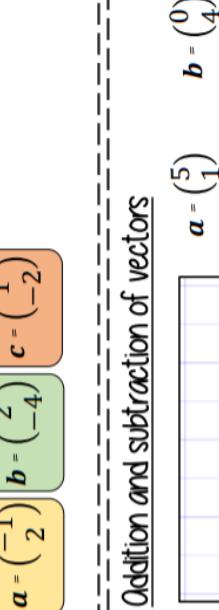
The resultant is  $\mathbf{a} - \mathbf{b}$  because the vector is in the opposite direction to which needs a scalar of -1

$$\mathbf{b} = -2 \times \mathbf{a} = -2\mathbf{a}$$

$$\mathbf{a} = \begin{pmatrix} -1 \\ 2 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} 2 \\ -4 \end{pmatrix} \quad \mathbf{c} = \begin{pmatrix} 1 \\ -2 \end{pmatrix}$$



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



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

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

The resultant is  $\mathbf{a} - \mathbf{b}$  because the vector is in the opposite direction to which needs a scalar of -1

**Maths.** Based on the **Vectors** KO page, please fill in the key vocabulary and have a go at using the methods to answer the questions.

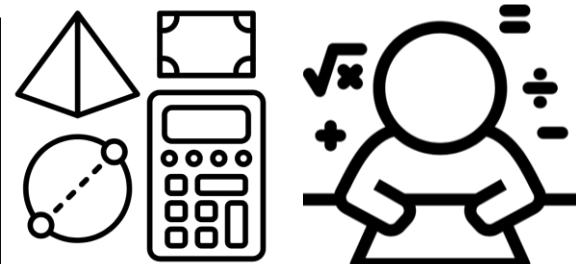
### Key Vocabulary (fill the gaps):

**Vector:** A v \_\_\_\_\_ has both m \_\_\_\_\_ and d \_\_\_\_\_.

Example: The v \_\_\_\_\_  $\overrightarrow{AB} = 7\mathbf{k}$  shows has a s \_\_\_\_\_ point of A and a finish point of \_\_\_\_\_. The m \_\_\_\_\_ of the v \_\_\_\_\_ is also \_\_\_\_\_.

**Magnitude:** The m \_\_\_\_\_ is the s \_\_\_\_\_ of a n \_\_\_\_\_.

Example: 4 and -4 have the same m \_\_\_\_\_ which is \_\_\_\_\_.



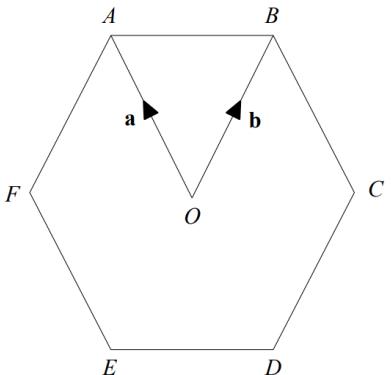
3.

$A$  is the point  $(5, -1)$  and  $B$  is the point  $(4, -3)$ .

(a) Write down as a column vector  $\overrightarrow{AB}$

1.  $ABCDEF$  is a regular hexagon with centre  $O$ .

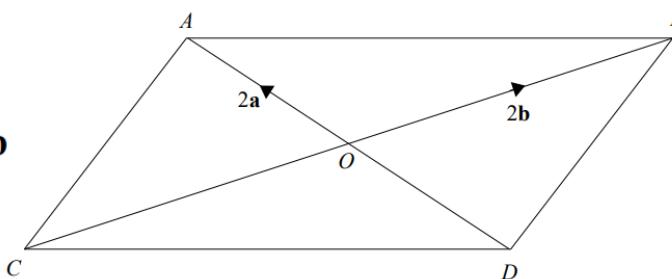
$$\begin{aligned}\overrightarrow{OA} &= \mathbf{a} \\ \overrightarrow{OB} &= \mathbf{b}\end{aligned}$$



- (a) Find, in terms of  $\mathbf{a}$ , the vector  $\overrightarrow{AD}$
- (b) Find, in terms of  $\mathbf{a}$  and  $\mathbf{b}$ , the vector  $\overrightarrow{AB}$
- (c) Find, in terms of  $\mathbf{b}$ , the vector  $\overrightarrow{AF}$

2. The diagram shows a parallelogram.

$$\begin{aligned}\overrightarrow{OA} &= 2\mathbf{a} \\ \overrightarrow{OB} &= 2\mathbf{b}\end{aligned}$$



- (a) Find, in terms of  $\mathbf{a}$ , the vector  $\overrightarrow{DA}$
- (b) Find, in terms of  $\mathbf{a}$  and  $\mathbf{b}$ , the vector  $\overrightarrow{AB}$
- (c) Find, in terms of  $\mathbf{a}$  and  $\mathbf{b}$ , the vector  $\overrightarrow{AC}$

**Maths.** Based on the working with circles KO page, please fill in the key vocabulary and have a go at using the methods to answer the questions.

### Key words (fill the gaps):

Circumference: the \_\_\_\_\_ of a circle.

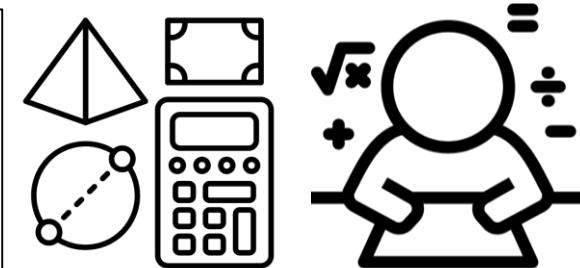
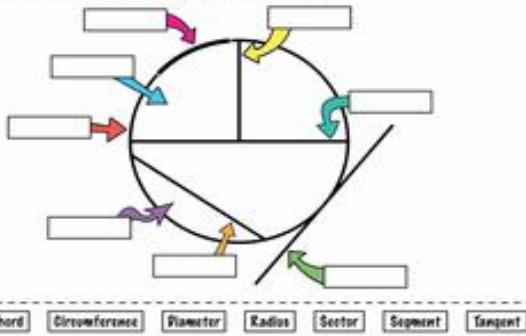
Diameter: a straight line passing through the \_\_\_\_\_ of a circle.

Radius: a straight line that extends from the centre to the \_\_\_\_\_ of a circle.

### Parts of a circle (fill the gaps):

#### Labelling parts of a circle

Use the words below to label each part of the circle correctly



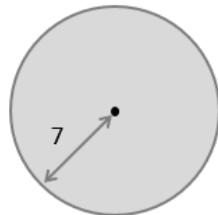
Where  $r$  is the radius and  $d$  is the diameter:

$$\text{Circumference of a circle} = 2\pi r = \pi d$$

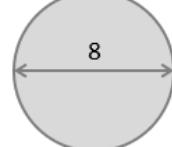
$$\text{Area of a circle} = \pi r^2$$

*Leave all answers in terms of  $\pi$ .*

① Area =



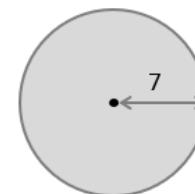
② Circumference =



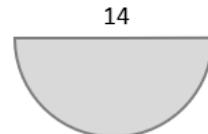
③ Area =



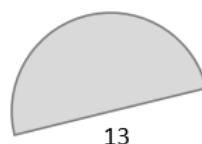
④ Circumference =



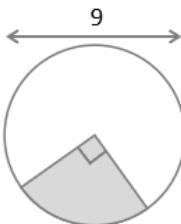
⑤ Area =



⑥ Curved Length =



⑦ Area =



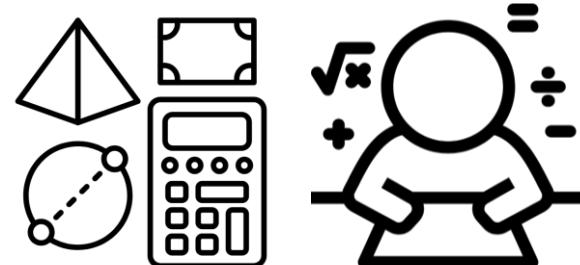
⑧ Total Perimeter =



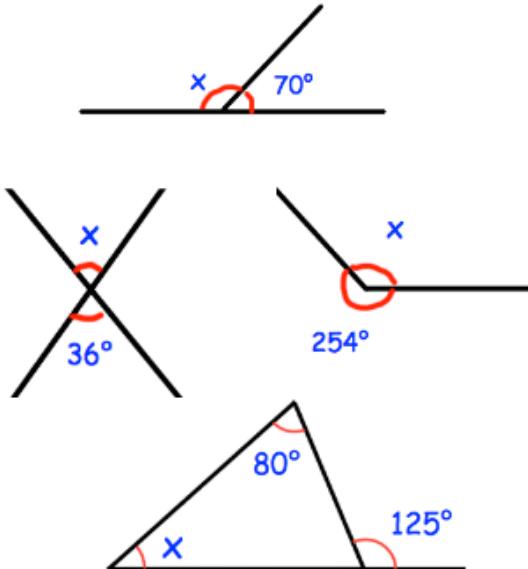
### Key Vocabulary (fill the gaps):

Angle: The amount a turn between two \_\_\_\_\_ around their common \_\_\_\_\_.

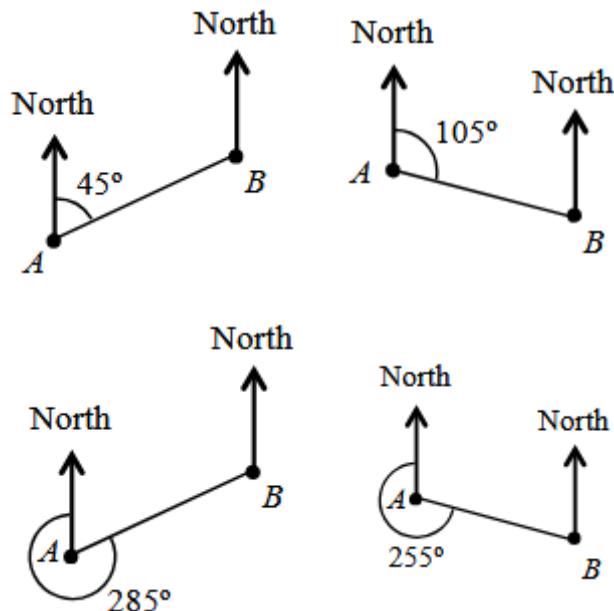
Bearing: The angle in \_\_\_\_\_ measured \_\_\_\_\_ from \_\_\_\_\_.



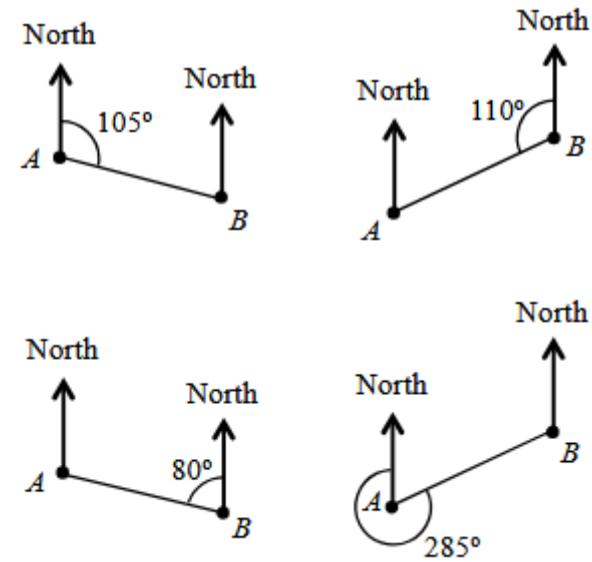
Calculate the missing angles below.



Calculate the bearing of B from A



Calculate the bearing of A from B



### The Reactivity Series

Here's a mnemonic to help you learn the order:

purple (potassium)
slime (sodium)
can (calcium)
make (magnesium)
a (aluminium)
careless (carbon)
zebra (zinc)
insane (iron)
try (tin)
learning (lead)
how (hydrogen)
camels (copper)
surprise (silver)
gorillas (gold)

The reactivity series is a league table for metals. The more reactive metals are near the top of the table with the least reactive near the bottom.

In chemical reactions, a more reactive metal will displace a less reactive metal.

### Reactions of Metals with Water

Metals, when reacted with water, produce a metal hydroxide and hydrogen.



The more reactive a metal is, the faster the reaction.

### Reactions of Metals with Dilute Acid

Metals that are below hydrogen in the reactivity series **do not** react with dilute acids.



Metals that are below hydrogen in the reactivity series **do not** react with dilute acids.

### Reactions with Bases

The general formula for the reaction between an acid and a metal oxide is:



### Reactions with Carbonates

The general formula for the reaction between an acid and a carbonate is:



When an acid reacts with an alkali, a neutralisation reaction takes place and a salt and water are produced.

The general formula for this kind of reaction is as follows:



### Naming Salts

The first part comes from the metal in the metal carbonate, oxide or hydroxide. The second part of the name comes from the acid that was used to make it.

For example, sodium chloride.

### Redox Reactions (Higher Tier Only)

When metals react with acids, they undergo a redox reaction. A redox reaction occurs when both oxidation and reduction take place at the same time.

For example:



The ionic equation can be further split into two half equations.



Oxidation is loss of electrons.



Reduction is gaining of electrons.

### Strong and Weak Acids (Higher Tier Only)

A strong acid completely dissociates in a solution.

For example:  $\text{HCl} \rightarrow \text{H}^+ + \text{Cl}^-$

Hydrochloric acid is able to completely dissociate in solution to form hydrogen and chloride ions.

Examples of strong acids include nitric acid ( $\text{HNO}_3$ ) and sulfuric acid ( $\text{H}_2\text{SO}_4$ ).

Weak acids in comparison only partially dissociate.

For example acetic acid is partially dissociates to form a hydrogen and acetate ion.



The double arrow symbol indicates that the reaction is reversible. Both the forward and reverse reaction occur at the same time and the reaction never goes to completion.

### Table 1 The reactivity series: Note: aluminium is protected by a layer of aluminium oxide, so will not undergo the reactions below unless the oxide layer is removed. That is why this fairly reactive metal can be used outside, for example, in sliding patio doors, without corroding.

### Order of reactivity

Order of reactivity	Reaction with water	Reaction with dilute acid
potassium	fizz, giving off hydrogen gas, leaving an alkaline solution of metal hydroxide	explode
sodium		
lithium		
calcium		
magnesium		
aluminium	very slow reaction	fizz, giving off hydrogen gas and forming a salt
zinc		
iron	slight reaction with steam	react slowly with warm acid
tin		
lead		
copper	no reaction, even with steam	no reaction
silver		
gold		

### Reactions of Acids

The general formula for the reaction between an acid and a carbonate is:



For example: hydrochloric acid + sodium → sodium chloride + hydrogen



The general formula for this kind of reaction is as follows:



### Making Soluble Salts

1. Make a saturated solution by stirring copper oxide into the sulfuric acid until no more will dissolve.

2. Filter the solution to remove the excess copper oxide solid.

3. Half fill a beaker with water and set this over a Bunsen burner to heat the water. Place an evaporating dish on top of the beaker.

4. Add some of the solution to the evaporating basin and heat until crystals begin to form.

5. Once cooled, pour the remaining liquid into a crystallising dish and leave to cool for 24 hours.

6. Remove the crystals with a spatula and pat dry between paper towels.

### Displacement reactions:

These reactions happen when a more reactive metal displaces (or pushes out) a less reactive metal from an aqueous solution of one of its salts.

As we have seen, magnesium is more reactive than copper. Therefore, the copper ions will be displaced from solution to form copper metal,  $\text{Cu(s)}$ . In this reaction, the magnesium metal forms aqueous magnesium ions,  $\text{Mg}^{2+}$ , and dissolves into the solution. This is a **displacement reaction**.

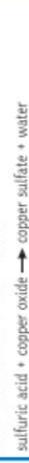
### Reaction with Carbonates

The general formula for the reaction between an acid and a metal oxide is:



### Reactions with Bases

The general formula for the reaction between an acid and a base is:



### Reactions with Carbonates

The general formula for the reaction between an acid and a carbonate is:



### Reactions with Carbonates

In aqueous solutions, acids produce  $\text{H}^+$  ions and alkalis produce  $\text{OH}^-$  ions.

Neutral solutions are  $\text{pH} 7$  and are neither acids or alkalis.

Acidic solutions are  $\text{pH} < 7$  and are acids.

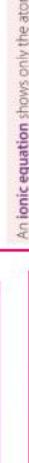
Alkaline solutions are  $\text{pH} > 7$  and are alkalis.

### pH Scale



### Reactions with Carbonates

The general formula for the reaction between an acid and a carbonate is:



### Reactions with Carbonates

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### pH Scale



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### pH Scale



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### pH Scale



### Reactions with Carbonates

In aqueous solutions, acids produce  $\text{H}^+$  ions and alkalis produce  $\text{OH}^-$  ions.

Neutral solutions are  $\text{pH} 7$  and are neither acids or alkalis.

Acidic solutions are  $\text{pH} < 7$  and are acids.

Alkaline solutions are  $\text{pH} > 7$  and are alkalis.

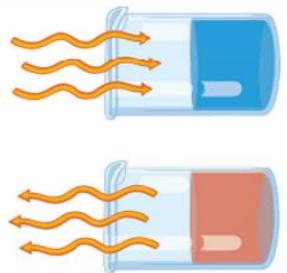
### pH Scale



### Exothermic and Endothermic Reactions

When a chemical reaction takes place, **energy** is involved. Energy is transferred when chemical bonds are broken and when new **bonds are made**.

**Exothermic reactions** are those which involve the transfer of energy **from the reacting chemicals to the surroundings**. During a practical investigation, an exothermic reaction would show an **increase in temperature** as the reaction takes place.



Examples of exothermic reactions include **combustion, respiration and neutralisation reactions**. Hand-warmers and self-heating cans are examples of everyday exothermic reactions.

**Endothermic reactions** are those which involve the transfer of energy **from the surroundings to the reacting chemicals**. During a practical investigation, an endothermic reaction would show a **decrease in temperature** as the reaction takes place.

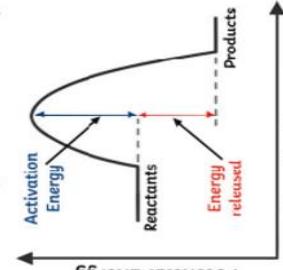
Examples of endothermic reactions include the **thermal decomposition of calcium carbonate**. Eating **sherbet** is an everyday example of an endothermic reaction. When the sherbet dissolves in the saliva in your mouth, it produces a cooling effect. Another example is **instant ice packs** that are used to treat sporting injuries.

