

KEY STAGE 3 KNOWLEDGE ORGANISER

POWER PACK



YEAR 7 – TERM 2

How do Knowledge Organisers support learning?

What are Knowledge Organisers?



Knowledge organisers are **one-page documents that contain all of the key vocabulary and information needed to succeed at the highest level** for a particular topic or unit. They are available to all in each department for every subject/qualification. They provide a clear reference point and a backbone of understanding to make learning focused and meaningful. They are printed and glued into exercise books at the start of each topic or unit. Additional copies can also be provided if required.

What do Knowledge Organisers look like?

Each Knowledge Organiser comprises of a range of colour-coded tables of key vocabulary, definitions, information and summaries with each table's contents numbered. **The colour-coding and numbering makes each piece of content easily identifiable and ensures that learning is incremental and manageable.** All Knowledge Organisers provide information about the Year, Topic/Unit Question and Term. There are also subtle differences that relate to subject-specific requirements.

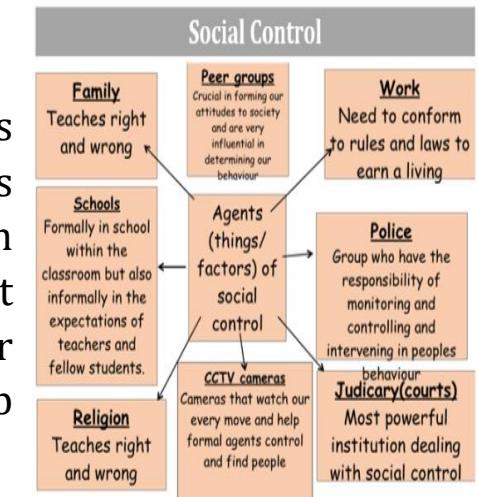


Why are Knowledge Organisers important?

Having all of this **key information in one place makes it easily accessible before during and after the study of a particular unit or topic**. Teachers continuously refer to the content of Knowledge Organisers within lessons and to support independent learning where they can be used to develop and consolidate knowledge. Therefore, Knowledge Organisers form the backbone of learning across the academy.

How do teachers use Knowledge Organisers?

Each department has carefully created each Knowledge Organiser so that it is **individually tailored to the curriculum taught at North Kesteven**. Teachers have selected the most key building blocks (knowledge and information) for each topic or unit provide clear support to develop knowledgeable and skilled subject experts. The knowledge and information contained on the Knowledge Organiser is carefully shared, identified and practised within and beyond lessons to develop confidence and fluency.



Key Concepts - Algebra			
1	Quadratic	A quadratic expression is of the form $ax^2 + bx + c$	Example of quadratic expressions: $8x^2 - 3x + 7$
2	Factorising Quadratics	$x^2 + bx + c$ find the two numbers that add to give b and multiply to give c.	$x^2 + 7x + 10 = (x + 5)(x + 2)$
3	Difference of Two Squares	An expression of the form $a^2 - b^2$ can be factorised to give $(a + b)(a - b)$	$x^2 - 25 = (x + 5)(x - 5)$ $16x^2 - 81 = (4x + 9)(4x - 9)$
4	Rearranging Formulae	Use inverse operations on both sides of the formula (balancing method) until you find the expression for the letter.	Make x the subject of y $\begin{aligned} y &= \frac{2x-1}{x} \\ yz &= 2x - 1 \\ yz + 1 &= 2x \\ \frac{yz+1}{2} &= x \end{aligned}$
5	Quadratic	A quadratic expression is of the form $ax^2 + bx + c$	Example of quadratic expressions: $8x^2 - 3x + 7$
English verb (infinitive)	English past participle	German verb (infinitive)	German past participle
To stay	stayed	wohnen	gewohnt
To make/do	Made/done	machen	gemacht
To eat	eaten	essen	gegessen
To sleep	slept	schlafen	geschlafen
To play	played	spielen	gespielt
To see	seen	sehen	gesehen

How do students use Knowledge Organisers?

There is regular testing within lessons on the understanding of the content of each Knowledge Organiser – this is carefully designed into the sequencing of the curriculum and lessons to gradually build and develop rather than overwhelm. Regular independent learning is structured around Knowledge Organisers. **The real beauty of the Knowledge Organiser is its ability to support students and parents independently outside of lessons.**

Why not try our...

- SUPER 6 STRATEGIES -

RECALL

Strategy	Activity	Imagery
3x3x3:	<ol style="list-style-type: none"> 1. Read 3 key words and definitions or pieces of information from one coloured box, 3 from another coloured box, and a final 3 from another coloured box. 2. Return to the first 3 words but this time cover up the key words and see if you can recall them by just reading the definitions – repeat for the other 6 words. 3. Repeat the previous step but this time cover up the definitions and see if you can recall them by just reading the key word. 4. Repeat using a combination of step 2 and step 3. 	
Race to the Bottom/Top:	<p>Race to the Bottom/Top:</p> <ol style="list-style-type: none"> 1. Pick one of the coloured boxes on the <i>Knowledge Organiser</i>. 2. Starting from the top, cover the key word and see if you can recall it by reading the definition. 3. See how far down the box you can get. 4. Repeat but this time cover up the definition and see if you can recall it by just reading the key word. 	

RECALL – these two strategies focus on your ability to bring knowledge, vocabulary and key information to mind quickly.