### Reaction Profiles – Exothermic

Energy level diagrams show us what is happening in a particular chemical reaction. The diagram shows us the **difference in energy** between the reactants and the products.

In an **exothermic** reaction, the reactants are at a **higher energy level** than the products.

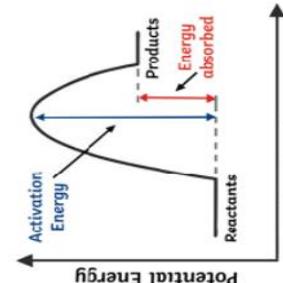
In an **exothermic** reaction, the difference in energy is **released to the surroundings** and so the **temperature of the surroundings increases**.



### Reaction Profiles – Endothermic

In an **endothermic** reaction, the reactants are at a **lower energy level** than the products.

In an **endothermic** reaction, the difference in energy is **absorbed from the surroundings** and so the **temperature of the surroundings decreases**.



**Activation Energy** – the minimum amount of energy required for a chemical reaction to take place.

**Catalysts** – increase the rate of a reaction. Catalysts provide an alternative pathway for a chemical reaction to take place by **lowering the activation energy**.

### Bond Making and Bond Breaking

In an **endothermic** reaction, energy is needed to break chemical bonds. The energy change ( $\Delta H$ ) in an endothermic reaction is **positive**.

You may also find, in some textbooks,  $\Delta H$  referred to as the **enthalpy change**. In an **exothermic** reaction, energy is needed to form chemical bonds. The energy change ( $\Delta H$ ) in an exothermic reaction is **negative**.

Bond energies are measured in **kJ/mol**.

Endothermic reactions are those which involve the transfer of energy **from the surroundings to the reacting chemicals**. During a practical investigation, an endothermic reaction would show an **increase in temperature** as the reaction takes place.

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### Calculations Using Bond Energies (Higher Tier Only)

Bond energies are used to calculate the change in energy of a chemical reaction.

Calculate the change in energy for the reaction:  $2\text{H}_2\text{O}_2 \rightarrow 2\text{H}_2\text{O} + \text{O}_2$

The first step is to write the symbol equation for the reaction. Once you have done this, work out the bonds that are breaking and the ones that are being made.



On the left-hand side of the equation, the **bonds are breaking**. There are two **H-O** bonds and one **O=O** bond.

So  $464 + 146 + 464 = 1074$

There are two moles of  $\text{H}_2\text{O}_2$ , therefore the answer needs to be multiplied by two.

$$\text{So } 1074 \times 2 = 2148$$

On the right-hand side of the equation, the **bonds are made**. There are two **H-O** bonds.

$$\text{So } 464 + 498 = 928$$

Two moles of  $\text{H}_2\text{O}$  are made therefore the answer needs to be multiplied by two.

$$\text{So } 928 \times 2 = 1856$$

There is also one **O=O** bond with a bond energy of 498

$$\text{So } 1856 + 498 = 2354$$

The reaction is **exothermic** as  $\Delta H$  is negative.

**Activation Energy** – the minimum amount of energy required for a chemical reaction to take place.

**Catalysts** – increase the rate of a reaction. Catalysts provide an alternative pathway for a chemical reaction to take place by **lowering the activation energy**.

The energy change ( $\Delta H$ ) in an endothermic reaction is **positive**. You may also find, in some textbooks,  $\Delta H$  referred to as the **enthalpy change**. In an **exothermic** reaction, energy is needed to form chemical bonds. The energy change ( $\Delta H$ ) in an exothermic reaction is **negative**.

Bond energies are measured in **kJ/mol**.

Endothermic reactions are those which involve the transfer of energy **from the surroundings to the reacting chemicals**. During a practical investigation, an endothermic reaction would show an **increase in temperature** as the reaction takes place.

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## The Process of Electrolysis

Electrolysis is the splitting up of an ionic substance using electricity.

On setting up an electrical circuit for electrolysis, two **electrodes** are required to be placed in the electrolyte. The electrodes are **conducting rods**. One of the rods is connected to the **positive** terminal and the other to the **negative** terminal.

The **electrodes** are **inert** (this means they do not react in the reaction) and are often made from **graphite** or **platinum**.

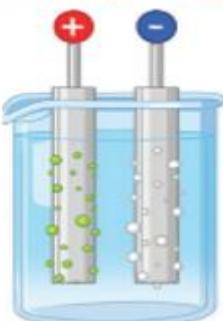
During the process of electrolysis, **opposites attract**. The positively charged ions will be attracted toward the negative electrode. The negatively charged ions will be attracted towards the positive electrode.

When ions reach the electrodes, the charges are lost and they become elements.

The **positive** electrode is called the **anode**.

The **negative** electrode is called the **cathode**.

## Electrolysis of Aqueous Solutions



Gases may be given off or metals deposited at the electrodes. This is dependent on the reactivity of the elements involved.

If the metal is **more reactive than hydrogen** in the reactivity series, then **hydrogen** will be **produced** at the **negative cathode**. At the **positive anode**, negatively charged ions **lose electrons**. This is called **oxidation** and you say that the ions have been **oxidised**.

## Using Electrolysis to Extract Metals

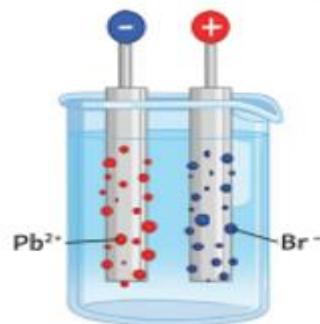
Metals are extracted by electrolysis if the metal in question reacts with carbon or if it is too reactive to be extracted by reduction with carbon. During the extraction process, large quantities of energy are used to melt the compounds.

Aluminium is manufactured by the process of electrolysis. Aluminium oxide has a high melting point and melting it would use large amounts of energy. This would increase the cost of the process, therefore molten **cryolite** is added to aluminium oxide to lower the melting point and thus reduce the cost.

## Electrolysis of Molten Ionic Compounds – Lead Bromide

**Lead bromide** is an **ionic substance**. Ionic substances, when solid, are **not** able to conduct electricity. When molten or in solution, the ions are free to move and are able to carry a charge.

The **positive** lead ions are attracted toward the **negative cathode** at the same time as the **negative bromide ions** are attracted toward the **positive anode**.



Oxidation is the loss of electrons and reduction is the gaining of electrons. **OIL RIG** (Higher Tier Only).

We represent what is happening at the electrodes by using **half equations** (Higher Tier Only).

The lead ions are attracted towards the negative electrode. When the **lead ions** ( $Pb^{2+}$ ) reach the cathode, each ion **gains two electrons** and becomes a neutral atom. We say that the lead ions have been **reduced**.



The bromide ions are attracted towards the positive electrode. When the **bromide ions** ( $Br^-$ ) reach the anode, each ion **loses one electron** to become a neutral atom. Two bromine atoms are then able to bond together to form the covalent molecule  $Br_2$ .



# **Science.** Recall your knowledge on the following:

## What's the point of the practical?

To find out how to make a pure, dry sample of a soluble salt from an insoluble carbonate or oxide.

## Risk assessment

How do you carry it out safely?

What can you do to minimise hazards?

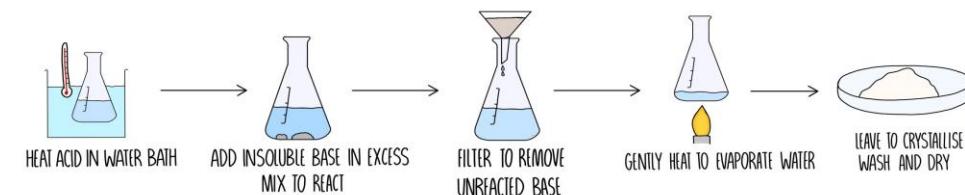
## GCSE Required Practical – Making Soluble Salts

## Method:

How do you carry out a safe and accurate experiment?

## Results

What should your results look like?



## Example Apparatus

What apparatus do you need for your practical? ( Use diagram to help you)



# Grade 9

# phrases French

Reach for the stars  
150 word wow phrases

Go through this booklet and pick out between 3-5 phrases in each section that you are going to use in your 150 word piece of writing no matter what the bullet points – learn them off by heart. In your exam write them down when you are planning to make sure you include them in your answers

## Opinions

ça m'amuse (used for something funny)  
 ça me plaît ( used for general liking)  
 ça m'a plu – I enjoyed it  
 ce qui m'inquiète c'est... - What worries me is  
 ce qui m'inquiétait c'était – what I found worrying was  
 je n'en ai pas envie – I don't want to  
 j'apprécie (often used for comparing two likes)  
 je pense que - I think that  
 je crois que - I believe that  
 je dirais que I would say that  
 je suis d'avis que- I am of the opinion that  
 à mon avis – in my opinion  
 pour ma part – as for me  
 d'après moi/selon moi – according to me  
 quant à moi – In my opinion  
 j'ai l'impression que... – I get the impression that...  
 je dirais que - I would say that...  
 je dois avouer que... - I must admit that...  
 j'aurais dit/cru que - I would have said/believed that  
 je me suis rendu compte que - i realised that  
 d'un côté, j'aime \_\_\_ parce que..mais de l'autre côté, je n'aime pas \_\_\_ parce que - On one hand, i like \_\_\_ because...but on the other, don't like\_\_\_ because...  
 je ne crois pas que ce soit le cas – I don't believe that that's the case  
 cela peut être... - it can be...

## A variety of adjectives

agaçant (annoying/irritating)	cauchemardesque – nightmarish
noïf - harmful	réussi (successful)
décevant (disappointing)	ridicule (ridiculous)
délicieux (delicious)	superbe (impressive, in a large scale)
divertissant (entertaining)	serviable - useful
émouvant (moving)	inoubliable (unforgettable)
	épouvantable – horrendous

### Key Vocabulary

Ways to practise vocabulary: 1. Look cover, write check 2. Seneca 3. Active Learn 4. Quizlet

### Key nouns

l'amour (m)	love	la sœur	sister
la barbe	beard	la tante	aunt
le beau-père	step-father/father in law	les yeux (m)	eyes
la belle-mère	step-mother/mother in law		
les cheveux (m)	hair (on head)		
le copain / la copine	friend, mate	aimable	kind
le demi-frère	half-brother/step-brother	âîné(e)	elder
la demi-sœur	half-sister/step-sister	bavard(e)	chatty/talkative
la femme	wife	beau / belle / bel	beautiful
la fille	daughter	bête	stupid/silly
le fils	son	bouclé(e)	curly
le frère	brother	célibataire	single
la grand-mère	grandmother	courte(e)	short
le grand-père	grandfather	égoïste	selfish
les grands-parents (m)	grandparents	fâché(e)	angry
l'héroïne /héroïne	hero/heroin	frisé(e)	curly
les lunettes (f)	glasses/spectacles	généreux / Généreuse	generous
le mari	husband	gentil / gentille	kind/nice
la mort	death	gros / grosse	fat
la naissance	birth	heureux / heureuse	happy
le nom	name/surname	injuste	unfair
l'oncle (m)	uncle	jeune	young
le / la partenaire	partner	jolie(je)	pretty
le petit ami	boyfriend	laid(e)	ugly
la petite amie	girlfriend	long / longue	long
la petite-fille	granddaughter	méchante(e)	naughty/nasty
le petit-fils	grandson	mi-long	medium length
le prénom	first name	morte(l)	dead
les relations (f)	relationships	né(e) le...	born on the...
le sens de l'humour	sense of humour		

How do you form the present tense in French?
How do I describe my family?
Where shall I go out with my friends?
Who makes a good friend?
How well do you get along with your family?
Where shall we go out tonight?
How do you form the passé composé?
How do I describe a recent day out with my friends?
Who do I admire and why?
How I feel about marriage and partnerships?

### THE BIG QUESTIONS: Who am I?

pareseux / paresseuse	lazy
pénible	annoying
raide	straight
séparé(e)	separated
sportif / sportive	sporty
sympa	kind/nice
de taille moyenne	medium height
timide	shy
tranquille	quiet/calm
travailleur / travailleuse	hard-working
triste	sad
unique [fils / fille unique]	only (child)
vieux / vieille / vieille	old

### Key Phrases

je me dispute avec	I argue with
j'ai les cheveux...	I have hair... (description of hair colour, style etc.)
mon père/ma mère est...	my dad/mum is
mon meilleur ami est...	my best friend (m/f) is...
mes parents sont...	my parents are...
un bon ami/une bonne amie est...	a good friend (m/f) is...

### Key Verbs



### Key Irregular verbs

### Key Spelling

### Tricky Spelling - Look, cover, write, check

Step 1 : Choose the correct conjugation of 'aller'	Forming the Near Future Tense
Step 2 : Add the past participle of the verb	
Step 3 : Add the past participle of the verb	
To form the past participle remove the infinitive endings (er/-ir/-re) and add the following endings:	
-er      -ir      -re	
é      i      u	

### Key Speaking Questions - possible role-play, photocard, general conversation questions

Il y a combien de personnes dans ta famille ? How many people are there in your family ?
Tu t'entends bien avec ta famille ? Do you get on with your family ?
Comment est ta personnalité ? What is your personality like ?
Tu peux décrire un membre de ta famille ? Can you describe a member of your family ?
Qu'est-ce-qu'un bon ami / une bonne amie ? What is a good friend (m/f) ?
Qu'est-ce-que tu aimes faire avec ta famille ? What do you like doing with your family ?
Qu'est-ce-que tu vas faire avec tes amis le week-end prochain ? What are you going to do with your friends next weekend ?
Qui est la personne que tu admire ? Pourquoi ? Who is the person you admire ? Why ?
Quelle est ton opinion sur le mariage ? What is your opinion on marriage ?
Voudrais-tu des enfants dans le futur ? Would you like children in the future ?



\*\* All verbs are regular in the Near future tense

### Forming the 'passé composé' Regular verbs

### Forming the 'passé composé'

### Tricky Pronunciation - type into google

translate, listen, practise	
la famille	family
les cheveux (m)	hair
les yeux (m)	eyes
la fille	girl/daughter
le fils	son
vieux / viel / vieille	old
gentil / gentille	kind

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### Forming the Present Regular verbs

### Forming the Present

### Tricky Spelling

Step 1 : Find the infinitive	
Step 2 : Remove the ending -er/-ir/-re	
Step 3 : Add the appropriate ending	
Step 4 : Add the auxiliary verb	
Step 5 : Add the past participle of the verb	

### Key Speaking Questions - possible role-play, photocard, general conversation questions

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Quelle est ton opinion sur le mariage ? What is your opinion on marriage ?
Voudrais-tu des enfants dans le futur ? Would you like children in the future ?

### Forming the Past Regular verbs

### Forming the Past

### Tricky Spelling

Step 1 : Decide e on the auxiliary verb (avoir or être)	
Step 2 : Conjugate the auxiliary	
Step 3 : Add the past participle of the verb	
To form the past participle remove the infinitive endings (er/-ir/-re) and add the following endings:	
-er      -ir      -re	
é      i      u	

### Key Speaking Questions - possible role-play, photocard, general conversation questions

Il y a combien de personnes dans ta famille ? How many people are there in your family ?
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Ways to practise vocabulary: 1. Look cover, write check 2. Seneca 3-Quizlet 4. Active Learn



## Key Phrases

**THE BIG QUESTIONS: Who am I?**  
**How do you form the present tense in French?**  
**How shall I go out with my friends?**  
**Who makes a good friend?**  
**How well do you get along with your family?**  
**Where shall we go out tonight?**  
**How do you form the passé composé?**  
**How do I form the imperfect tense?**  
**How do I describe my life as a young child?**  
**How do I feel about marriage and partnerships?**  
**Who do I admire and why?**  
**How do I feel about marriage and partnerships?**

**Qui y a-t-il dans ta famille ?**  
**Comment est ta personnalité ?**  
**Tu peux décrire un membre de ta famille ?**  
**Quelles sont les qualités d'un bon ami / une bonne amie ?**  
**Qu'est-ce que tu as fait récemment avec ta famille ?**  
**Qu'est-ce que tu vas faire avec tes amis le week-end prochain ?**  
**Qui est une personne que tu admirés ? Pourquoi ?**  
**Quelle est ton opinion sur le pacs ?**  
**Penses-tu te marier dans le futur ?**

## False Friends

**compréhensif / comprehensive understanding**  
**le pacs civil partnership**  
**l'enfant child**

## Key Speaking Questions – possible role-play, photocard, general conversation questions

**Qui y a-t-il dans ta famille ?**  
**Comment est ta personnalité ?**  
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**Qu'est-ce que tu vas faire avec tes amis le week-end prochain ?**  
**Qui est une personne que tu admirés ? Pourquoi ?**  
**Quelle est ton opinion sur le pacs ?**  
**Penses-tu te marier dans le futur ?**

## Key verbs

## Key verbs in the Imperfect

<b>Les noms</b>	la bague	ring
	le bouton	spot, pimple, button
	la confiance	trust
	l'esprit (m)	mind
	les fiançailles (f)	engagement
	le lumeau	twin (m)
	la lummelle	twin (f)
	la jeunesse	youth
	le neveu	nephew
	la nièce	niece
	les noces (f) / le mariage	wedding
	le pacs	civil partnership
<b>Les adjectifs</b>		
	colérique	bad-tempered
	compréhensif / comprehensive	understanding
	étonnant(e)	amazing, surprising
	étrange	strange
	fier / fière	proud
	fou / folle	mad/crazy
	jaloux / jalouse	jealous
	ondulée(e)	wavy
	pleine(e) de vie	lively
<b>Les verbes</b>		
	connaitre	to know (a person)
	épouser	to marry
	gâter	to spoil
	gêner	to annoy
	en avoir marre (en avoir marre)	to be fed up (I am fed up)
	mepriser	to despise
	se mettre en colère	to get angry
	mourir	to die
	naître	to be born
	se paresser	to sign a civil partnership
	se rendre compte	to realise
	se ressembler	to look alike
	se séparer	to separate, to split up

## Key verbs in the Imperfect

	<b>Présent</b>	<b>Pasé</b>	<b>Futur</b>
<b>faire - to do</b>	je fais ; il fait ; elle fait ; nous faisons	j'ai fait ; il a fait ; elle a fait ; nous avons fait	je vais faire ; il va faire ; elle va faire ; nous allons faire
<b>être - to be</b>	je suis ; il est ; elle est ; nous sommes	j'ai été ; il a été ; elle a été ; nous avons été	je vais être ; il va être ; elle va être ; nous allons être
<b>avoir - to have</b>	je j'ai ; il a ; elle a ; nous avons	j'ai eu ; il a eu ; elle a eu ; nous avons eu	je vais avoir ; il va avoir ; elle va avoir ; nous allons avoir
<b>aller - to go</b>	je vais ; il va ; elle va ; nous allons	je suis allé(e) ; il est allé(e) ; elle est allée(e) ; nous sommes allé(e)s	je vais aller ; il va aller ; elle va aller ; nous allons aller
<b>sortir - to go out</b>	je sort ; il sort ; elle sort ; nous sortons	je suis sorti(e) ; il est sorti ; elle est sortie ; nous sommes sorti(e)s	je vais sortir ; il va sortir ; elle va sortir ; nous allons sortir
<b>vouloir - to want</b>	je veux ; il veut ; elle veut ; nous voulons	j'ai voulu ; il a voulu ; elle a voulu ; nous avons voulu	
<b>s'entendre - to get on</b>	je m'entends ; il s'entend ; elle s'entend ; nous nous entendons		

## Idiomatic Expressions

J'ai le cœur sur la main	I am very generous
J'ai une cervelle d'oiseau	I am forgetful
J'ai une mémoire d'éléphant	I have a good memory
Je coupe les ponts avec....	I cut all ties with...
Je suis de mauvais poil	I am in a bad mood
Il vaut mieux être seul que mal accompagné	It's better to be alone than in bad company
Nous nous ressemblons comme deux gouttes d'eau	We are like two peas in a pod
trouver chausseur à son pied	to find a suitable match
trouver l'âme sœur	to find your soul mate

## Tricky Spellings – Look, cover, write, check

<b>la famille</b>	family	Check the double 'f'
vieux / vieille	old	Check the vowel combination
je m'entends avec...	I get on with...	Check the 's' at the end of 'entends'
<b>connaitre</b>	to know	Check the 'hat' on the 'T'
<b>naître</b>	to be born	Check the 'hat' on the 'T'
<b>les fiançailles (f)</b>	engagement	Check the accent on 'ç'

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## Present Tense

Use: to speak about what is happening now or regularly

e.g. I watch films on Saturday evenings

How: take away the infinitive ending (i.e. IR/RE/ER) and add the correct ending.