Strategy	Activity	Imagery
SYNTHESIS:	<p>Answer Planning:</p> <ol style="list-style-type: none"> 1. Write down a key question for the topic on a piece of paper 2. Try to recall as many key pieces of vocabulary and knowledge as possible that link to this. 3. Use the <i>Knowledge Organiser</i> to see what you have missed. 4. Add these in a different colour. 	
Categorising:	<p>Categorising:</p> <ol style="list-style-type: none"> 1. Pick one of the coloured boxes on the <i>Knowledge Organiser</i> and consider the heading/category. 2. Cover up the <i>Knowledge Organiser</i> and on a separate piece of paper, write down as many key words or pieces of information that you can that relate to the heading/category. 3. Uncover the <i>Knowledge Organiser</i>, look at what you have missed and add these in a different colour pen. 4. Get somebody to test you on the words you have added, and then re-attempt steps 1-3. 	

SYNTHESIS – these two strategies focus applying your knowledge to show your thinking, understanding and reasoning.

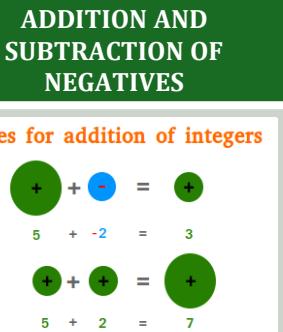
Strategy	Activity	Imagery
REFLECTION:	<p>RAG-rate:</p> <ol style="list-style-type: none"> 1. On completion of a unit of work get somebody to test you on each aspect of the <i>Knowledge Organiser</i>. 2. RAG-rate each piece: Red = don't know it, Amber = partly know it, Green = know it. 3. Revisit all Amber pieces frequently, and Red pieces more frequently. 4. After a set period of time, RAG-rate the knowledge organiser again and repeat the process. 	
REFLECTION:	<p>Booster:</p> <ol style="list-style-type: none"> 1. Revisit a piece of lesson work or an exam answer. 2. Use the <i>Knowledge Organiser</i> to locate any key vocabulary or relevant information that could be added to develop the work further. 3. Annotate the original piece of work to develop your thinking. 4. Re-write or type up the improved version of the work or exam answer. 	

REFLECTION – these two strategies focus on improving your existing knowledge and understanding by developing it further.

Year 7 | Term 2 | How do I use the story of 'Beowulf' to write creative fantasy fiction?

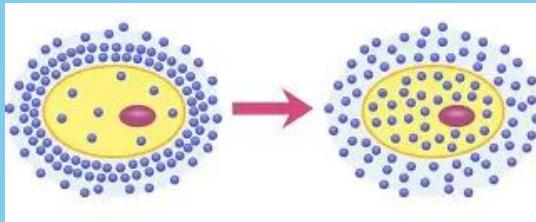
English

PLOT				CONTEXT				
						CHARACTERS		
						THEMES		
1	Who is Beowulf?	Beowulf (a Geat) is the hero of the tale: an extraordinary swimmer and warrior. He comes to defend the Danes & King Hrothgar against monsters. His father Ecgtheow owed a debt to the Danish king because he had raised blood money for him. Beowulf repays his father's debt by single-handedly slaying Grendel (a monster) and Grendel's mother. He returns home where he eventually becomes King. Beowulf rules for 50 years.	1	Beowulf	Beowulf is one of the most important surviving works of medieval literature which we have today. It is by far the longest Old English poem in existence and – at just over 3,000 lines – is the oldest surviving English epic poetry from before the Norman Conquest.	1	Beowulf	Beowulf (a Geat) is the hero of the tale: an extraordinary swimmer and warrior. He is an unusual hero as he fights monsters rather than other warriors. Beowulf is the first piece of English literature to present a dragon-slayer.
2	Why did Beowulf attack?	Beowulf's kingdom is terrorised by an angry dragon. Beowulf and his thanes (fellow warriors) climb to the dragon's lair where, upon seeing the beast, the thanes flee in terror, leaving only Wiglaf to battle at Beowulf's side. When the dragon wounds Beowulf fatally, Wiglaf attacks it with his sword, and Beowulf kills it with his dagger.	2	Key dates	Beowulf was probably composed around 750 AD. Circulated orally. It was written down sometime around 1000 AD. It is the only surviving Old English epic.	2	Grendel	The monster who terrorises the Danes and is slain by the hero. He is described as a shadowy figure (a 'mearcstapa', ['border-stepper'], whose eyes glow with a 'leoht unfæger' ['grim light'].
3	What happens to Beowulf?	Beowulf dies after battling the dragon which had begun to terrorise the Geats. Beowulf is old and has lost some of his strength. The epic tale has a tragic ending. Society breaks down following Beowulf's death. People fear the Swedes will swarm their land. This fear was true in England at the time. People feared invasions.	3	Old English	The history of English is generally divided into three periods usually called Old English (or Anglo-Saxon), Middle English, and Modern English. The Old English period covers from the fifth to the eleventh century. Therefore, Beowulf is written in Old English.	3	Hrothgar	King of the Danes, a people living in fear of Grendel before the warrior hero saves them.
4	A Thousand and One Arabian Nights	'A Thousand and One Nights' is a collection of popular stories originally passed on through the oral tradition and developed over several centuries, with material added at different periods and places.	4	A Thousand and One Arabian Nights	'A Thousand and One Nights' is a collection of popular stories originally passed on through the oral tradition and developed over several centuries, with material added at different periods and places.	4	Grendel's mother	Beowulf's second adversary. She tries to take revenge for her son. Beowulf follows her back to her underwater lair and kills her.
1	Oral tradition	Stories handed down through the spoken word.	1	Beowulf	Beowulf (a Geat) is the hero of the tale: an extraordinary swimmer and warrior. He is an unusual hero as he fights monsters rather than other warriors. Beowulf is the first piece of English literature to present a dragon-slayer.	1	Loyalty	Loyalty is Beowulf's guiding virtue. Beowulf comes to the assistance of the Danes to repay a sense of debt to the Danish king.
2	Epic poem	A long narrative poem celebrating the deeds of a hero or god.	2	Grendel	The monster who terrorises the Danes and is slain by the hero. He is described as a shadowy figure (a 'mearcstapa', ['border-stepper'], whose eyes glow with a 'leoht unfæger' ['grim light'].	2	Courage	Beowulf single-handedly defeats Grendel and Grendel's mother where other warriors have failed.
3	Allegory	A story with a hidden meaning, usually moral or political.	3	Hrothgar	King of the Danes, a people living in fear of Grendel before the warrior hero saves them.	3	Good vs Evil	Beowulf's stand against the monsters and the dragon symbolises the warrior's courage, as a representative of good, against evil.
4	Protagonist	The leading character or one of the major characters in a	4	Grendel's mother	Beowulf's second adversary. She tries to take revenge for her son. Beowulf follows her back to her underwater lair and kills her.	4	Morality	The moral of Beowulf is that it is better to die young with heroism and virtue than to grow to a ripe old age being cowardly and avoiding your responsibilities.
5	Antagonist	The character opposing the protagonist	5	The Dragon	Beowulf's final adversary. The dragon kills Beowulf.			

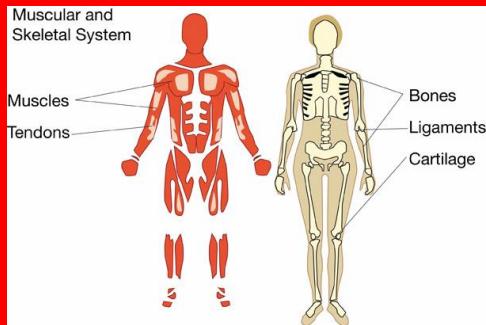
CALCULATION RULES			ALGEBRAIC NOTATION	VOCABULARY	
1	Collecting like terms	$2a + a + b + b$ simplified	$3a + 2b$.		
2	Substitution	$a = 5$ therefore $2a = 10$.			
3	Solving equations	Work backwards from your Variable. $2x + 3 = 15$ Subtract 3 then divide by 2.			
4	24-hour clock	Write in the form 00:00 e.g. 13:10. Do not include am or pm.			
5	Conversions	1000 units in a Kilo, 1000 milli-units in a unit, 100 centi-units in a unit.			
KEY FORMULAE AND CONVERSIONS			TIME UNIT CONVERSIONS	STEP BY STEP	
1	a^2	$a \times a$	Find $\frac{1}{4}$ of an hour 60 minutes/4 = 15 1/10 of an hour 60 minutes/10 = 6	1	Simplify an expression $2a + b + 2b - a + 5$ Collect like terms $2a - a = a$ $b + 2b = 3b$ $+5$ $a + 3b + 5$
2	$2a \times 2b$	$4ab$		2	Time A film starts at 7:45 pm. The film lasts 98 minutes. What time does the film finish? $98 \text{ mins} = 1 \text{ hour } 38 \text{ mins}$ $7:45 + 1 \text{ hour } = 8:47$ $47 \text{ mins} + 38 \text{ mins} = 85 \text{ mins}$ $85 \text{ mins} = 1 \text{ hour } 25 \text{ mins}$ $8:00 + 1 \text{ hour } 25 \text{ mins} = 9:25$
3	Metric mass conversions	$1000g = 1kg$ $1000mg = 1g$	ADDITION AND SUBTRACTION OF NEGATIVES Rules for addition of integers 		
4	Metric distance conversions	$1000m = 1km$ $1000mm = 1m$ $100cm = 1m$			
5	Metric capacity conversions	$1000ml = 1L$ $100cl = 1L$			

DIFFUSION ACROSS A CELL MEMBRANE

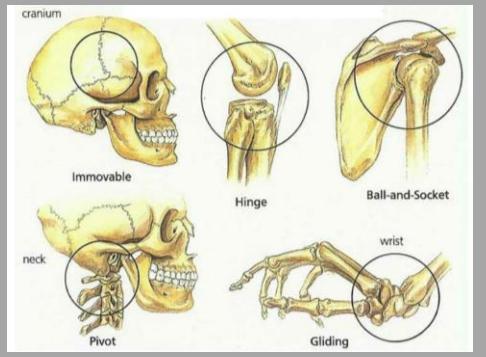
Particles move from areas of high concentration (here: outside the cell) to areas of low concentration (inside the cell).



THE MUSCULAR-SKELETAL SYSTEM

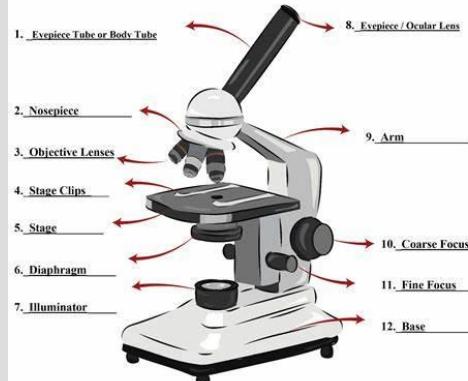


TYPES OF JOINTS



PARTS OF MICROSCOPE

Parts of a Microscope Worksheet



SPECIALISED CELLS

	A red blood cell is disc shaped, has no nucleus and carries oxygen.
	A guard cell is a semi-circular cell which guards the tiny holes (stomata), letting gases in and out.
	A root hair cell is long and thin and absorbs water from the soil
	A sperm cell is the male sex cell and has a tail so it can swim.
	A nerve cell is long, branched and transmits electrical messages.
	A skin cell is thin, flat and protects the body.
	A palisade cell has a regular shape and contains chloroplasts to trap the Sun's energy.