	IR	RE	ER
1. Je	is	s	e
2. Tu	is	es	es
3. Il/Elle	it	-	e
4. Nous	issons	ons	ons
5. Vous	issez	ez	ez
6. Ils/Elles	issent	ent	ent

### Examples in English:

- Usually, I go to the swimming pool with my sister.
- I like eating chocolate.
- Right now, I am drinking a coffee.

e.g.

Aimer → Aimer → Aim → Nous aim → Nous aim+ons = Nous aimons

Vendre → Vendre → Vend → Vous vend → Vous vend+ez = Vous vendez

Finir → Finir → Fin → Je fin → Je fin+is = Je finis

## Perfect Tense – Have...

Use: to speak about something that has happened in the past, but is now over. e.g. I have eaten/I ate a cheese sandwich for lunch.

How: use present tense 'avoir/être' as an auxiliary and add the past participle (with correct agreement if using être).

1. Je	ai	4. Nous	We	avons
2. Tu	as	5. Vous	You (pl.)	avez
3. On	a	6. Ils	They	ont

1. Je	suis	4. Nous	We	sommes
2. Tu	es	5. Vous	You (pl.)	êtes
3. On	est	6. Ils	They	sont

These verbs use <b>Être</b>				
Devenir		Tomber		
Revenir		Rester		
Monter		Arriver		
Rentrer		Mourir		
Sortir		Partir		
Venir				
Aller				
Naitre				
Descendre				
Entrer				
Rentrer				
Agreements if using <b>Être</b>				
Feminine → e				
Plural → s				

e.g.

Aimer → j'ai aimer → j'ai aimer → j'ai aimé+é = j'ai aimé

Aller → je suis aller → je suis aller → je suis all+é = je suis allé(e)(s)

## Imperfect Tense – Used to...

Use: to speak about something that used to happen regularly in the past, but it is now over. e.g. I used to walk to school, but now I take the bus.

How: use present tense, third person plural minus-ons and add the correct ending.

1. Je	ais	4. Nous	We	ions
2. Tu	ais	5. Vous	You (pl.)	iez
3. On	ait	6. Ils	They	aients

e.g.

Aimer → nous aimons → aim → on aim → on aim+ait = on aimait → one used to like

Finir → nous finissons → finiss → ils finiss → ils finiss+aients = ils finissaient

they used to finish

## Near Future Tense – Going to...

Use: to speak about things in the very near future (this weekend, tonight)

e.g. tonight I am going to watch a DVD

How: use present tense 'aller' and add the infinitive.

1. Je	vais am going	4. Nous	allons are going
2. Tu	vas are going	5. Vous	allez are going
3. On	va are going	6. Ils	vont are going



**Infinitive**  
Jouer – to play  
Faire – to do  
Manger – to eat

**REMEMBER!** The infinitive is the basic form of the verb, before it is attached to a person or time. In French, the infinitive always ends in -RE/-IR/-ER. This is what you find in the dictionary. Some examples in English include 'play', 'run', and 'sleep'.

e.g.

Je vais + jouer = I am going to play

On va + faire = we are going to do

Nous allons + aller = we are going to go

## Simple Future Tense – Will...

Use: to speak about will happen in the future. There is a nuance of certainty about this. e.g. I will go to university and I will study law.

How: use your infinitive (minus the final E for -RE verbs) and add the correct ending.

1. Je	ai	4. Nous	ons
2. Tu	as	5. Vous	ez
3. On	a	6. Ils	ont

e.g.

Je jouer + ai = I will play

Nous manger + ons = we will eat

Ils pourr + ont = they will be able to

### Example in English:

- She will play hockey at university.

## Conditional Tense – Would...

Use: to speak about something that might happen in the future, but it is based on a condition.

e.g. I would like go to university and I would like to study law.

How: use your infinitive (minus the final E for -RE verbs) and add the correct ending.

1. Je	ais	4. Nous	ions
2. Tu	ais	5. Vous	iez
3. On	ait	6. Ils	aients

e.g.

Je jouer + ais = I would play

On manger + ait = we would eat

Ils écouter + aient = they would listen

### Example in English:

- They would like to reduce car emissions.

**Idioms (you only need 1 or 2)**

Le revers de la médaille – on the other side of the coin  
 c'est le pied! – it's great!  
 j'ai mangé comme quatre – I ate like a horse  
 les doigts dans le nez – hands down  
 je suis tombé sur les pommes – I fainted  
 ça me prend la tête – it bugs me  
 coûter les yeux de la tête – costs an arm and a leg  
 ce n'est pas ma tasse de thé – it's not my cup of tea  
 mon péché mignon – guilty pleasure  
 c'est n'est pas la mer à boire – it's not a big deal  
 ça ne mange pas du pain – it won't break the bank

**Extending your sentence (Fancy connectives)**

que/qui – which, that - use *que* if you are following with a pronoun eg. La Suisse est le pays **que** je préfère.

- Use *qui* if there is no pronoun eg. Mon frère, **qui** est grand.

ce que/ce qui – use at the beginning of sentences to express an opinion – Ce que j'aime c'est...

Ce qui est...

quand – when

d'ailleurs - Besides/Moreover/Furthermore

pendant que – while

en fait,... - In fact,...

au moment où – at the point when

néanmoins - nevertheless

puisque – since

pourtant,... – however,...

depuis que – since

dès que – as soon as

comme – as

des fois - sometimes

non seulement... mais de plus – not only...but also...

du coup - therefore

par exemple...ou bien – for example...or alternatively

de plus... - Furthermore...

par contre,... – on the other hand,...

**Introducing ideas**

il s'agit de – this is about/ to do with

quant à – as for

pour comble de malheur – to cap it all

étant donné que – given that

vu que – considering that

en raison de – in view of

il me semble que – it seems to me that

qu'on ne s'y trompe pas – let there be no mistake about it

à tort ou à raison – rightly or wrongly

grâce à – thanks to

à cause de – because of

en effet – indeed, in fact

tout d'abord – First of all

**The Subjunctive**

Il faut que (to have to) and bien que (although) are followed by the subjunctive

Il faut que j'aille – I have to go

Bien que je (ne) sois (pas) – although I am (not)

Bien que ce (ne) soit – although it is (not)

Mes parents veulent que je fasse – My parents want me to do...

Autant que je sache – as far as I know

**A range of grammatical structures**

**Venir de + INF** – to mean you have just done something.

Je viens de rentrer – I have just come back

Je venais de rentrer....quand elle est arrivée – I had just come back...when she arrived

si j'avais su... (+ conditional) - if I had known...

avant de (+ inf),... – Before (doing sth.),...

après avoir/être (+inf)... - After having (done something)...

quand j'étais...- when I was...

j'ai hâte de... - I can't wait

Week 1: Times phasesWeek 2: Expressions of frequency

French	Meaning	First guess	Checked in a dictionary	After learning	Reviewed
à l'heure	On time				
l'an (m)/ l'année (f)	Year				
après-demain	After tomorrow				
l'après-midi	Afternoon				
aujourd'hui	today				
avant-hier	The day before yesterday				
bientôt	Soon				
demain	Tomorrow				
dernier/dernière	Last				
en ce moment	At the moment				
en retard	Late				
hier	yesterday				
il y a (2 mois)	...ago (2 months)				
le jour/ la journée	The day				
le lendemain	The day after				
le matin	On The morning				
la nuit	At night				
prochain(e)	next				
le soir	On the evening				

French		First guess	Checked in a dictionary	After learning	Reviewed
chaque	each				
d'habitude	Usually				
de temps en temps	From time to time				
déjà	already				
de nouveau	again				
en train de (faire)	In the process of				
encore une fois	Once more time				
une fois	once				
longtemps	longtime				
maintenant	now				
normalement	normally				
parfois	sometimes				
par mois	Per month				
par semaine	Per week				
quelquefois	sometimes				
rarement	rarely				
souvent	often				
toujours	always				
tous les jours	everyday				
tout de suite	Straigh away				

Self-test score: ..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

Self-test score: ..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

French		First guess	Checked in a dictionary	After learning	Reviewed
absolument	Absoluly				
ça dépend	It depends				
ça m'énerve	It ennoys me				
ça me fait rire	It makes me laught				
ça me plaît	It pleased me/ i like it				
ça m'est égal	I am not bothered				
ça ne me dit rien					
ça suffit	enough				
croire	To believe				
espérer	To hope				
étonner	To be surprised				
franchement	Franckly				
(s')intéresser à	To be interested in				
(en avoir) marre	To be fed up of				
(moi) non plus	Me neither				
penser	To think				
peut-être	Maybe				
sembler	To seem				
supporter	To support				
vraiment	Really				

Self-test score: ..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

French		First guess	Checked in a dictionary	After learning	Reviewed
affreux/affre use	awful				
agréable	Pleasant				
amusant(e)	fun				
barbant(e)	Boring				
beau/belle	beautiful				
cher/chère	Expensive/ dear				
chouette	cool				
compliqué(e)	complicated				
content(e)	happy				
désagréable	Unpleasant				
drôle	funny				
embêtant(e)	Annoying				
ennuyeux/ennuyeuse	Boring				
facile	easy				
faible	weak				
formidable	Great/ formidable				
génial(e)	Great				
grave	serious				
habile	Abled				
intéressant(e )	Interesting				

Self-test score: ..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

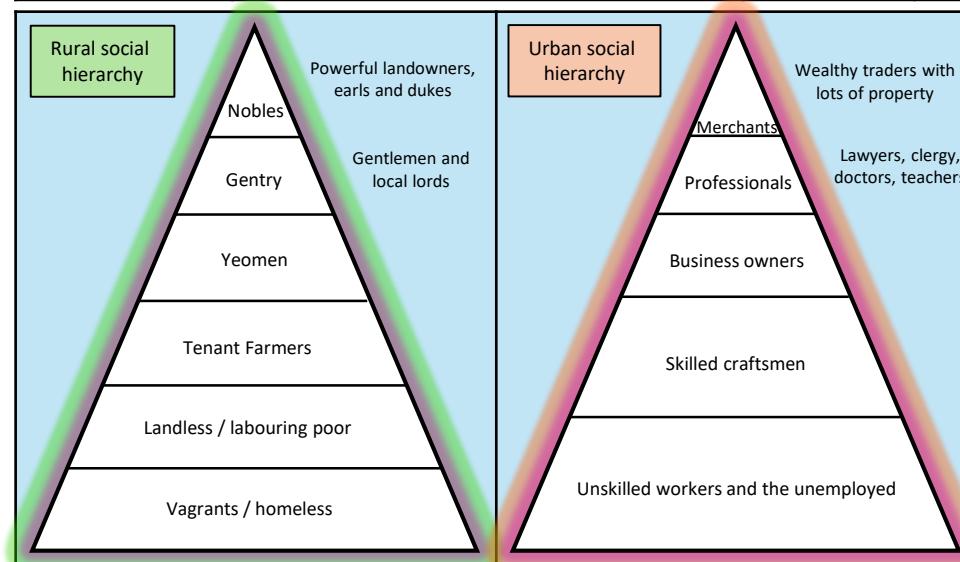
French		First guess	Checked in a dictionary	After learning	Reviewed
inutile	Useless				
incroyable	unbelievable				
inquiet/inquiète	Worried				
joli(e)	beatiful				
laid(e)	ugly				
marrant(e)	funny				
mauvais(e)	bad				
merveilleux/merveilleuse	marvalous				
mignon/mignonne	cute				
moche	ugly				
nouveau/nouvelle	new				
nul/nulle	rubbish				
parfait(e)	perfect				
passionnant(e)	Exciting				
pratique	pratical				
ridicule	ridiculous				
rigolo	funny				
sage	wise				
sensass	Great				
utile	Useful				

Self-test score: ..... /20

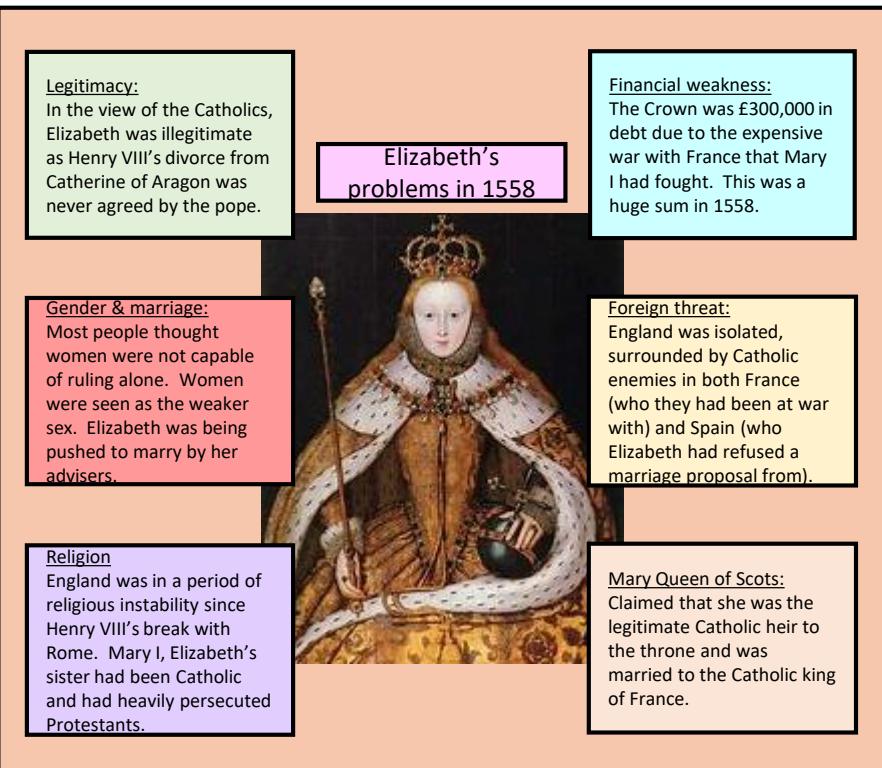
Teacher test score: ..... /20

Re-test score: ..... /20

Key Terms			
Elizabethan Society		Patron	Someone who provides encouragement or financial support.
Social hierarchy	See table below.	Crown	With a capital 'C' – the monarch and government.
Yeomen		Roman Catholic Church	
Craftsmen	Skilled employees including apprentices.	Papacy	The system of Church government ruled by the pope.
The Government		Heretics	Held religious beliefs different to those accepted by society.
Monarch	A king or queen – had the right to rule by the 'grace of God'.	Martyr	Someone killed for his/her beliefs.
Secretary of State	Head of the Privy Council, monarch's closest advisor.	Religion	
Privy Council	Leading courtiers and advisers, who advised the monarch.	Mass	Catholic service involving the miracle of the bread and wine.
Court	The inner social circle of the queen, based in her palaces.	Reformation	Challenge to the teachings and power of the Catholic church.
Parliament	Senior political figures whose duty was to advise queen.	Sacraments	Special Church ceremonies.
Lord Lieutenants	Maintained monarch's power and England's defences.	Holy Communion	Another name for mass, often used in Protestant churches.
JPs	Justices of the Peace kept law and order.	Clergy	Religious leaders, such as bishops and priests.
Courtiers	Members of the nobility who attended court (see above).	Diocese	An area looked after by a bishop.
Militia	A military force of ordinary people, rather than soldiers.	Ecclesiastical	Things to do with the Church.
The Monarch		Royal Supremacy	When the monarch is head of the Church.
Divine Right	Belief that the monarch's right to rule came from God.	Recusants	Catholics who were unwilling to attend church services.