VOCABULARY

Cell	The smallest functional unit of a living organism.
Tissue	Group of cells of one type, working together to perform a function.
Organ	Group of different tissues working together to carry out a function.
Organ system	A group of organs working together to perform a function.
Skeleton	All the bones in an organism.
Bone marrow	Tissue found inside some bones where new blood cells are made.
Muscular-skeletal system	The organ system in which muscles and bones work together to cause movement and support the body.
Antagonistic muscle pair	A pair of muscles working in unison to create movement at a joint – as one muscle contracts, the other relaxes.
Joints	Parts of the skeleton where bones meet.
Ligaments	Connect bones in joints.
Cartilage	Smooth tissue found at the end of bones which reduces friction.
Tendons	Connect muscles to bones.
Specialised cells	A cell whose shape and structure enable it to perform a particular function.
Concentration	A measure of the number of particles in a given volume.
Uni-cellular organisms	Living things made up of one cell.

TYPES OF MAP			MAP SYMBOLS			COMPASS DIRECTIONS		
1	Political Map	Shows countries, borders, and cities.	1	Symbol	A picture/shape used to represent a feature on a map.	1	Cardinal Points	The four main compass points: North, East, South, West.
2	Physical Map	Shows natural features such as mountains, rivers, coasts, and deserts.	2	Key	Explains what each map symbol means.	2	Intercardinal Points	The four in-between points: NE, SE, SW, NW.
3	Thematic Map	Shows specific information (e.g. climate, population, rainfall).	3	Human Feature	Man-made features such as roads, railways, schools, or buildings.	3	16-point Compass	A detailed compass showing extra directions such as NNE, WNW.
4	Topographic Map	Shows relief, height, and both human and physical features using contour lines.	4	Physical Feature	Natural features such as rivers, forests, cliffs, or mountains.	4	Compass Rose	A diagram showing compass points on a map.
5	Ordnance Survey (OS) Map	Detailed UK maps at different scales, often used for navigation.	5	Spot Height	A number showing the exact height of the land above sea level.	5	Bearing	An exact direction measured in degrees (0° = N, 90° = E, etc.).
6	Choropleth Map	Uses shading/colour to show values like population density.	6	Triangulation Pillar	A concrete pillar marking high points, used in surveying.	GRID REFERENCES		
7	Sketch Map	A simplified drawing, often not to scale.	SCALE AND DISTANCE			1	Grid Lines	The lines on OS maps used to form grid squares.
KEY WORDS			1	Scale	The ratio between distances on a map and the real world.	2	Eastings	Vertical grid lines; numbers increase eastwards.
1	Latitude	Horizontal lines around the globe (Equator = 0°).	2	Ratio Scale	Example: 1:25,000 means 1cm = 250m in real life.	3	Northings	Horizontal grid lines; numbers increase northwards.
2	Longitude	Vertical lines around the globe (Prime Meridian = 0°).	3	Line Scale	A line marked on the map that helps measure distance.	4	4-figure Grid Reference	Identifies a grid square (e.g. 2734).
3	Equator	Imaginary line dividing Earth into Northern and Southern Hemispheres.	4	Small Scale Map	Shows a large area with little detail (e.g. a world map).	5	6-figure Grid Reference	Pinpoints a more exact location within a square (e.g. 273346).
4	Prime Meridian	Imaginary line dividing Earth into Eastern and Western Hemispheres.	5	Large Scale Map	Shows a small area with lots of detail (e.g. a town map).	6	Rule: Corridor then Stairs	Always read eastings first, then northings.
5	Atlas	A book of maps.	6	Straight-line Distance	Distance measured 'as the crow flies'.			
			7	Actual Distance	Distance following paths, roads, or routes.			

Tiere - Animals

1	der Hund	dog
2	der Fisch	fish
3	der Hamster	hamster
4	der Vogel	bird
5	der Wellensittich	budgie
6	die Katze	cat
7	die Maus	mouse
8	die Schlange	snake
9	die Schildkröte	tortoise
10	das Pferd	horse
11	das Kaninchen	rabbit
12	das Meerschweinchen	guinea pig

Familie - family members

1	der Bruder	brother
2	die Schwester	sister
3	der Vater	father
4	die Mutter	mother
5	der Grossvater (Opa)	grandfather
6	die Grossmutter (Oma)	grandmother
7	die Eltern	parents
8	die Grosseltern	grandparents
9	der Onkel	uncle
10	die Tante	aunt
11	der Cousin	cousin (m)
12	die Cousine	cousin (f)

Monate - months

1	Januar	January
2	Februar	February
3	März	March
4	April	April
5	Mai	May
6	Juni	June
7	Juli	July
8	August	August
9	September	September
10	Oktober	October
11	November	November
12	Dezember	December

Key questions and example answers

Q	Wie ist dein Haustier? What is your pet like?	Beschreib deine Schwester. Describe your sister.
A	Ich habe einen Hund. Er heisst Rover und er ist energisch. I have a dog. He is called Rover and he is energetic.	Meine Schwester heisst Agnes und sie ist vierzehn Jahre alt. Sie ist ziemlich schlank. Sie hat kurze, braune Haare und blaue Augen. My sister is called Agnes and is 14 years old. She is quite slim. She has short, brown hair and blue eyes.

Physical description

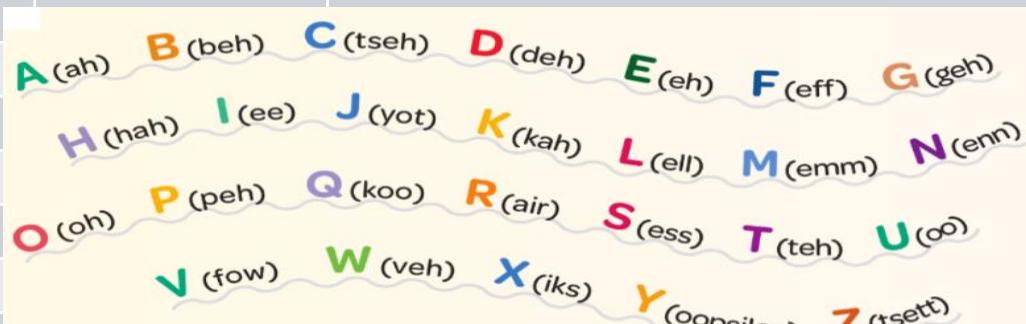
1	Ich habeHaare.	I have ... hair.
2	Ich habeAugen.	I have ... eyes.
3	lockig	curly
4	glatt	straight
5	lang	long
6	kurz	short
7	mittellang	medium length
8	groß	tall
9	klein	small
10	mittlegroß	medium sized



Adjectives

1	faul	lazy
2	energisch	energetic
3	dick	fat
4	schlank	thin
5	frech	cheeky
6	niedlich	cute

Alphabet - pronunciation



The/A

A **noun** is a word that names a person, animal, place or thing. In German, all nouns start with a capital letter and have a **gender**: masculine, feminine or neuter.

	<i>m</i>	<i>f</i>	<i>nt</i>
<i>the</i>	<i>der</i>	<i>die</i>	<i>das</i>
<i>a</i>	<i>ein</i>	<i>eine</i>	<i>ein</i>

Present Tense - key information

- 1 The present tense is used to talk about:
 - What is usually done
 - What is happening now
- 2 Verbs change their endings depending on who or what (the subject) is doing the action.
- 3 Many verbs are regular – they follow the same pattern.
- 4 Some verbs are irregular – they do not follow the pattern and we need to learn the common ones.

Present Tense - Irregular Verb 'Sein'

1	Sein	To be
2	Ich bin	I am
3	Du bist	You are
4	Er/Sie/Es ist	He/she/it is
5	Wir sind	We are
6	Ihr seid	You are
7	Sie/sie sind	You/they are

Present Tense – Regular Verbs

1	Take the infinitive (the whole verb ending in '-en'.	
2	Remove the '-en'	
3	Add the endings depending on the 'subject' (who is doing the action)	
4	Ich wohne	I live
5	Du wohnst	You live (someone you know)
6	Er/Sie/Es wohnt	He/She/It lives
7	Wir wohnen	We live
8	Ihr wohnt	You live (more than one person that you know)
9	Sie/sie wohnen	You (formal)/They live

Present Tense – Irregular Verb 'Haben'

1	Haben	To have
2	Ich habe	I have
3	Du hast	You have
4	Er/Sie/Es hat	He/she/it has
5	Wir haben	We have
6	Ihr habt	You have
7	Sie/sie haben	You/they have

KEY VOCABULARY

1	Materialism	The idea that we are only a body and when we die it is the end.
2	Dualism	The idea that we are made of a body and soul. The body dies but the soul lives on.
3	Soul	The part of the body which is eternal and lives on when we die.
4	Funeral	The ceremony at the end of someone's life to say goodbye or celebrate someone's life.
5	Afterlife	The belief that death isn't the end . The afterlife is life after death.

CHRISTIANITY

1	Free will	The belief that we are free to make our own choices which God will judge us on.
2	Heaven	Being close to God after death or a physical place 'good' people go when they die.
3	Hell	Being cast away from God or a physical place of punishment for those who have sinned.
4	Particular Judgement	When people are judged by God after death based on their actions and faith.

ISLAM

1	Janna	Heaven- a state of joy, happiness and peace.
2	Jahannom	Hell- a state of torment and suffering.
3	Akhira	The afterlife.
4	Munkar and Nakir	Judging angels who will question the dead to test their faith.
5	Barzakh	A place of waiting until the final judgement.

JUDAISM

1	Olan Ha-Ba	the world to come' The afterlife.
2	Sheol	A place of purification or waiting.
3	Gan Eden	Garden of Eden or Heaven.
4	Gehenna	Hell.
5	Mishnah	teaching', part of which tells Jews about the afterlife.

BUDDHISM

1	Samsara	The cycle of rebirth.
2	Karma	Actions and the consequences of your actions.
3	Enlightenment	The realisation of the truth about life- freedom from the cycle of rebirth.
4	Anatta	The idea that there is no permanent self or soul.
5	Anicca	The idea that nothing is permanent.

SIKHISM

1	Reincarnation	The cycle of birth, life, death and rebirth.
2	Mukti	The freeing of the soul.
3	Karma	Intentional action.
4	Sewa	Service to others.
5	Merit	Good actions (karma), capable of affecting a person's future experience in this life and the next.

| Year 7 | Term 2 | How have artists used the formal elements?