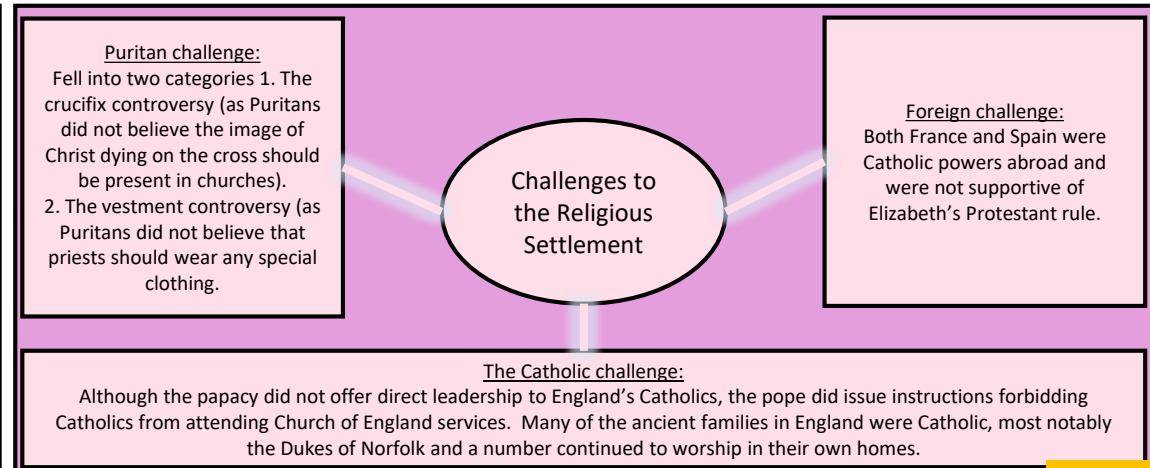
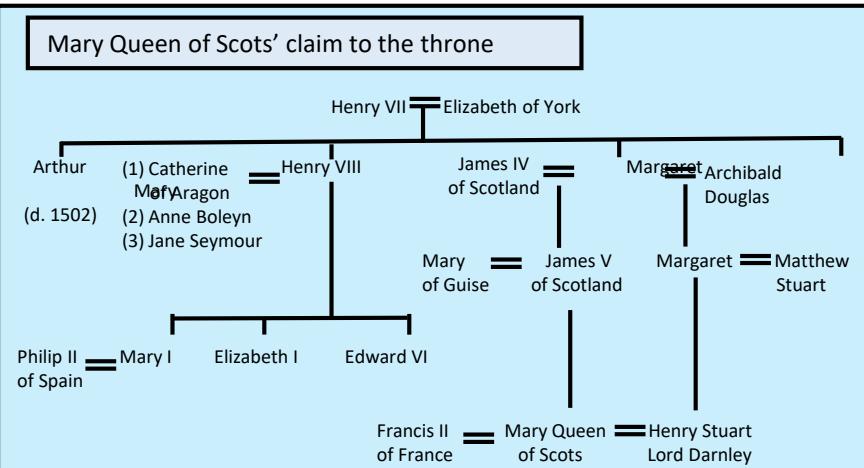
Question types
'Describe two features of...' [4] (2 x 2 = 4 marks total) <i>Identify 2 features and support with evidence.</i> <i>Useful phrases: "One feature was..."</i> <i>"For example ...."</i>
'Explain why...' [12] <i>3 PEE paragraphs about the reasons for an event/change/threat. The paragraphs must show a link to the question.</i> <i>Useful phrases: "This shows that...because..."</i> <i>"Another reason is...this is because..."</i>
'How far do you agree..' [16] <i>A balanced answer discussing both sides of the argument with an overall conclusion.</i> <i>Useful phrases: "It is debatable whether..."</i> <i>"Some might agree that..."</i> <i>"This is shown by..."</i>
Sample exam questions
<p>'Describe two features of Elizabethan society in 1558'. [4]</p> <p>'Describe two features of the Elizabethan social hierarchy'. [4]</p> <p>'Describe two features of the Privy Council'. [4]</p> <p>'Describe two features of Catholic beliefs about the organisation of the Church'. [4]</p> <p>'Describe two features of the Religious Settlement of 1559'. [4]</p> <p>'Describe two features of Puritan challenges to the Religious Settlement of 1569'. [4]</p> <p>'Explain why religion was a problem for Elizabeth when she became queen in 1558'. [12]</p> <p>'Explain why Catholics abroad were a problem for Elizabeth 1558-1569'. [12]</p> <p>'Explain why Catholics challenged the Religious Settlement of 1569'. [12]</p> <p>'Explain why Mary Queen of Scots created a problem for Elizabeth upon her arrival in 1568'. [12]</p> <p>"Financial issues were the main cause of Elizabeth's domestic challenges between 1558-69". How far do you agree? [16]</p> <p>"The threat of invasion was the main problem Elizabeth faced when she became queen in 1558". How far do you agree? [16]</p> <p>"Elizabeth was successful in dealing with the problems she faced between 1558-69". How far do you agree? [16]</p> <p>"English Catholics represented the most significant threat to Elizabeth's Religious Settlement". How far do you agree? [16]</p>



Comparison between Catholicism and Protestantism	
<b>Roman Catholic</b>	<b>Protestant</b>
The pope is the head of the Church	There should be no pope
The Bible and church services should be in Latin	The Bible and church services should be in your own language
The Church can forgive sins	Sins can only be forgiven by God
During mass a miracle occurs when the bread and wine become the body and blood of Christ	The bread and wine simply represent the Last Supper in the Bible. There is no miracle
Priests are special and should wear special clothing (vestments)	Priests are not special and should not wear special clothing
Churches should be highly decorated in honour and glory of God	Churches should be plain and simple so as not to distract from worshipping God
Priests are forbidden to marry	Priests are permitted to marry if they wished

The Religious Settlement	
<b>The Act of Uniformity</b>	Established what churches should look like. Moderate decoration was allowed. Hymns could be sung. All services, bibles and prayers books were in English. Miracle at Communion left ambiguous. Priests still wore vestments.
<b>The Act of Supremacy</b>	Elizabeth was named Supreme Governor of the Church of England. All clergy members swore an oath of allegiance to her.
<b>Royal Injunctions</b>	Set of instructions on how to reinforce the acts of Uniformity and Supremacy. Included instructions on how people should worship God.



Key Terms			
<b>Revolt of the Northern Earls</b>		Privateers	Pirates whose activities are legal and in service of the Crown.
Revolt	An uprising or rebellion against the monarch.		<b>The Spanish Armada</b>
Earl	A senior noble who played an important role in governing England.		Gravelines A town on the border of France and the Spanish Netherlands.
Mass	A Catholic church service.		Galleon Large but slow fighting ships used by the Spanish.
<b>The Catholic Plots</b>		Fleet	The group of ships.
Plot	A planned rebellion or attack – normally one which is not carried out.		Fire Ships Unmanned ships loaded with explosives and sent into the Spanish fleet.
Double Agent	Someone who pretends to be on one side but is actually on the other.		<b>Reasons for the Failure of the Armada</b>
Spymaster	Francis Walsingham, Elizabeth's chief spy responsible for her security.		Cadiz Spain's main western port – the site of much of the Armada preparations.
Jesuits	Extreme Catholics carrying out the wishes of the Pope.		Tilbury The south-eastern port from where Elizabeth spoke and inspired her fleet.
Incriminate	To find evidence of someone's involvement in a crime.		Admiral The most senior commander of a fleet.
<b>Reasons for the Spanish Armada</b>		Comptroller	Someone who supervises the financing and organisation of a project.
New World	The continents of North and South America – dominated by Spain		Gloriana The image of Elizabeth as divine, powerful and in control.



Sample exam questions
'Describe two features of the Revolt of the Northern Earls in 1569'. [4]
'Describe two features of the Ridolfi Plot of 1571'. [4]
'Describe two features of the Throckmorton Plot of 1583'. [4]
'Describe two features of the Babington Plot of 1586'. [4]
'Describe two features of Walsingham's methods of catching Catholic plotters'. [4]
'Describe two features of the execution of Mary, Queen of Scots in 1587'. [4]
'Describe two features of English involvement in the Spanish Netherlands'. [4]
'Describe two features of Spanish preparations for the Armada'. [4]
'Describe two features of Drake's raid on Cadiz'. [4]
'Describe two features of the Spanish plan to invade England in 1588'. [4]
'Describe two features of the English defence against the Armada in 1588'. [4]
'Describe two features of the leadership of the English fleet in 1588'. [4]
'Describe two features of the Spanish fleet in 1588'. [4]
'Explain why the Revolt of the Northern Earls took place in 1569'. [12]
'Explain why the Ridolfi Plot of 1571 increased tension between Protestants and Catholics'. [12]
'Explain why the Throckmorton Plot of 1583 was a threat to Elizabeth'. [12]
'Explain why Sir Francis Walsingham was effective at dealing with Catholic plotters between 1573 and 1586'. [12]
'Explain why Philip II ordered the invasion of England in 1588'. [12]
'Explain why Elizabeth authorised intervention in the Netherlands between 1578 and 1588'. [12]
'Explain why the Spanish Armada was defeated in 1588'. [12]
'Political grievances were the main cause of the Revolt of the Northern Earls in 1569'. How far do you agree? [16]
'The Babington Plot was the greatest threat to Elizabeth's rule in the period 1569-86'. How far do you agree? [16]
'The execution of Mary, Queen of Scots was the main reason for the Spanish Armada in 1588'. How far do you agree? [16]
'Effective leadership was the main reason for English victory over the Spanish Armada in 1588'. How far do you agree? [16]



Lord Charles Howard



Lord Howard was a cousin of Queen Elizabeth and Earl of Nottingham. Through his family connections he achieved the rank of Lord High Admiral of the English fleet. However, he was a natural born leader with an excellent tactical mind and was a deserving leader of the English defence. His most notable contribution to the defeat of the Armada was the decision to send fire ships towards the Spanish fleet. He was responsible for the larger part of England's fleet.



Sir Francis Drake



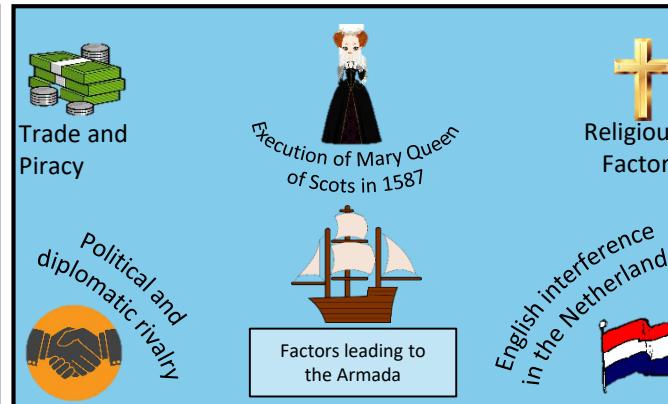
Sir Francis Drake was the greatest sailor alive. He was the first captain to successfully circumnavigate the globe in 1580, and inspired such terror in the Spanish that they nicknamed him 'El Draque' – the Dragon. He had been very successful in stealing Spanish treasure and had made Elizabeth lots of money – one notable capture paid off England's entire national debt. He was born to humble origins but rose up the ranks through his talent. His men adored him. He was second in command of England's forces.



Duke of Medina Sidonia



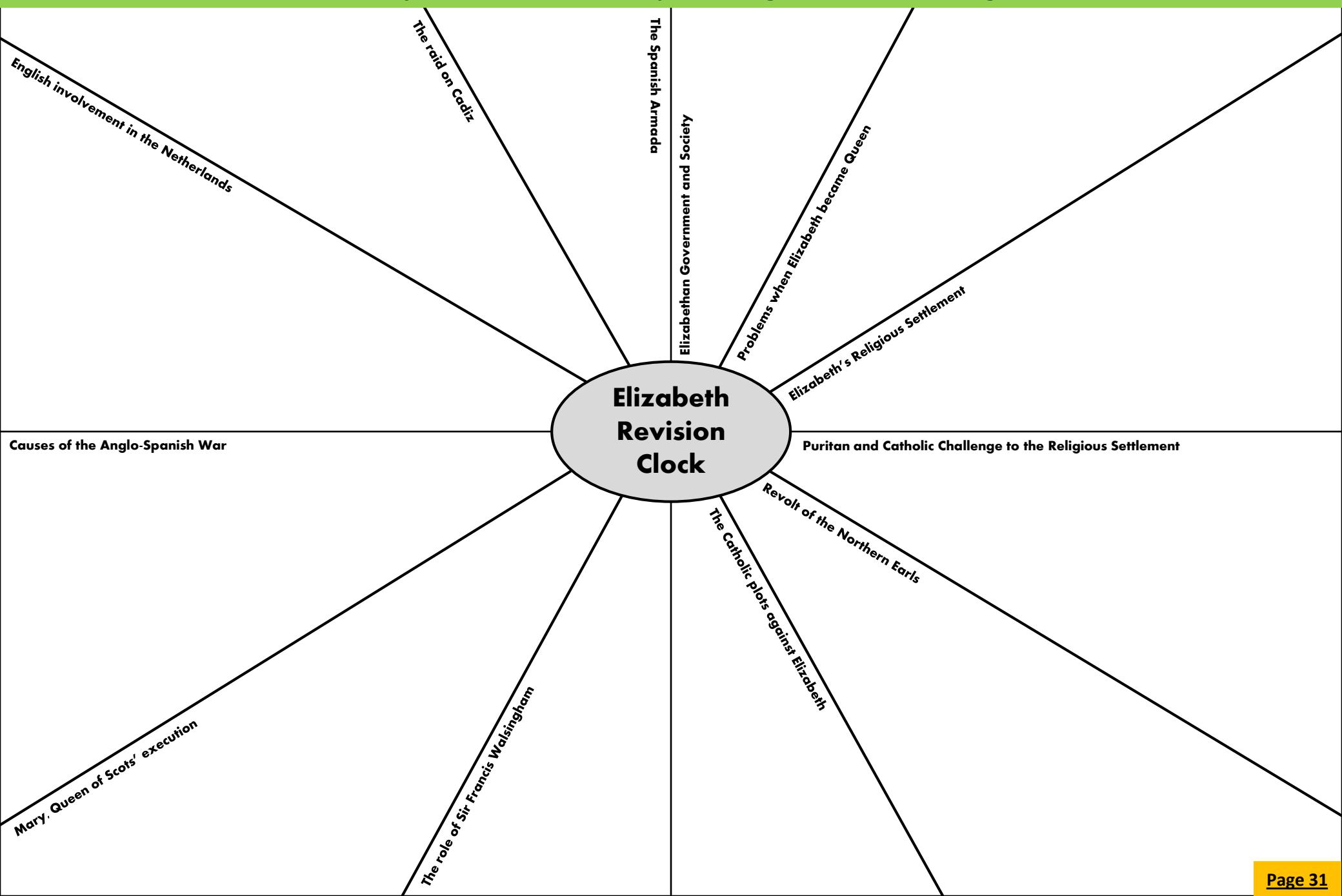
Medina Sidonia was not a natural choice to lead an invasion fleet. He had never fought at sea before and complained of seasickness and colds. His own mother wrote a letter to the king complaining of the appointment. However, he was very wealthy and powerful, and proved to be an excellent planner – his preparations for the Armada were superb. Ultimately, his inexperience in battle proved to be costly as a number of mistakes and missed opportunities helped contribute to the Spanish defeat.



Reasons for defeat of the Spanish Armada	
English	Spanish
<ul style="list-style-type: none"> <li>Excellent leadership</li> <li>Drake's actions in Cadiz causing disruption and delay</li> <li>Innovative English tactics such as fire ships</li> <li>Home advantage – knowledge of the local area</li> <li>More effective weapons</li> </ul>	<ul style="list-style-type: none"> <li>Poor leadership – lack of experience and lack of flexibility</li> <li>Complicated plan</li> <li>Lack of communication</li> <li>Impractical tactics and weapons</li> <li>The wind and stormy seas</li> </ul>

### The Catholic Plots against Elizabeth 1571-1586

The Ridolfi Plot 1571	The Throckmorton Plot 1583	The Babington Plot 1586
<p><u>Plan:</u></p> <p>Mary, Queen of Scots used an Italian banker called Roberto Ridolfi to attempt to coordinate an invasion of England by the Pope and Philip II of Spain. An invasion from the Netherlands led by the Spanish Duke of Alva would restore Catholicism, and the Catholic Duke of Norfolk would marry Mary, who would become queen.</p> <p><u>What happened?</u></p> <p>Ridolfi met with Alva but Spain wouldn't commit to supporting the plan until Elizabeth had already been overthrown. Elizabeth's spies found details of the plot and arrested the Duke of Norfolk. The plot fell apart.</p> <p><u>Outcome:</u></p> <p>The Duke of Norfolk was executed. The plot increased fears of Catholic interference in Elizabeth's reign and she came under pressure to take a tougher stance.</p>	<p><u>Plan:</u></p> <p>The plan, probably concocted by an English Catholic called Francis Throckmorton, was for a simultaneous Catholic uprising in England and an invasion by the French Duke of Guise, all financed with Spanish money. The plot would put Mary on the throne, restore Catholicism and potentially kill Elizabeth.</p> <p><u>What happened?</u></p> <p>Throckmorton's house was searched by Elizabeth's spies. A list of English Catholic sympathisers was found, including some in Elizabeth's court. The plot never got anywhere as expected Spanish funding never arrived.</p> <p><u>Outcome:</u></p> <p>Elizabeth's advisors began to actively search for Mary's involvement in plots, as they felt that they would never stop while she lived. Spanish ambassador was expelled.</p>	<p><u>Plot:</u></p> <p>Sir Anthony Babington wrote to Mary, who was unaware she was under surveillance, with a plan for a foreign Catholic invasion of England, the installation of Mary on the throne, and crucially, the murder of Elizabeth.</p> <p><u>What happened?</u></p> <p>Mary responded to the letters, and Elizabeth's spies allowed the correspondence to continue. Eventually, Mary wrote in a letter details of Elizabeth's assassination. Satisfied she could no longer deny her guilt, Elizabeth's spies arrested Mary for treason.</p> <p><u>Outcome:</u></p> <p>Most of the plotters were rounded up and immediately executed. After months of delay, Elizabeth signed Mary's death warrant and she too was executed.</p>



## What are Natural Hazards?

Natural hazards are physical events such as earthquakes and volcanoes that have the potential to do damage humans and property. Hazards include tectonic hazards, tropical storms and forest fires.

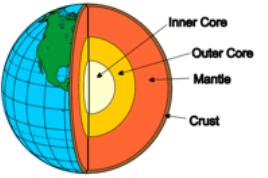
## What affects hazard risk?



## Structure of the Earth

## The earth has 4 layers

- The inner core
- The outer core
- The mantle
- The crust



There are 2 theories of why plates move: **convection currents** and **ridge push, slab pull**.

Plates either move towards each other (**destructive** margin) away from each other (**constructive**) or next to each other (**conservative**).

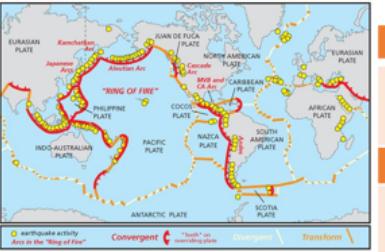
## Earthquakes and Volcanoes

## Volcanoes

## Earthquakes

- Constructive** margins – Hot magma rises between the plates eg. Iceland. Forms Shield volcanoes
- Destructive** margins – an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes eg the Pacific Rim

- Constructive** margins – usually small earthquakes as plates pull apart.
- Destructive** margins – violent earthquakes as pressure builds and is then released
- Conservative** margins – plates slide past each other. They catch and then as pressure builds it is released eg San Andreas fault..