ART

KEY VOCABULARY		ANALYSING AN ARTWORK			SENTENCE STARTERS	
1	Analyse	To look at something very carefully and in detail.	1.	Subject	<ul style="list-style-type: none"> What can you see in the artwork? What type of Artwork is it? A still life, landscape, portrait? 	1 My first impressions of this piece are...
2	Media	The materials used to make an artwork, e.g. paint, pencil.	2	Materials	<ul style="list-style-type: none"> What materials have been used to make the artwork? How has it been made? 	2 This piece of work is about....
3	Composition	How an artwork is arranged.	3	Elements	<ul style="list-style-type: none"> How has the artist used the formal elements? Colour, Line, Shape, Space, Texture, Pattern. <i>Remember not all of these may be relevant.</i> 	3 In this piece I can see....
4	Experimentation	Trying new approaches to see what happens.	4	Emotion	<ul style="list-style-type: none"> How does the work make you feel? Why is this? 	4 I think the artist was inspired by....
5	Develop	To change and improve a piece of work over time.	5	Intent	<ul style="list-style-type: none"> What was the artist trying to communicate with us? 	5 This piece reminds me of....

ABOUT CHRISTOPHER MARLEY

- American artist, designer, photographer and author.
- He uses preserved natural specimens for his artwork.
- The specimens are reclaimed, bred or harvested. He wants to preserve and protect the creatures he works with.
- His work has to be stored in a climate controlled environment.



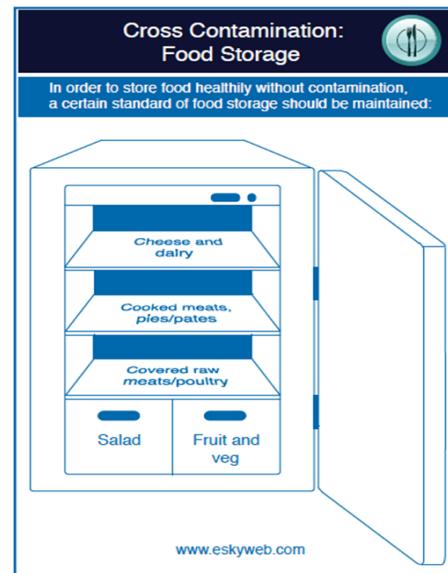
ABOUT LUCY ARNOLD

- Born in 1954 in America.
- The theme of her work is nature including Insects, birds, flowers, stones, and fallen feathers.
- She produces work in a variety of materials including watercolour, pastels and colouring pencils.

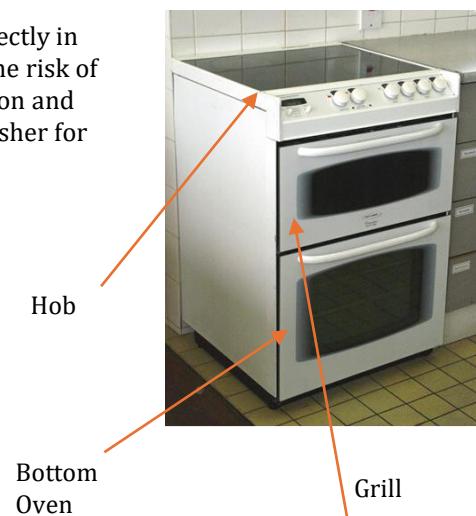


| Year 7 | Term 2 | How and why do we work hygienically in the kitchen? FOOD TECHNOLOGY

KEY WORD		DEFINITION
1	Bacteria	A microscopic organism which is all around us.
2	Contamination	Making something unsafe by adding something harmful.
3	Control measure	Actions taken to prevent, eliminate or reduce hazards in situations involving risk or potential harm.
4	Food poisoning	An illness caused by eating contaminated food. Symptoms include stomach ache, diarrhoea and vomiting.
5	High risk food	Foods which are highly likely to become contaminated as they contain all the correct conditions for bacteria to grow.



Storing foods correctly in the fridge reduces the risk of cross contamination and helps keep food fresher for longer



CONDITIONS NEEDED FOR BACTERIA TO GROW

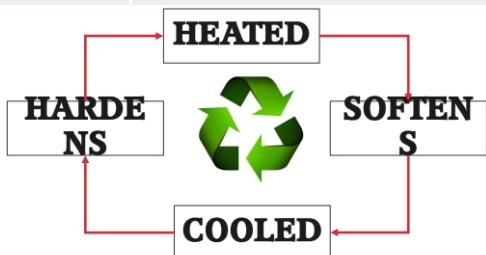
1	Food	High risk foods are those which are high in protein such as meat, fish and eggs.
2	Warmth	Bacteria grow rapidly when the high risk foods are in the danger temperature zone 6°C to 63°C.
3	Moisture	Bacteria needs moist, wet food. It will not grow on dried food such as pasta.
4	Time	Time - 1 bacteria splits into 2 every 20 minutes, then 2 into 4, 4 into 8 and so on.

KEY TEMPERATURES

1	6-63°C	The danger zone where bacteria grow most readily.
2	37°C	Body temperature, optimum temperature for bacterial growth.
3	8°C	Maximum legal temperature for cold food, i.e. your fridge.
4	5°C (or below)	The ideal temperature your fridge should be.
5	-18°	The temperature your freezer should be.
6	75°C	If cooking food, the core temperature, middle or thickest part should reach at least this temperature.
7	83°C	If reheating food, it should reach at least this temperature. Remember to reheat food only once.