## Effects of Tectonic Hazards

**Primary effects** happen immediately. **Secondary effects** happen as a result of the primary effects and are therefore often slightly later.

## Primary - Earthquakes

- Property and buildings destroyed
- People injured or killed
- Ports, roads, railways damaged
- Pipes (water and gas) and electricity cables broken

## Secondary - Earthquakes

- Business reduced as money spent repairing property
- Blocked transport hinders emergency services
- Broken gas pipes cause fire
- Broken water pipes lead to a lack of fresh water

## Primary - Volcanoes

- Property and farm land destroyed
- People and animals killed or injured
- Air travel halted due to volcanic ash
- Water supplies contaminated

## Secondary - Volcanoes

- Economy slows down. Emergency services struggle to arrive
- Possible flooding if ice melts
- Tourism can increase as people come to watch
- Ash breaks down leading to fertile farm land

## Comparing Earthquakes – Haiti (LIC) and Tohoku, Japan (HIC)

LIC – **Haiti 2010** At 16:53 on January 12th 2010 the island of Haiti was struck by a powerful 7.0 magnitude earthquake. The earthquake was followed by several large aftershocks of up to 5.0 on the Richter scale.

HIC – **Tohoku, Japan 2011** On 11 March 2011, a massive 9.0 earthquake occurred off the Japanese coastline at 14:46. The **epicentre** was 43 miles east of Tohoku at a depth of 20 miles. The earthquake lasted 6 minutes and caused a **tsunami** wave that reached heights of over 40 metres.

## Primary Effects

220,000 deaths  
300,000 injured  
180,000 homes destroyed

15,900 people died. 6,100 people injured. Parts of Japan were shifted 2.4 metres further east. 400 km stretch of coastline dropped vertically by 0.6 metres. 128,500 properties destroyed

## Secondary Effects

2 million people were affected.  
1.5 million were homeless. Over 1100 camps set up. Few services. Cholera and disease spread.  
Storms and flooding in the camps. 19 million cubic metres of rubble 5000 schools damaged or destroyed. Services such as electricity, water, communications badly disrupted /destroyed. Total damage = \$11.5 billion.

Tsunami up to 40m devastated towns  
Over 800 earthquakes of magnitude 4.5 or more after the main earthquake.  
People lost electricity.  
2000 roads destroyed. 56 bridges. 26 railways. 300 hospitals damaged and 11 destroyed. 7 nuclear reactors- meltdown – high radiation levels.  
Economic cost \$235 billion.

## Immediate Responses

Search and rescue. Assistance was required and so specially trained medics with sniffer dogs and hi-tec heat sensitive equipment were flown in from HICs. Local people made up the majority of the rescuers. Camps set up for homeless. Aid from abroad in the form of food, water, medical supplies and temporary shelters.

Warnings helped save lives. Many countries such as the UK sent search and rescue teams to help search for survivors. The Japanese government responded by sending in specially trained people. NGOs and other Aid agencies helped too, with the Japanese Red Cross reporting \$1 billion in donations. Within 2 seconds of the earthquake all 27 Shinkansen trains in the area had stopped without derailment, and with no injuries or deaths.

## Long term responses

3/4 of damaged buildings were repaired.  
200,000 people have received cash or food for public work such as clearing rubble. In camps for more than a year. Some people have moved to other countries. The world bank pledged \$100million to support reconstruction and recovery programmes in Haiti.

Just 6 days after the quake a motorway was repaired. As of November 2011, 96% of the electricity supply had been restored, 98% of the water supply and 99% of the landline network. 100% of expressway, the Shinkansen and airport facilities had been restored.

LICs suffer more than HICs from natural disasters because they are not as prepared and struggle to react effectively



## Responses to Tectonic Hazards



## Immediate (short term)

- Issue warnings if possible
- Rescue teams search for survivors
- Treat injured
- Provide food and shelter, food and drink
- Recover bodies
- Extinguish fires

## Long-term

- Repair and re-build properties and infrastructure
- Improve building regulations
- Restore utilities
- Resettle locals elsewhere
- Develop opportunities for recovery of economy
- Install monitoring technology

## Monitoring

Seismometers measure earth movement.  
Volcanoes give off gases

## Prediction

By observing monitoring data, this can allow evacuation before event

## Protection

Reinforced buildings. Making building foundations that absorb movement  
Automatic shut offs for gas and electricity

## Planning

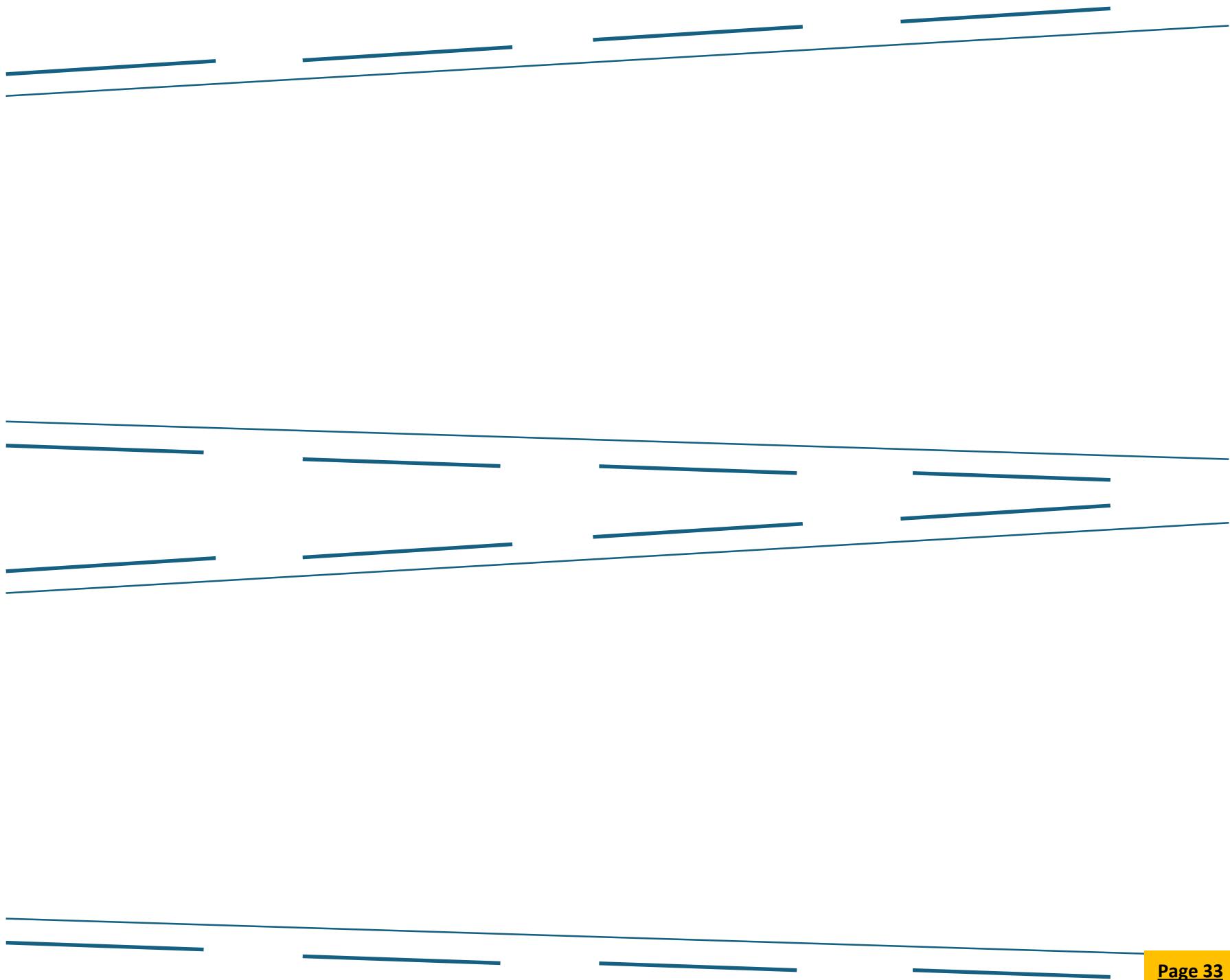
Avoid building in at risk areas  
Training for emergency services and planned evacuation routes and drills.

## Why live in areas at risk from tectonic hazard

Always lived there. Employed in the area. Support after an earthquake or volcanic eruption. Some think that severe earthquakes or eruptions won't happen again in the area. Soil around volcanoes is fertile. Good for crops. Volcanoes are tourist attractions. Tourism jobs.

# Geog your memory

Use the LANES to recall key information about a particular topic from *Geography*, without looking at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.



# DUAL CODING

Based on some key knowledge from your ***History/ Geography*** knowledge organisers, can you assign different parts of this knowledge to images to help you remember this in the future? Consider your images carefully.

Image	Key Knowledge

Image	Key Knowledge

# Eva Hesse

Personal information: Born in Germany in 1936.

- Jewish. Family escaped the German Nazis and fled to Holland first and then to England and finally to America where they settled.
- Hesse's parents divorced a few years later, sadly her mother committed suicide.
- Eva went on to study Art in New York. She became a sculptress.
- In 1969, she was diagnosed with a brain tumour. Her death in 1970 at age 34 ended a career spanning only ten years.



Subject matter: Natural forms and the environment. The human condition (being a human). Human body forms.

Context: Eva Hesse was working in a new 'modern' world. Science was creating new and wonderful materials like plastic. She was inspired by the materials that she used.

Process/technique:

Eva would plan her sculptures in her pencil studies and through exploring and experimenting with materials.

Materials/media: Weird and wonderful materials. New and modern for the time...like plastics and latex (stretchy rubber). She would use anything that she could find. Cloth-covered cord, electrical wire, and masonite, latex and fibre glass. She recycled materials.



Influences: Her art is effected by all the painful struggles of her life including escaping the Nazis, her parents' divorce, the suicide of her mother when she was ten, her failed marriage and the death of her father. She "coped" with emotional chaos by reinventing sculpture through playing with worthless material amid the industrial ruins of a defeated nation that, only two decades earlier, would have murdered her without a second thought. She also always felt she was fighting for recognition in a male dominated art world.

Formal qualities of work:

Style; abstract and expressive.

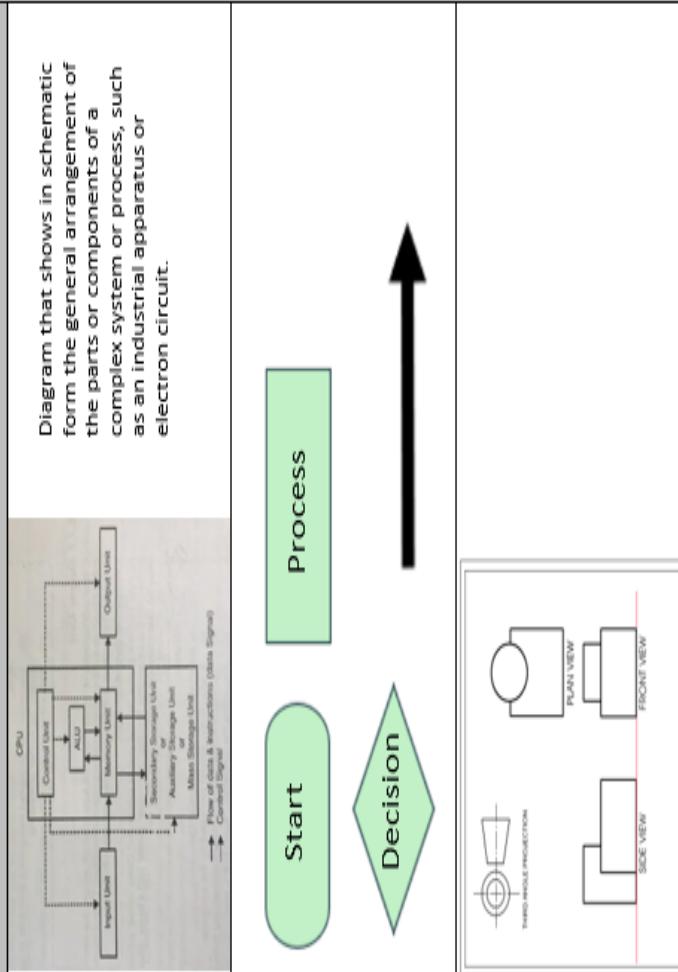
Colour; Pastels.

Representational/abstract; Abstract.

## Design Communication

1	Isometric Drawing	Isometric drawings are a type of 3D representation of an object on a 2D surface, where all three axes (length, width, and height) are equally foreshortened.
2	Oblique Drawing	<b>Oblique drawing</b> is a simple type of 2D technical drawing used to represent 3D objects.
3	Orthographic Drawing	An <b>orthographic drawing</b> , also known as an <b>orthographic projection</b> , is a way to represent a 3D object in 2D by using multiple views.
4	Exploded View Drawing	An <b>exploded view drawing</b> is a technical illustration that shows the relationship and order of assembly of components within a product or system. Also known as an <b>assembly drawing</b> .
5	Free hand sketching	<b>Freehand sketching</b> is the art of drawing without relying on tools like rulers or stencils, using only your hand, pencil, and paper. Also known as a <b>concept sketch</b> .
6	Working Drawing	<b>Working drawings</b> are detailed, scaled technical drawings used in construction and manufacturing to guide the building or production process.

## Diagram



## Flow chart Symbols



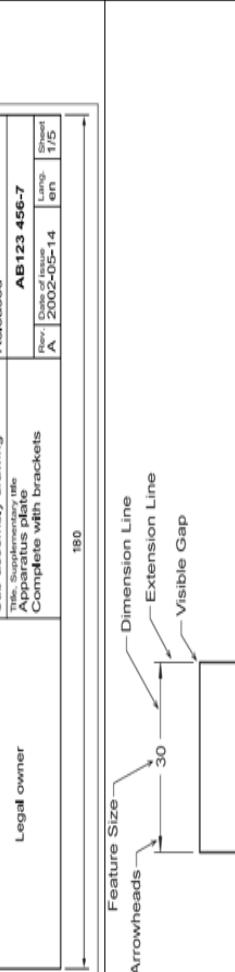
## Keywords Vocabulary



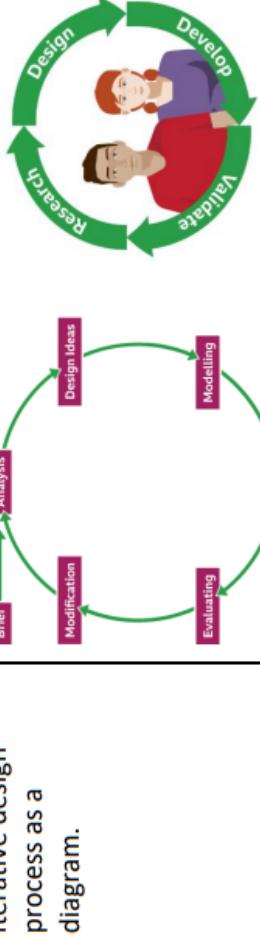
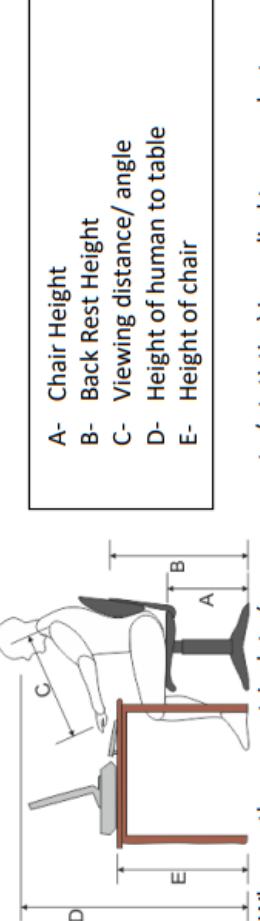
## Dimensions

10	Title Block	Figure 2 Title block in compact form																								
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## Dimensions



11	CAD-Computer aided Design	Advantages	Limitations
12	CAD-Computer aided Design	<ul style="list-style-type: none"> <li>Competitively priced packages.</li> <li>Drawings can be produced and amended quickly.</li> <li>Most cad programs have online training to upskill.</li> <li>Range of programs that are available internationally. Files can be shared easily.</li> <li>CAD produces designs that can be rendered and viewed from a 360 degree.</li> </ul>	<ul style="list-style-type: none"> <li>Requires high processing capacity so IT needs to be high quality- expensive.</li> <li>Initial training in complex programs is necessary.</li> <li>Can be time consuming to produce initial designs.</li> <li>Computers using the software are susceptible to software changes.</li> </ul>

Engineering	Designing Processes	Year 10/11	R038
<b>Designing Processes</b>			
1	Linear design	Linear design is a process that follows a step-by-step process	
2	Iterative design	<b>Iterative design</b> is a circular design process that models, evaluates and improves designs based on the results of testing.	
3	Inclusive design	<b>Inclusive design</b> is a design process that aims to create products, services, and environments that are accessible and usable by the widest range of people, including those with disabilities, diverse cultural backgrounds, and varying needs.	
4	User-centred design	<b>User-centered design (UCD)</b> is a design philosophy and process that prioritizes the needs, goals, and feedback of the user throughout the entire design and development lifecycle.	
5	Sustainable design	<b>Sustainable design</b> is an approach to creating products, buildings, and systems that minimize environmental impact and promote social and economic well-being throughout their entire life cycle.	
6	Ergonomic design	<b>The ergonomic design</b> discipline focuses on designing products and environments that are comfortable, efficient, and safe for humans to use.	
<b>Diagram</b>			
7	Iterative design process as a diagram.	 <pre> graph TD     Brief[Brief] --&gt; Analysis[Analysis]     Analysis --&gt; Design[Design Ideas]     Design --&gt; Modelling[Modelling]     Modelling --&gt; Testing[Testing]     Testing --&gt; Brief     </pre>	
8	Ergonomics	 <p>A- Chair Height      B- Back Rest Height      C- Viewing distance/ angle      D- Height of human to table      E- Height of chair</p>	<p>When anthropometric data (measurements / statistics) is applied to a product, e.g. measurements of the hand are used to design the shape and size of a handle, this is ergonomics.</p>
9	ACCESS FM	<p>A: Aesthetics, what does the product look like?      C: Cost, how much does the product cost to buy?      C: Customer, who would buy or use the product?      E: Environment, where would the product be used or stored?      S: Size, how big or small is the product?      S: Safety, how safe during normal use?      F: Function, how does the product work?      M: Material, what is the product made of?</p>	<p>ACCESS FM is a design tool used for product analysis and evaluation. It stands for Aesthetics, Cost, Customer, Environment, Size, Safety, Function, and Materials. This framework helps designers and students consider various aspects of a product during the design process, from initial concept to</p>

**Keywords Vocabulary**

<b>Keywords Vocabulary</b>			
10	<b>Anthropometrics</b>	The study of the human body and its movement, often involving research into measurements relating to people. It also involves collecting statistics or measurements relevant to the human body, called Anthropometric Data.	
11	<b>Design brief</b>	A set of instructions given to a designer by a client	
12	<b>Design specification</b>	Document containing details of a product's required characteristics, and all the processes, materials and other information needed to design the product.	
13	<b>Market Research</b>	Market research is the process of collecting, collating and analysing data about the market.	
14	<b>Primary Research</b>	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Fitness for purpose</li> <li>• Allows to target right segments</li> <li>• Can explain difficult problems / concepts</li> </ul>	<p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• Can be time consuming</li> <li>• Expensive</li> <li>• Some forms have low response rates</li> </ul>
	1.Postal surveys – these have a high sample size but low response rate, relatively cheap		
	2. Telephone surveys – more expensive, higher response rate, can explain questions		
	3. Interviews – smaller sample size, higher response rate, may be interviewer bias		
	4. Focus groups – provide in-depth analysis, small sample size		
15	<b>Secondary Research</b>	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Quick and easy</li> <li>• Relatively cheap</li> </ul>	<p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• May be out of date</li> <li>• May not be relevant</li> </ul>
	1.Census – provides information on all the households in the UK, updated every 10 years		
	2. Internet – can provide a wealth of information however need to check validity of data		
	3. Government statistics		
	4. Books and journals		
	Company reports		
	5. MINTEL reports – these are often a good source of market information		
16	<b>Projection Lines</b>	Lines used to extend existing lines on a drawing and used to help create new geometry.	
17	<b>Projections</b>	2D view of an object used to represent it in 3D.	