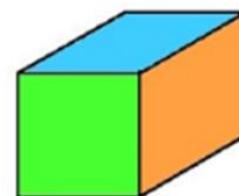
KEY VOCABULARY

1	Oblique	This is a simple drawing method that involves drawing an object from one view point, and extending the corners back 45 degrees.
2	Rendering	Adding colour to a drawing to show a particular material.
3	MDF	Medium Density Fibreboard.
4	Jig	Jigs are devices that can be used to assist the manufacturing process when drilling, sawing, bending or shaping.
5	Thermoplastic	These plastics that they can be heated, reshaped and cooled to make new products.
6	HIPS	High Impact Polystyrene
7	Glass paper	An abrasive paper used to sand down wood and other materials
8	Wet and dry paper	A finer grade of paper which is used with water to finish a product



OBLIQUE DRAWING

- 1 Draw the front face of the shape
- 2 From each corner of the front view, draw lines at 45 degrees
- 3 Add parallel lines to the shape to make it 3D.



Oblique

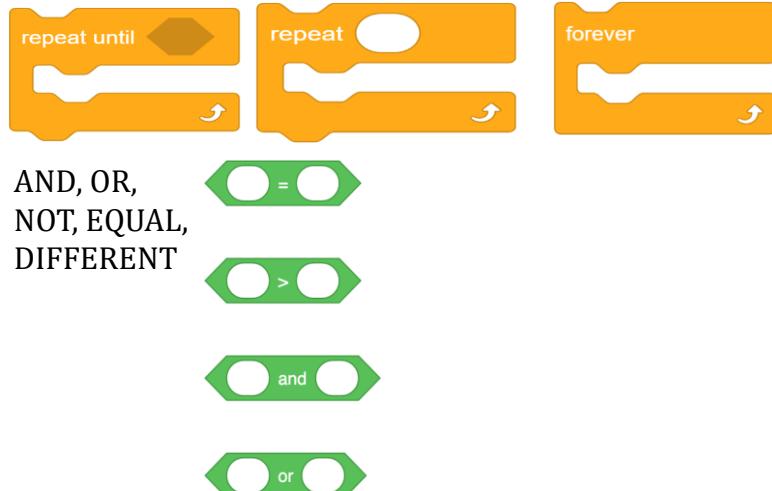
TOOLS & MACHINES

1	Linisher	A machine used to sand down wood.	
2	Vacuum Former	A machine used to heat and shape plastics	
3	Pliers	Pliers are hand tools used for gripping, bending, twisting, or cutting various materials.	
4	Wire Cutters	Used to cut wire once shapes	

Scratch Key Words

1	Sequence	The order the code is run.
2	Selection	Making a decision based on a response.
3	Iteration	The process of repeating an action.
4	Forever Loop	Will continuously repeat an action. (condition controlled).
5	Repeat	Will repeat for a set amount of time (count controlled).
6	Repeat Until	Will repeat an action until a condition is met. (condition controlled).
7	List (Array)	A collection of variables.
8	Sub-routine	A small piece of code that could be part of a bigger code.
9	Decomposition	Breaking down a problem into smaller parts.
10	Condition-controlled loop	Repeating a sequence until a condition is met.

Which of these is count-controlled iteration and which ones are condition-controlled iteration? How do you know?



Selection is used when a computer makes a decision for example if the weather is = to warm the computer will display the text "Enjoy nice weather" else the code will display "Put your coat on"