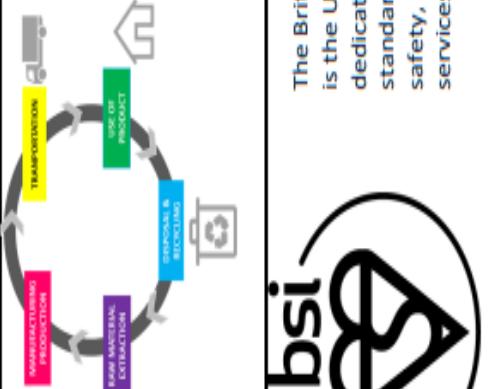
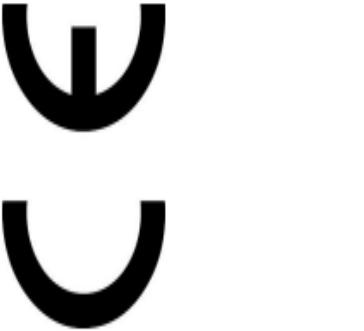
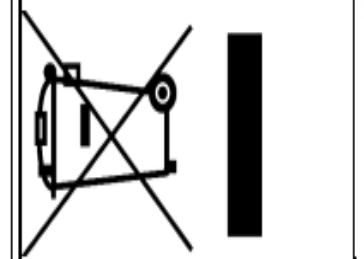
Engineering	Designing Requirements	Year 10-11	R038
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## Commercial Production methods

<b>1</b>	Needs and wants	In design, needs represent fundamental requirements for a product or service to function as intended and fulfill a basic purpose, while wants are desires or preferences that enhance the user experience but are not strictly necessary. Needs are about functionality and usability, whereas wants focus on aesthetics, features, and emotional connections.	
<b>2</b>	Quantitative and qualitative criteria	Quantitative criteria rely on numerical data and statistical analysis to measure and quantify variables. Qualitative criteria, on the other hand, focus on descriptive, non-numerical data to understand experiences, perspectives.	
<b>3</b>	Scale of manufacture	<b>One-off;</b> One-off manufacturing, also known as job or bespoke production, involves creating a single, unique product tailored to a specific customer's requirements.  <b>Batch;</b> Batch manufacture, also known as batch production or process manufacturing, is a production method where goods are produced in discrete groups or sets, called batches.	<b>Mass;</b> Mass manufacture, also known as mass production, involves producing large quantities of standardized goods, often on assembly lines, using specialized machinery and a division of labour.

## Types of manufacturing processes:

<b>4</b>	Wasting	Wasting is a process that uses tools to remove material from a workpiece until the required component has been produced: wasting can be achieved by hand tools and machine tools. <b>Examples, drilling, routing, chiselling, turning.</b>
<b>5</b>	Shaping	Shaping refers to the process that take raw materials and form them into final parts. <b>Examples, casting, moulding, injection moulding and machining processes.</b>
<b>6</b>	Forming	Forming, pressing or press forming is where a pressing force is applied to a material to cause it to deform. <b>Examples, die pressing, line bending, Vacuum forming, rolling.</b>
<b>7</b>	Joining	Joining processes are used to physically join two or more components. <b>Examples, brazing, soldering, adhesives, bolts and rivets.</b>
<b>8</b>	Finishing	Finishing refers to the process of applying a decorative appearance, protective coating or other treatments to protect a surface material. <b>Examples, painting, spraying, waxing, heat treating, dip coating.</b>
<b>9</b>	Assembly	Products with two or more components will have been designed to be assembled so they can function.

<p><b>10 Supply Chains-</b></p> <p><b>THE SUPPLY CHAIN</b> – is a <b>network</b> between a company and its suppliers to produce and distribute a specific product, and the <b>supply chain</b> represents the steps it takes to get the product or service to the customer. Left is an infographic to show the general supply chain of a product getting to market.</p> 	<p><b>11 British Safety Institute</b></p>  <p>The British Standards Institution (BSI) is the UK's national standards body, dedicated to developing and publishing standards to improve the quality, safety, and reliability of products, services, and systems.</p>	<p><b>12 European safety symbol</b></p>  <p>The CE mark is a conformity marking required for many products traded in the European Economic Area (EEA). It indicates that the manufacturer has checked the product meets EU safety, health, and environmental requirements, and it allows the product to be sold freely within the EEA. The CE mark is not a quality mark or a guarantee of origin, but rather a declaration by the manufacturer that the product complies with applicable EU legislation.</p>	<p><b>13 British Safety Marks</b></p>  <p>The BSI Kitemark is a UK product and service quality certification mark, owned and operated by the British Standards Institution (BSI). It signifies that a product or service has been</p> <p><b>UKCA</b></p> <p>The UKCA (UK Conformity Assessed) marking is a product marking used for goods being placed on the GB (Great Britain) market, replacing the CE marking for many products.</p>	<p><b>14 WEEE symbol</b></p>  <p>The WEEE symbol is a crossed-out wheeled bin, indicating that electrical and electronic equipment should not be disposed of with regular household waste. This symbol, mandated by the Waste Electrical and Electronic Equipment (WEEE) Regulations, signifies that the product needs to be recycled separately. The WEEE regulations aim to reduce the amount of electrical waste going to landfills and promote recycling and reused.</p>	<p><b>15 Aluminium Recycling symbol</b></p>  <p>The "ALU" symbol, in the context of recycling, represents recyclable aluminium. It typically appears as a circle of arrows with the letters "alu" inside, indicating that the product can be recycled and made into new aluminium items. This symbol is often found on aluminium cans, foil, and other packaging.</p>
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**Keywords Vocabulary**

<b>Keywords Vocabulary</b>		
16	Tooling	Manufacturing equipment needed to produce a component, such as cutting tools, dies, gauges, moulds or patterns.
17	Deburring	Process to remove sharp or raised edges on a material caused by other processes.
18	Labour Costs	Costs associated with employees in a business, including wages, taxes and additional benefits.
19	Overheads	Expenses that need to be paid by the business, not including labour or materials but rent and utilities.
20	Subtractive process	The removal of material from a solid block by a machining process, such as milling, turning or drilling.
21	Consumables	Resources that assist manufacture and are used up during the process- for example, oil and lubricant used in machines.
22	Standard Forms	Made available in large quantities to the same specification- sheet metal, paper, timber sheeting.
23	Geometry	Shape of the object.
24	Automation	Using computer technology to operate equipment, rather than humans.
25	Turning	A machine operation that generates cylindrical and rounded forms with a stationary tool.
<b>6 R's- Sustainable Approaches</b>		
26	Rethink	Can the designer rethink the way it is manufactured. Is the material being used the only option?

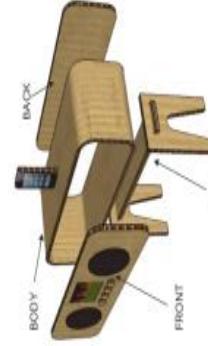
Engineering	Designing Requirements	Year 10-11	R038
27	Reuse	Is about reusing what you've already got rather than buying new items straightaway.	
28	Recycle	From batteries to bubble wrap, you might be surprised by how much can be recycled.	
29	Repair	Taking the time to repair broken items can extend their lifetime and avoid introducing new materials into the cycle.	
30	Reduce	Consider how you can reduce your meat and dairy consumption, and buy new clothes only when you really need them by making do with what you've got before replacing them.	
31	Refuse	Say no to single-use bags, packaging, cups, straws and so on, and get into the habit of bringing along your own reusable replacement	

## Engineering

## Evaluating Design Ideas

## Year 10-11

## RO38

Evaluation Models		Evaluating Design Ideas		Year 10-11	RO38
1	ACCESS FM	<b>ACCESS FM</b> is a design and technology framework used for analysing and evaluating products. It stands for represent?			
2	House of Quality (HOQ)	The <b>House of Quality (HOQ)</b> is a matrix-based tool used in Quality Function Deployment (QFD) to translate customer needs into technical requirements for product development.			
3	Pugh Chart	<b>A Pugh chart</b> , also known as a Pugh matrix or decision matrix, is a tool used to compare multiple options against a set of criteria, helping to identify the best choice.			
4	Quality Function Deployment (QFD)	<b>Quality Function Deployment (QFD)</b> is a structured method used to translate customer needs and expectations into specific engineering characteristics and design parameters for products or services			
5	Production Plan	<b>A production plan</b> , also known as production planning, is a comprehensive strategy that outlines how a company will manufacture its products or deliver its services.			
6	Gantt Chart	A chart in which a series of horizontal lines shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.			
7	Evaluation	In production, <b>evaluation</b> is the process of systematically assessing the performance and impact of a product, service, or process to determine its effectiveness, efficiency, and value.			
8	Product Testing	<b>Product testing</b> is the process of evaluating a product's performance, quality, and usability before its release to the market.			
Diagram					
9	Breadboard	 <p>A breadboard in electronics is a solderless platform used for prototyping and building temporary electronic circuits. It allows users to easily connect and disconnect components without soldering, making it ideal for experimenting with circuit designs and testing new ideas</p>			
10	Card Modelling	 <p>Card modelling offers several benefits, including versatility, portability, ease of manipulation, and cost-effectiveness, making it a valuable tool for design exploration and prototyping. It allows designers to quickly and inexpensively create physical representations of their ideas, enabling better visualization, spatial understanding, and communication with stakeholders</p>			
11	3D Printing	 <p>3D printing offers numerous benefits, including faster prototyping, design flexibility, cost-effectiveness, and on-demand production. It allows for the creation of complex geometries, customization, and reduced waste compared to traditional manufacturing methods. Furthermore, 3D printing can be more environmentally friendly and accessible.</p>			
12	Block Modelling	 <p>Blockboard is a great material for creating physical models of design ideas due to its strength, ease of working with, and relatively low cost. It's lightweight, making it easy to transport and handle, and its dimensional stability means models won't easily warp or bend. Additionally, blockboard can be cut, shaped, and joined using common woodworking tools, making it versatile.</p>			

<p><b>13 CAD Modelling</b></p> <p>CAD software offers numerous advantages for modelling ideas, including improved accuracy, faster design iterations, better visualization, enhanced collaboration, and cost reduction. It enables designers to create precise 2D and 3D models, simulate designs, and easily make changes, leading to more efficient design processes and higher quality products.</p>	<p><b>14 Vernier Callipers</b></p> <p>Vernier Caliper is a widely used linear measurement instrument with the least count of 0.02 mm. It is used to measure linear dimensions like length, diameter, depth.</p> <p>It is a basic instrument of measurement, consisting of two types of scale. The main scale and the Vernier scale can slide along the main scale. Two types of measurement we can do, the first one is through the external jaw (measure external dimensions) and another one is the internal jaw (measure internal</p>	 <p><b>14 Micrometer</b></p> <p>External Micrometer is also known as Outside Micrometer or External Micrometer.</p> <p>It is used to check the outside diameter of the circle by the means of the accuracy of 0.01 mm or up to 0.001 mm.</p>
		 <p><b>15 Steel rule</b></p> <p>A steel rule is a single piece linear measuring instrument. The steel scale indicates two units that are cm and inches, cm division on one side and inches, on another side.</p>
<p><b>Keywords Vocabulary</b></p>	<p><b>16 Subjective Evaluation</b></p> <p>Subjective evaluation refers to assessments or judgments based on personal opinions, feelings, interpretations, or preferences, rather than on objective facts or measurable criteria. It involves individual perspectives and can vary from person to person.</p>	<p><b>17 Objective Evaluation</b></p> <p>Objective evaluation refers to assessments that are based on measurable, verifiable facts and data, rather than on personal opinions or biases. It emphasizes impartiality and consistency, aiming for judgments that would be similar regardless of who is making them</p>
	<p><b>18 Summative Evaluation</b></p>	<p>Summative evaluation is a method of assessment conducted at the end of a program, course, or project to measure its overall effectiveness and determine the extent to which objectives have been achieved</p>
	<p><b>19 Ranking matrix</b></p>	<p>In the context of design, a ranking matrix is a tool used to prioritize or rank different design options or features based on their importance or effectiveness according to specific criteria. It helps designers make informed decisions by systematically comparing and evaluating alternatives.</p>
	<p><b>20 Qualitative data</b></p>	<p>Qualitative data is non-numerical information that describes characteristics and qualities. It focuses on concepts, opinions, and experiences, rather than numerical measurements or statistics. This type of data is often gathered through interviews, observations, and text-based sources, providing insights into the "why" and "how" behind phenomena</p>
	<p><b>21 Quantitative data</b></p>	<p>Quantitative data is numerical information that can be counted or measured, often used for statistical analysis to understand quantities, frequencies, and trends. It differs from qualitative data, which describes characteristics or qualities. Essentially, quantitative data provides numerical values that can be subjected to mathematical calculations and statistical analysis.</p>

## Textiles Knowledge Organiser – Spring 1

### Reverse Appliqué/Molar work:

This is a technique that involves placing layers of fabric on the inside of a garment/product. A design is stitched onto the surface of the top layer and then cut away to reveal the layers beneath.



### Analysing the work of an Artist/Fashion designer:

Use the following headings when analysing the work of your chosen Artist/Fashion designer:

1. First impressions: Record your reactions and thoughts of the artwork.
2. What materials and processes have been used? Write a paragraph describing everything you see: colour, pattern, texture, line, shape, material or anything else interesting.
3. Background information about the Artist: The name of the artist, the title of the artwork. People, events, movements, concepts they have been influenced by.
4. Meaning – what mood or feeling do you get from the work and how has the artist created this?
5. What do you think of it? Describe some of the following things: What you particularly like about the work, what the artist has done well, what you would change about the artwork, what 2-3 questions would you like to ask the artist about the work and what ideas has the artwork given you for your own work.
6. Last thoughts. Using all the information you have gathered, explain if your views have changed.
7. Compare 2 pieces of work –either between work of the same artist or another artist. Describe the main similarities and differences.

### Heat transfer printing:

This technique involves **dyes that transfer from paper to fabric with heat**. The cloth fibres open with heat allowing the dyes to bond permanently. The process is simple and allows the designer to create multi-coloured designs. **Cotton** is the only material that works best with standard heat press methods. Cotton/ polyester and reflective material require additional support during the heat transfer process. The type of printer normally used for heat transfer printing is an **inkjet printer or laser printer**. To develop skills learnt at KS3 – use one of your pieces of artwork to scan and transfer print onto fabric. Further embellish the design by adding either hand or machine embroidery.

#### Equipment needed for this technique:

- Cotton fabric
- Transfer paper
- Good quality inkjet printer
- Heat press



### Lino printing:



#### Wooden blocks



#### Printing inks



#### Lino cutting tools

#### Roller for spreading ink – to prepare for printing

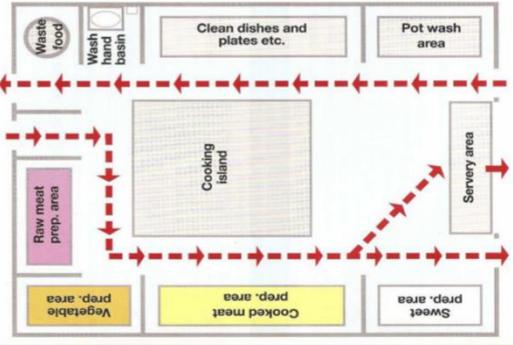


### Weaving and Knitting:

Weaving is a method of textile production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Other methods are knitting, crocheting, felting, and braiding or plaiting.



Workflow in the kitchen should follow a logical process by using different areas so that the clean stages in food production never come into contact with the "dirty" stages.



You need to consider the following key areas in terms of layout...

1. Delivery
2. Storage
3. Food preparation
4. Cooking
5. Holding
6. Food service area
7. Wash up
8. Waste disposal

## DRESS CODE

A chef's uniform is more than a fashion statement. Each component plays a specific role in protecting from potential dangers common in most kitchens

### Chef's uniform

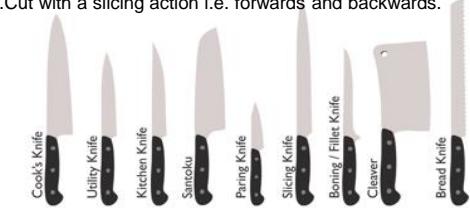
- Chef's jacket
- Chef's pants
- Hat
- Neckerchief
- Apron
- Hand towel
- Slip-resistant shoes

- Some establishments have staff wear the same uniform; this makes them easily identifiable for staff and customers. The uniform may change depending on which area of the establishment they work in.
- Protective clothing as part of a uniform must be paid for by the employer.



## KNIVES

1. Store knives safely so you don't cut yourself accidentally
2. Clean knives after each use. gently scrub the knife, then wash it off with hot water. Dry with a clean cloth
3. Make sure knives are sharp.
4. Use knives for the purpose that they were intended.
5. Cut with a slicing action i.e. forwards and backwards.



## STOCK CONTROL

2 types of foods when it comes to stock control:

**Perishable food** and products that do not stay fresh for very long

- Fresh fruit, vegetables
- Dairy products
- Meat and fish
- Only buy enough to last a few days because they will not last

**Staple foods** and supplies that are canned, bottled, dried or frozen. These have a longer shelf life and so do not need to be purchased as frequently. Larger amounts can be bought to get cheaper prices and can be stored .

- Condiments,
- Canned vegetables
- Frozen foods including meat, fish and deserts
- Sauces
- Flour, sugar, fat,oil

## DOCUMENTATION

### Why must they be completed?

1. Maintaining organisational procedures
2. Safety of staff and customers
3. Legal requirements
4. Complying with food safety legislation
5. Complying with accounting and taxation practices

### Stock control

Monitor stock levels for re ordering

Decide frequency of stock check  
First in First out for items with a shelf life

### Personnel records

- Hours worked
- Personal details
- Wages
- Taxation
- National insurance
- Training
- Accidents
- Staff rotas and timetables

### Health and safety, hygiene

- Fire certificate
- Staff training records
- Accident book
- Food hygiene checks
- Cleaning checks
- Bookings and reservations**
- Electronic booking system
- Electronic reservations system
- Diary with bookings and reservations
- Feedback forms

### Purchasing

- Food and drink orders
- Packaging orders
- Equipment
- Tables, chairs etc.
- Cutlery and crockery
- Staff uniforms

### Financial

- Income tax
- VAT
- Wages
- Insurance
- Sales and income
- Staff costs
- Heating, lighting

## CUSTOMER REQUIREMENTS

Customer service is what an establishment does in order to meet the **expectations** of their customers and generate customer satisfaction.

- **So customers return.** - People will not return to a place where they were not satisfied with the service. Repeat business means a successful business.
- **Exceeding expectations**- This makes repeat business more likely
- **Growth of the business**- If customers receive a high standard of service ad return, they will spend more money and also tell other people about the business.

Customers are influenced by:

- TV
- Magazines
- Health
- Travel abroad
- Technology
- Ratings and reviews
- Amount of money service is

## Types of Customer

Leisure	Local residents	Business / corporate
Customers who visit the establishments in their leisure time e.g. a meal with friends, a family day out, tourists,	Customers who live in the local area who visit the establishment often e.g. regular Sunday lunch, or get togethers	e.g. business lunches. Use business facilities in establishment for meetings or presentations. Courses and conferences

### Leisure customers' requirements

- Value for money
- Good facilities
- Families want child menus, play area, child friendly
- Tourists want local food, easy to communicate
- Older people may want more formal service
- Good customer service
- Varied choice of menu
- Dietary needs eg allergies, intolerances, vegetarian catered for without having to ask for special foods
- Facilities for physically impaired customers

### Local customers' requirements

- Value for money
- good standard of customer service so they return
- Catering for local needs (culture, religion)
- Consistent dishes served
- Loyalty schemes
- Recognised by staff- feel welcome
- Menu specials
- Theme nights
- OAP discount day
- Child friendly
- Entertainment
- Mailing list or email for special offers

### Business customers requirements

- Dedicated corporate (business) contact at establishment
- Discounted rates
- Meeting rooms
- Water, juice on tables
- Presentation equipment, Tea and coffee for breaks
- Lunch or other meals- buffet or restaurant
- Accommodation if attendees are from a long distance
- Quick service for lunch meetings

## Small Equipment

you will need to know what each piece of equipment is used for.



## Large Equipment

you will need to know what each piece of equipment is used for.



## Remember

1. **FIFO – First In First Out rule.**
2. **Check use by/best before dates and make sure you stick to these.**
- Do not use something if it is past its use by date.**
3. **Keep food that cause an allergic reaction separate from all other food.**

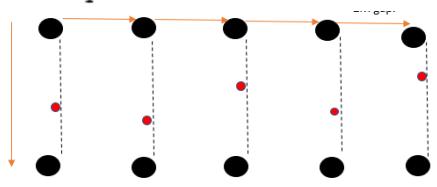
- Avoid spilling water on surface
- switch off parts, which are not being used.
- Cool hot plates before cleaning

# ➤ A to Z of...

Based on your **OPTION SUBJECT**, recall any key information from the current topic you have been studying.



# Unit R185 – Performance and Leadership in Sports Activities

TIME	ACTIVITY	KEY FACTORS/MAIN TEACHING POINTS	ORGANISATION/ DIAGRAMS	RESOURCES/ EQUIPMENT
12mins	<p><b>Drill 1. Bowling Practice</b></p> <p>For the first drill of the session, the participants will be in groups of two . . . I may need to step in if there is a student without a partner, I will do the drill with them. The drill will consist of each team having one ball and the aim is to warm the students up in their bowling ability and recapping them on how to bowl properly. Each pair will start from 10 yards apart from each other and continue back and forth while stationary to bowl the ball to their partner. The aim is to have the ball bounce once in between and develop a straight arm and a good release point.</p>	<p>1. Grip the ball with your index finger, middle finger, and thumb.</p>  <p>2. Brush your ear with your bowling arm.</p> <p>3. Release the ball to send it downwards.</p> <p>I will question pupils about this technique and ask questions like, 'what makes an effective bowl'?</p>	<ul style="list-style-type: none"> <li>-Having each student begin 10 yards apart and then gradually getting further apart to 15 yards.</li> <li>- To make it easier they can move closer together.</li> <li>-5 groups of 2 with one ball per group.</li> <li>-2 metres gap between each group.</li> <li>-I will move some pairs back if they are finding it too easy.</li> <li>-I will demonstrate the technique and focus students to look at specific parts of my technique.</li> </ul> 	Stopwatch Whistle Cones

Realistic timing

Teaching points should be **short and precise**. Focusing on **specific parts of the technique**.

**Description of drill**, your teacher should be able to set up your drill using this.

Consider how you will organise your **space and pupils** here. Diagrams will help.

# Year 10 Dance

Knowledge, understanding and skills for choreography

## Action

Travel  
Turn  
Elevation  
Gesture  
Stillness  
Use of different body parts  
Floor work  
Transfer of weight

## Dynamics

Fast/slow  
Sudden/sustained  
Acceleration/deceleration  
Strong/light  
Direct/indirect  
Flowing/abrupt

## Spatial Content

Pathways  
Levels  
Direction  
Size of movement  
Patterns  
Spatial design

## Relationship Content

Lead and follow  
Mirroring  
Action and reaction  
Accumulation  
Complement and contrast  
Counterpoint  
Contact  
Formations

## Choreographic processes

Researching  
Improvising  
Generating  
Selecting  
Developing  
Structuring  
Refining and synthesising

## Structuring devices and form

Binary  
Ternary  
Rondo  
Narrative  
Episodic  
Beginning/middle/end  
Unity  
Logical sequence  
Transitions

## Choreographic devices

Motif and development  
Repetition  
Contrast  
Highlights  
Climax  
Manipulation of number  
Unison and canon

Knowledge, understanding and skills for critical appreciation

## Features of production

**Staging/set:** Eg- projection, furniture, structures, backdrop, screens and features of these such as colour, texture, shape, decoration, materials.

**Lighting:** Eg- Colour, placement, direction, angles etc.

**Properties:** Eg- Size, shape, materials, how used etc.

**Costume:** Footwear, masks, make up, accessories, Features such as colour, texture, material, flow, shape, line, weight, decoration and how they define character or gender, identify characters, enhance or sculpt the body and enhance the action.

**Dancers:** Number and gender.

**Aural setting:** Eg: Song, instrumental, orchestral, spoken word, silence, natural sound, found sound, body percussion, style, structure and musical elements such as tone, pitch and rhythm.

**Dance for camera:** Eg- Placement, angle, proximity, special effects.

## Choreography key words

**Stimulus:** The starting point for a dance piece.

**Motif:** A short phrase of movement that reflects a stimulus.

## Choreographic intention:

What the choreographer would like the audience to learn about the dance.

## Choreographic approach:

How the choreographer created movement material eg- improvisation, collaboration, choreographic tasks.

## Communication of choreographic intent

Mood  
Meaning  
Idea  
Theme  
Style/style fusion

## Performance environment

Proscenium arch  
End stage  
Site-sensitive  
In-the-round

**Physical:** The purpose of physical therapies is to help individuals to maintain, improve or recover their physical abilities.

- Yoga
- Tai chi
- Reiki



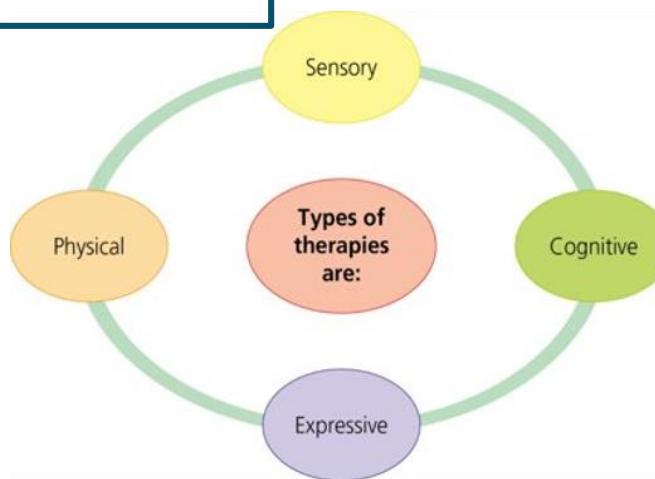
**Expressive:** The purpose of expressive therapies is to stimulate the expression of thoughts and emotions.

- Art therapy
- Play therapy



**Sensory:** The purpose of sensory therapies is to stimulate the five senses of sight, sound, touch, taste and smell.

- Aromatherapy
- Reflexology
- Massage



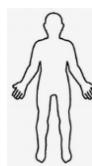
**Cognitive:** The purpose of cognitive therapies is to stimulate the mind and body.

- Hypnotherapy
- Speech and language therapy
- Reminiscence therapy
- Mind–body healing by using the power of positive thinking



### Benefits of therapies

Physical	Intellectual	Emotional	Social
<ul style="list-style-type: none"> <li>• Reducing pain</li> <li>• Improve circulation</li> <li>• Improve coordination</li> <li>• Lower blood pressure</li> <li>• Improve dexterity</li> <li>• Encourage body movement</li> <li>• Improve flexibility</li> <li>• Improve heart function</li> <li>• Increase strength</li> </ul>	<ul style="list-style-type: none"> <li>• Improve concentration</li> <li>• Improve focus</li> <li>• Being relaxed and calm improves mind to be more creative</li> <li>• Improve communication</li> <li>• Improve imagination</li> <li>• Increased awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Improve self esteem</li> <li>• Maintain a sense of well being</li> <li>• Reduce stress and anxiety</li> <li>• Reduce depression</li> <li>• Improve confidence</li> <li>• Help deal with grief</li> </ul>	<ul style="list-style-type: none"> <li>• Improving interactions</li> <li>• Make friends - increased confidence</li> <li>• Cooperation/working together</li> <li>• Share views and opinions – build connections</li> <li>• Understanding of rules</li> <li>• Taking responsibility</li> <li>• Cooperation</li> </ul>



# Roll-a-dice Revision



Based on your **OPTION SUBJECT**, create questions for each square on the grid. Once you're done, take it in turns to roll two dice and answer the corresponding questions.

	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

# Pricing



When pricing a product, a business will make an informed decision based on its market research and the factors we will discuss.

## Cost of production

In general terms, a business will price its product by working out what its costs to buy or make the product and then adding the amount of profit it would like to make. There is little point selling a product for a lower price than it has cost to produce as the business would make a loss.

When deciding on price, a business will also need to understand the income level of its target customers. For example, luxury car makers can charge high prices as their potential customers will earn a high salary. Budget supermarkets will charge low prices as many of their customers will have a low income.

## Competitor Prices

Competitors might already have similar products and it will be difficult to price your product higher than theirs – customers will go for cheaper option.

Larger businesses have more bargaining power and therefore can get raw materials and stock cheaper than smaller business. This helps to reduce production costs and means that they can sell their products cheaper.

When pricing products lower, you must consider the impact this will have on production costs and profits.

**Competitive pricing** = pricing goods at the same price as competitors are charging

### Competitive pricing

**Target market** – new and existing customers

**Pricing tactic** – setting a price that is similar to that of a local competitor, e.g. supermarket price matching goods sold by their competitors.

#### Advantages

Because all businesses are changing the same price, it could damage the business's ability to compete.

May attract new customers as the price is the same as their usual retailer.

#### Disadvantages

Profit margins are likely to be low as the selling price may only be sufficient to cover the production costs of the goods.

Businesses need to be creative in their methods of attracting customers, as price alone will not encourage customers to the store.

**Price skimming** = set the price high initially and then decreasing the price when demand subsides

### Price Skimming

**Target market** – new customers.

**Pricing tactic** – introduce the product at a high price and then gradually lower it over time E.g. when Dyson introduced a bagless clearer, there were no similar alternative products, so they could charge very high prices.

#### Advantages

High prices can give a product a good image.

A good image can lead customers to think the product is of high quality.

Businesses will make higher profits while the price is high, and this additional money helps pay back research costs that have been incurred.

#### Disadvantages

Some customers will be lost due to the high price.

Sales can be lost, reducing revenue as customers are put off by the higher price.

There is a possibility that competitors will bring out lower priced products and therefore sales will be lost.

## Price Penetration

= Setting the price low initially for a limited time and then increasing the price later; in line with competitors



### Price Penetration

**Target market** – new customers

**Pricing tactic** – introduce the product at a lower price than usual to attract customers. Gradually increase the price over time, e.g. new flavour crisps might be sold at half the price they will be sold at eventually

#### Advantages

Attracts customers to a product and encouraged them to try it in the hope they will continue to purchase it once prices increase. Price penetration is effective in increasing market share quickly.

#### Disadvantages

While setting at the lower cost, revenue is lost and therefore profit is lower.

Products that have a very short life span, for example, fashion clothing, are not suited to this method of pricing because by the time the price rises, the product will no longer be in fashion.

**Psychological pricing** = pricing goods at a price that is perceived to be lower than it actually is e.g. 99p

### Psychological Pricing

**Target market** – new and existing customers.

**Pricing tactic** – setting a price that appears attractive to a customer, e.g. selling a holiday for £999 rather than £1000.

#### Advantages

Attracts customers as it is perceived to be a good deal; this may increase customer numbers, revenue and profit margins.

Products are being sold for only slightly less than their true value.

#### Disadvantages

Customers are becoming increasingly aware of this type of pricing and may be less susceptible than in the past.

Difficult to offer percentage discounts – it is difficult to offer 10% off 99p.

# Knowledge Organiser 14 : Boolean logic, Programming Languages and IDEs

## 1. Logic Gate Symbols



$\sim A$

$A \wedge B$

$A \& B$

**OR**

**AND**

**NOT**

**OR**

## 2. Truth Tables

A	NOT A
0	1
1	0

A	B	A AND B
0	0	0
0	1	0
1	0	0
1	1	1

A	B	A OR B
0	0	0
0	1	1
1	0	1
1	1	1

## 4. Translators

Assembler Assembles' assembly language into machine code. Translates the whole code before execution

Compiler Translates source code from high-level languages into object code and then into machine code ready to be processed by the CPU. The whole program is translated into machine code before it is run.

Compiler Advantages

- No need for translation software at run-time, and no need to share original source code
- Speed of execution is faster because code is usually optimised.

Compiler Disadvantages

- You cannot compile the program if there are syntax errors anywhere in it which can make it tricky to debug.
- If you change anything you need to recompile the code

Interpreter Translates source code from high level languages into machine code ready to be processed by the CPU. The program is translated line by line as the program is running.

Interpreter Advantages

- Easy to write source code because the program will always run, stopping when it finds a syntax error.
- Code does not need to be recompiled when code is changed, and it is easy to try out commands when the program has paused after finding an error.

Interpreter Disadvantages

- Translation software is needed at run-time, so you need to share the original source code.
- Speed of execution is slower because the code is not optimised

## 3. Levels of Programming Languages

Machine Code  
1st Generation

- Binary representation of instructions in a format that the CPU can decode and execute.
- Have an operation code (opcode) instruction and address or data to use (operand).

Low-Level Languages  
2nd Generation

- Written in Assembly language.
- Translated by an assembler into machine code.
- Used for embedded systems and device drivers where instructing the hardware directly is necessary.
- One instruction translated into one machine code instruction.
- The code works on one type of processor only.
- The programmer works with memory directly.
- Code is harder to write and understand.
- Memory efficient.
- Code is fast to execute.

High-Level Languages  
3rd Generation

- Source code is written in languages as Python, C++.
- Translated by a compiler or interpreter into machine code.
- Makes the writing of computer programs easier by using commands that are like English.
- One source code instruction translates to many machine code instructions.
- Code will run on different types of processors.
- The programmer has lots of data structures to use.
- Code is quicker and easier to understand and write.
- Less memory efficient.
- Code can be slower to execute if it is not optimised.

## 5. Integrated Development Environments

Debugging Tools

- Breakpoints - stopping at a line of code during execution.
- Stepping through lines of code one at a time.
- Tracing through a program to output the values of variables.

Run Time Environment

- Output window.
- Simulating different devices the program can run on.

Usability Functions

- Navigation, showing/hiding sections of code.
- Formatting source code often in different colours.
- Text editor functions
- Illustrating keyword syntax and auto-completing command entry.

Translator

- Some IDEs have an inbuilt translator to test the program and make small alterations before compiling the final program into an executable file for distribution

Key Word	Meaning
<b>Family (of instruments)</b>	Instruments or equipment which are 'related' to your instrument (e.g. in the same orchestral 'family' or 'section' or different sizes and types of your instrument).
<b>Pitch</b>	The highness or lowness of a sound, governed by the rate of vibrations producing it.
<b>Pitch Range</b>	The distance from the lowest to the highest note a musical instrument can play. For a singing voice, the equivalent is the "vocal range".
<b>Playing Technique</b>	The ability of instrumental and vocal musicians or performers using technology to exert optimal control of their instruments of playing equipment, in order to produce the precise musical effects they desire. Also includes: playing a musical instrument or singing in a particular way (e.g. <i>pizzicato/arco/col legno</i> for strings).
<b>Sound Production</b>	Describes how sound is produced either on a musical instrument e.g. <i>via vibration</i> , a voice or electronically, using digital technology.
<b>Special Effects/FX</b>	FX in music technology, stands for "effects" which is the processing of sound using digital software (e.g. <i>reverb, delay, phaser etc</i> ). Musical instruments and the voice can also produce special effects by being played or performed in a particular way (see <i>Playing Technique above</i> ).
<b>Tessitura</b>	A term used commonly in vocal music and singing to describe the pitch range in which most notes of the vocal part fall (comfortably for the singer/performer).
<b>Timbre/Sonority</b>	The character or quality of musical sound or voice. Each musical instrument has its own unique timbre, which is how we identify it as distinct from others.
<b>Transposing Instrument</b>	An orchestral instrument for which parts are written in a different key from that in which they sound e.g. <i>the clarinet and many brass instruments</i> .

- ✓ A single BEAT is a basic unit of musical time. In dance music, beats are grouped together to make a repeating pattern – normally made up of either twos, threes or fours.
- ✓ The repeating pattern of beats gives us the METRE or the TIME of the music, shown by the TIME SIGNATURE at the start of a piece of music. Each repetition of the beat-pattern is called a BAR and bars are separated by vertical lines called BARLINES.
- ✓ A DOUBLE BARLINE always comes at the end of a piece of music or section of music. The TOP NUMBER of a time signature tells you how many beats there are in each bar.
- ✓ The BOTTOM NUMBER tells you what types or note values these beats are (as divisions of a semibreve = 1): 1 = Semibreve 2 = Minim 4 = Crotchet 8 = Quaver 16 = Semiquaver SIMPLE DUPLE METRE:
- ✓ Two beats to a bar Dance music such as MARCHES, the TANGO and IRISH REEL often use simple duple metre. SIMPLE TRIPLE METRE: Three beats to a bar Dance music such as WALTZES and the MINUET, COURANTE and SARABANDE from the Baroque Dance Suite often use simple triple metre.
- ✓ SIMPLE QUADRUPLE METRE: Four beats to a bar Dance music such as the TANGO, the IRISH REEL, the ALLEMANDE from The Baroque Dance Suite, AMERICAN LINE DANCE MUSIC (Country and Western), DISCO and CLUB DANCE often use simple quadruple metre.

# Child Development: TA3 and TA4: Observations and Evaluations

## LO3: Methods of observation

- Narrative
- Checklist
- Snapshot
- Time sample
- Participative
- Non-participative

## LO3: Methods of recording

- Chart
- Written
- Child's work
- Photographs

Consideration for the best method to use, justifying why.

## LO4: Plan play activities for a chosen area of development:

- Chosen activity
- Reason for choice
- Aims
- Developmental area
- Timing
- Safety considerations
- Appropriate resources
- How the activity will be introduced to the child

## LO4: How to evaluate plans for play activities:

- Using feedback from others
- Using self-reflection
- Were the aims met
- Successes, strengths and weaknesses
- Changes or recommendations to improve activity and planning

**Reason for choice:** Relevance to developmental area chosen/benefits to the child.

**Safety considerations:** Is the area safe – inside/ outside (traffic, gates). Is there appropriate supervision available, are the resources child friendly, no sharp items, clean materials, clean working area.

## Useful sentence starters:

- I would recommend ...
- The impact is...
- This has affected ...
- As explained by...
- This is important because...
- In reflection...
- Overall...
- I think that ...
- Their needs would be met by...
- This is suitable because...
- The benefit is...
- The advantages is...
- The disadvantage is...

## Useful connectives:

- On the other hand
- Whereas
- Subsequently
- Also
- Alternatively
- However
- In comparison
- More importantly
- Additionally

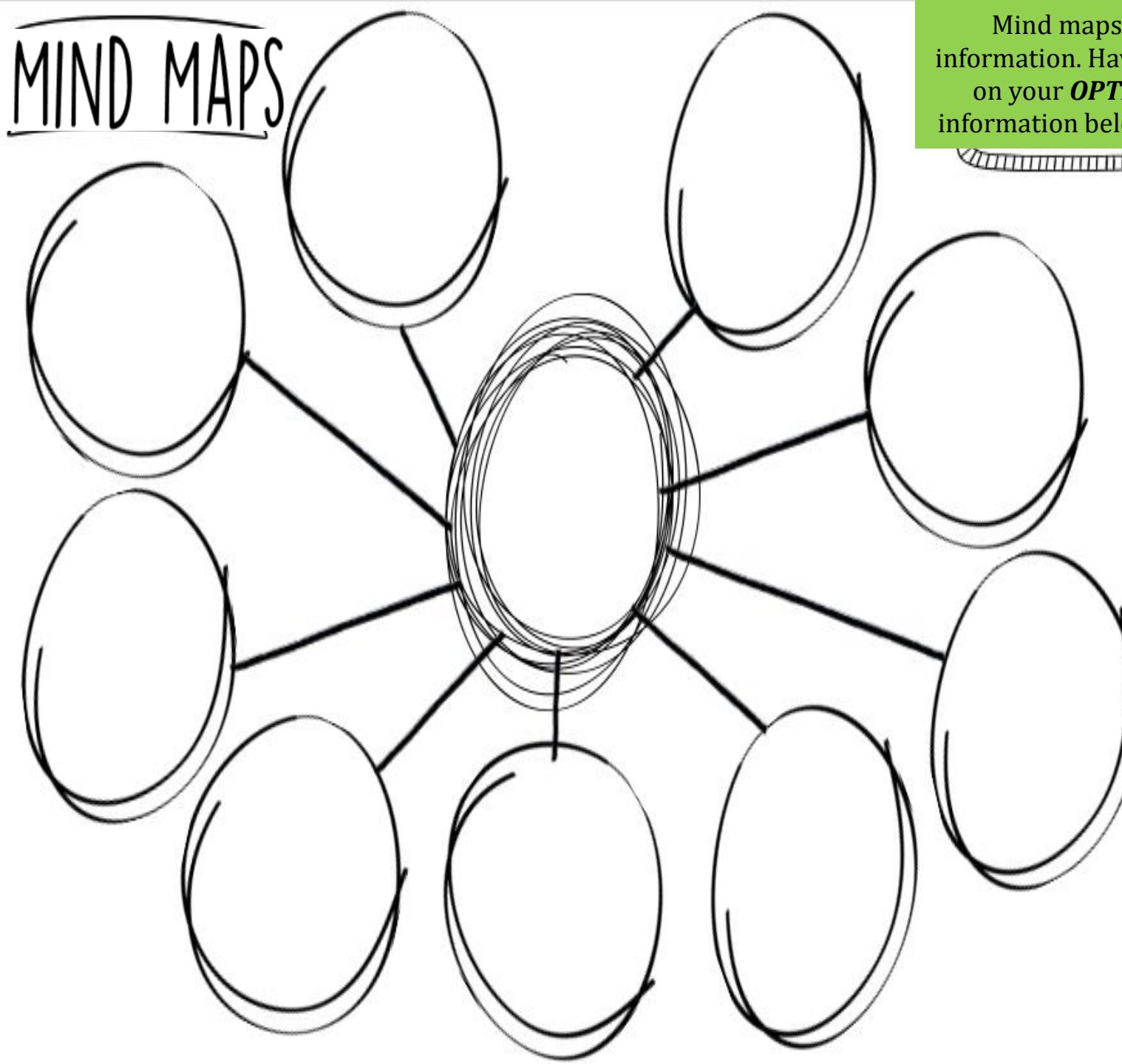
Key Terminology		Description	
<b>Media</b>	Forms of communication or products that communicate a message to an audience.		
<b>Traditional Media</b>	Any form of mass communication available before the advent of digital media.		
<b>New Media</b>	Any form of mass communication only ever produced using digital methods.		
<b>Pre-Production</b>	The process of planning elements involved in a form of media.		
<b>Post-Production</b>	The stage after production when editing of visual and audio materials begins.		
<b>CGI</b>	Computer Generated Imagery – Special visual effects added to a product using computer software		
<b>Distribution</b>	The action of sharing a product with others.		
Evolution over time			
<b>Late 1600s</b>	Local newspapers were first printed		
<b>Early 1700s</b>	First magazines produced		
<b>Late 1800s</b>	First black and white silent film		
<b>1920s</b>	First public demonstration of radio and TV		
Scales of media			
<b>Small Scale</b>	Local and national companies that often focus on one type of media product with a small number of staff who perform multiple roles. EG: Coffee Films, Ustwo Games, American Chordata magazine, the Film music production house.		
<b>Large Scale</b>	Multinational and global companies that produce many different types of media products. EG: Channel 4, Facebook, EA Games, News Corp, Warner Bros.		

Media Industry Sectors		Description	
Type	Media	Type	Media
<b>Traditional Media</b>	<b>Television (TV)</b>	Planning, production, distribution, and broadcasting of programmes on TV.	
	<b>Radio</b>	Planning, production and distribution of audio and music programmes to be broadcast on different platforms.	
	<b>Film</b>	Planning, production, and distribution of recorded video material for feature films including animation.	
	<b>Print Publishing</b>	Planning, production, printing and distribution of printed documents including books, comics, graphic novels, magazines and newspapers.	
<b>New Media</b>	<b>Internet</b>	Planning, production and use of websites and social media platforms/ apps to provide a wide variety of products and services.	
	<b>Computer Games</b>	Planning, design, development and distribution of games to be played on a variety of digital platforms.	
	<b>Interactive Media</b>	Planning and production of a digital system which combines different types of media to create an interactive visual product.	
	<b>Digital Publishing</b>	Planning, production, distribution of eBooks and digital magazines, journals, newspapers and promotional material.	

### Production phases

- 1. Pre-production**
  - Products are researched
  - Ideas and concepts are developed, planned, and designed (concept design)
- 2. Production**
  - Product parts are created from designs by producers or creatives (workers within organisations)
- 3. Post-Production**
  - All parts are brought together
  - Parts are edited to form a final product
- 4. Distribution**
  - Products are sent out in different ways for audiences to access on a range of platforms.

Media Industry Products		Description	
Product	Description	Traditional Media	New Media
<b>Video</b>	Recording, editing and production of moving visual images.	Film, TV	Games, interactive media, internet
<b>Audio</b>	Recording, editing and production of vocal and/or other sounds or noises.	Film, TV, radio	Internet, games, interactive media, eBooks, Internet, games, interactive media
<b>Music</b>	Recording, arrangement and production of vocal and/or instrumental sounds.	Film, TV, radio	Internet, games, interactive media
<b>Animation</b>	Digital photographing or computer generation of drawings or models to create the illusion of movement.	Film, TV	Internet, games, interactive media
<b>Special Effects (SFX)</b>	An illusion created by props, camerawork, or lighting recording.	Film, TV	Games
<b>Visual Effects (VFX)</b>	Computer-generated imagery to enhance a video recording.		
<b>Digital Imaging &amp; graphics</b>	Creation of pictures or designs using digital software, a digital camera or scanner.	Film, TV, print	Internet, games, digital publishing
<b>Social media</b>	Digital-based programmes that encourage connections and communication between their users, using the internet and digital devices.	Film, TV, radio	Internet, games, interactive media
<b>Digital games</b>	Games that are played using digital technology.		Internet, games, interactive media
<b>Comics and graphic novel</b>	Stories that are told using pictures in panels, along with text and speech bubbles.	Print	Digital publishing, internet, computer games, interactive media
<b>Websites</b>	Collections of webpages containing text, images and interactive elements.	Film, TV, radio, print	Digital publishing, internet, computer games, interactive media
<b>Multimedia</b>	Combines different types of media into one form of communication.	Film	Internet, digital publishing, games, interactive media
<b>eBooks</b>	Digital versions of printed books that can be read on a device such as a tablet.		Games, interactive media
<b>Augmented Reality (AR)</b>	When computer-generated images on screen are combined with a real-world environment	Film	
<b>Virtual Reality (VR)</b>	Computer Generated sounds and images that are not part of the users real-world environment		Video games, YouTube videos, Google Search, immersive education, simulation.



Mind maps are a great way to revise key information. Have a read through the information on your **OPTION SUBJECT** and then use the information below to help you create mind maps.

#### HOW TO TAKE NOTES

#### MIND MAPPING AND BRAINSTORMING

##### ABOUT

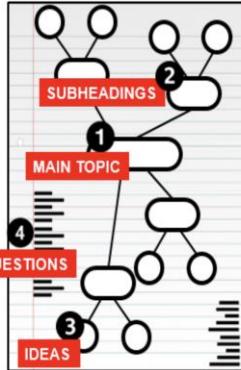
Mind Mapping and Brainstorming is a highly visual method of representing information

- Establishes links and relationships between ideas and concepts
- Can be used to take notes as part of the Cornell Method
- Effective when working from textbooks or written notes

##### HOW

This works far better on paper than as a digital method  
Make sure you start in the centre of the page

- 1 TOPIC
- 2 SUBHEADINGS
- 3 IDEAS
- 4 QUESTIONS



- 1 Determine the overall topic or theme  
Write this in the centre of your page and circle it  
If the main focus of your mind map changes – create an additional mind map – do not add the new focus to the mind map that you are already working on.

- 2 You will need to add major facts (subheadings) that relate to your main topic

- 3 Each subheading will have at least one idea related to it.  
Make sure that your ideas are visually distinct from your subheadings
- 4 Use the edges of your document to write questions  
These should relate to the ideas in your mind map  
You could also use these areas to expand on points that need additional clarification on the main mind map

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Fancy some additional Class Charts points? Impress your teachers with any of these BHAmazing pieces of vocabulary, and they will award you extra CC points. Challenge: Can you use them in any sentences and show a member of the Senior Leadership Team?

Word List 1	Word List 2	Word List 3	Word List 4	Word List 5	Word List 6	Word List 7
<b><u>Myriad</u></b> (adjective) - many	<b><u>Caustic</u></b> (adjective) - mean / harsh	<b><u>Tension</u></b> (noun) - feeling of anxiety or nervousness	<b><u>Omniscient</u></b> (adjective) - all-knowing	<b><u>Sentimental</u></b> (adjective) - emotional	<b><u>Oppressed</u></b> (adjective) - subjected to cruel mistreatment	<b><u>Metamorphosis</u></b> (noun) - a change / transformation
<b><u>Assert</u></b> (verb) - state a fact confidently or forcefully	<b><u>Elucidate</u></b> (verb) - to make clear	<b><u>Esoteric</u></b> (adjective) - likely to only be understood by a small number or people / obscure	<b><u>Oblivious</u></b> (adjective) - unaware	<b><u>Gullible</u></b> (adjective) - believes things easily	<b><u>Bawdy</u></b> (adjective) - rude or vulgar	<b><u>Abhorrent</u></b> (adjective) - repulsive
<b><u>Egregious</u></b> (adjective) - outstandingly bad		<b><u>Naïve</u></b> (adjective) - inexperienced / unaware	<b><u>Supercilious</u></b> (adjective) - arrogant	<b><u>Hypermasculine</u></b> (adjective) - overly masculine	<b><u>Exploit</u></b> (verb) - to use someone for your own good	<b><u>Abhor</u></b> (verb) - to hate
<b><u>Erroneous</u></b> (adjective) - wrong	<b><u>Tenuous</u></b> (adjective) - weak or fragile	<b><u>Pretentious</u></b> (adjective) - arrogant	<b><u>Tyrannical</u></b> (adjective) - a cruel dictator	<b><u>Atavistic</u></b> (adjective) - has characteristics of an earlier generation	<b><u>Epiphany</u></b> (noun) - a sudden realization	<b><u>Fate</u></b> (adjective) - destiny
<b><u>Engender</u></b> (verb) - to cause	<b><u>Perfunctory</u></b> (adjective) - carried out with minimal effort	<b><u>Pompous</u></b> (adjective) - arrogant	<b><u>Brazen</u></b> (adjective) - bold, shameless	<b><u>Troglodytic</u></b> (adjective) - like a caveman	<b><u>Façade</u></b> (noun) - a front (to 'wear a façade' means you wear a metaphorical mask, covering your true emotions or character)	<b><u>Integral</u></b> (adjective) - important
<b><u>Employ</u></b> (verb) - to make use of	<b><u>Moral</u></b> (noun) - a lesson	<b><u>Privileged</u></b> (adjective) - having an advantage over other, usually wealth	<b><u>Elusive</u></b> (adjective) - mysterious	<b><u>Apathetic</u></b> (adjective) - indifferent / lazy	<b><u>Segregated</u></b> (adjective) - separated	<b><u>Demise</u></b> (noun) - a person's downfall or death
<b><u>Salient</u></b> (adjective) - most noticeable and important	<b><u>Autonomy</u></b> (noun) - independence	<b><u>Compassionate</u></b> (adjective) - sympathetic	<b><u>Chauvinistic</u></b> (adjective) - has an attitude of superiority to opposite sex	<b><u>Misogynistic</u></b> (adjective) - hateful towards women	<b><u>Ridicule</u></b> (verb) - to make fun of	
<b><u>Advantageous</u></b> (adjective) - providing an advantage / beneficial	<b><u>Assertive</u></b> (adjective) - confidence	<b><u>Vindictive</u></b> (adjective) - spiteful, cruel	<b><u>Materialistic</u></b> (adjective) - cares for objects and commodities	<b><u>Choleric</u></b> (adjective) - quick-tempered, angry	<b><u>Deride</u></b> (verb) - to mock	
<b><u>Galvanize</u></b> (verb) - to shock or excite someone into action	<b><u>Conceited</u></b> (adjective) - excessively proud / vain	<b><u>Duplicitous</u></b> (adjective) - having two sides	<b><u>Prophetic</u></b> (adjective) - able to accurately predict	<b><u>Secular</u></b> (adjective) - not religious	<b><u>Contempt</u></b> (noun) - hate	
<b><u>Substantiate</u></b> (verb) - to provide evidence	<b><u>Superior</u></b> (adjective) - better than	<b><u>Narcissistic</u></b> (adjective) - self-obsessed	<b><u>Impulsive</u></b> (adjective) - rash / careless		<b><u>Hysterical</u></b> (adjective) - uncontrolled emotion	
					<b><u>Aloof</u></b> (adjective) - stand-offish	
					<b><u>Degenerate</u></b> (adjective) - disgusting	
					<b><u>Depraved</u></b> (adjective) - immoral / evil	
					<b><u>Feral</u></b> (adjective) - wild	

## My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.