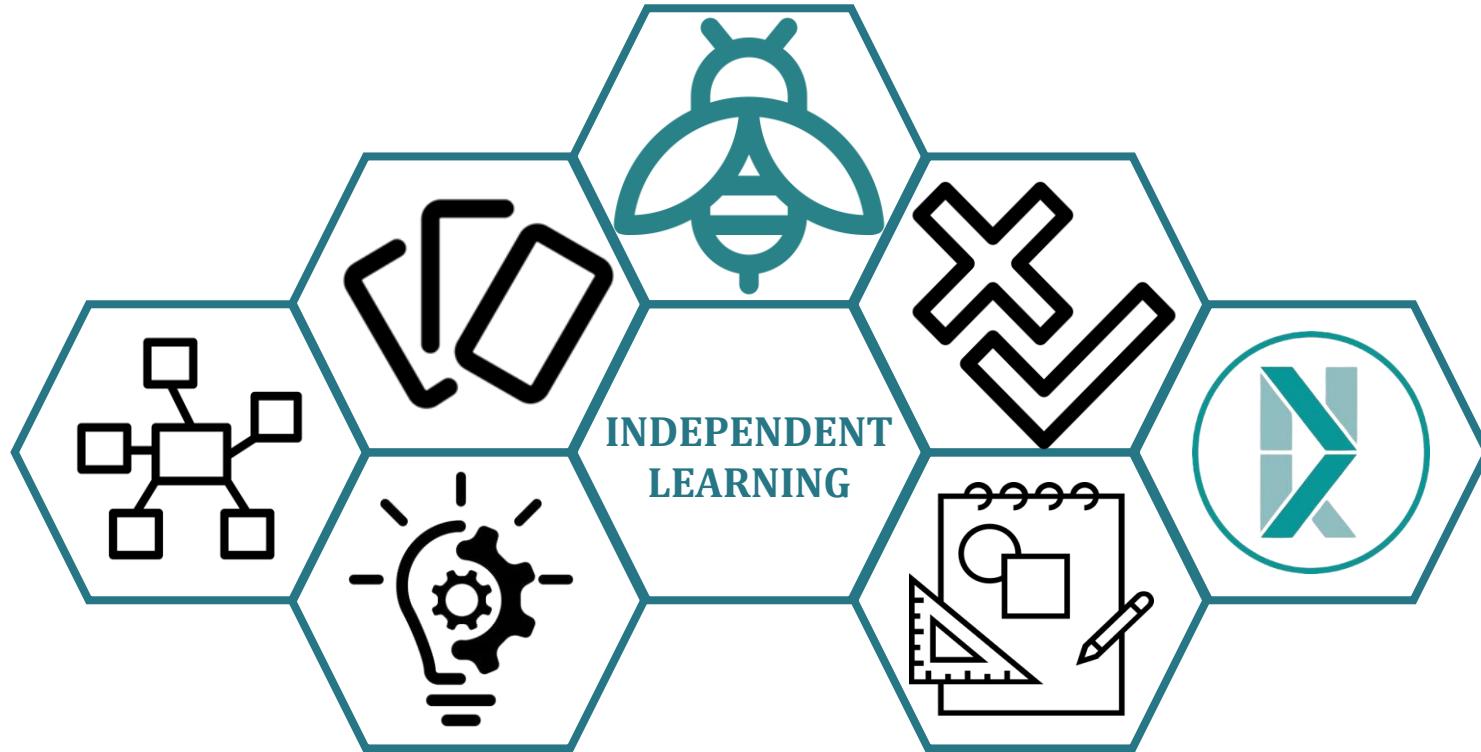
MUSICAL THEATRE SKILLS			MUSICAL THEATRE FEATURES			PROFESSIONALISM		
1	Acting	Performing a character believably using voice, movement, and emotion.	1	Dance break	A section in a musical number where the singing pauses and the focus shifts entirely to dance.	1	Staying in Character	Maintaining role consistently, even during mistakes or distractions onstage.
2	Singing	Using the voice to express story, mood, and emotion.	2	Jazz square	A four-step movement that creates a square pattern on the floor.	2	Ensemble reactions	Reacting naturally to action while supporting main performance focus.
3	Dancing	Moving rhythmically and expressively, often with choreographed precision.	3	Audience engagement	Characters may break the fourth wall or involve the audience emotionally or comedically.	3	Improvisation	Thinking quickly to adapt when something unexpected happens during performance.
4	Characterisation	Creating a unique, believable character through voice, movement, personality.	4	Unison	Doing the same thing at the same time.	4	Punctuality	Arriving on time for rehearsals, performances, and calls always.
5	Facial expressions	Exaggerated use of the face to show emotions and enhance storytelling.	5	Storytelling	The acting and dancing shows the plot and characters.	5	Correct attire	Wearing suitable rehearsal clothes or costumes for safety and professionalism.
6	Stamina	Maintaining physical and vocal performance energy over long periods.	REPERTOIRE			6	Warm-ups	Preparing body and voice to perform safely and effectively.
6	High level energy	Performing with strong enthusiasm, focus, and physical commitment throughout.	1	Matilda	A clever girl uses powers to outsmart cruel adults and tyrants.	7	Audience etiquette	Respecting performers by being quiet, attentive, and appropriate throughout.
8	Confidence	Believing in your ability and performing boldly without hesitation.	2	Annie	An optimistic orphan finds family and hope during the Great Depression.	PERFORMING ARTS STRANDS		
PURPOSE			3	Mary Poppins	A magical nanny transforms a family's life with wonder and wisdom.	1	Performing	Presenting your performance to an audience.
1	Entertainment	Captivate audiences through a dynamic mix of singing, dancing, and acting.	4	Aladdin	A street boy discovers a genie, love, and his true worth.	2	Creating	Creating your own performance through devising and choreography.
2	Tell stories	Use music and movement to explore characters, plots, and emotions.				3	Appreciation	Understanding and commenting on your own performance and the performances of others.

Year 7 | Term 2| What does a good ensemble performance look and sound like? Music

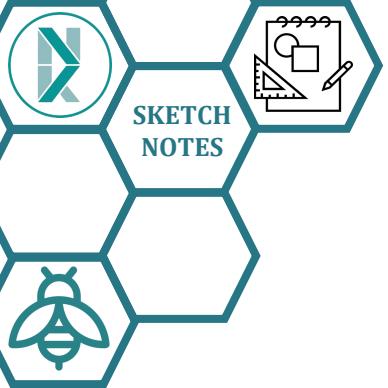
Ensemble Types			Vocabulary		
1	Orchestra	A large group with string, brass, woodwind, and percussion instruments.	1	Ensemble	A group of musicians who perform together, such as a band, orchestra, or choir.
2	Choir	A vocal group that sings in harmony.	2	Performance	Presenting music to an audience, focusing on accuracy, expression, and confidence
3	Band	Can include rock bands, brass bands, jazz bands, etc.	3	Melody	A sequence of notes that form the main tune of a piece of music.
4	Chamber Group	A small ensemble such as a string quartet.	4	Harmony	A group of notes played or sung together to create a rich sound.
			5	Tempo	The measurement of the speed of music.
			6	Dynamics	How hard or soft an instrument is played.
			7	Texture	How different musical layers interact such as melody and harmony.

Rehearsal and Performance Tips			Core Concepts		
1	Warm-up exercises	Prepare for playing by doing simple stretches. Breathing exercises help to prepare for singing.	1	Timing	Playing together accurately ensures good timing.
2	Rehearsal Technique	Break songs down into sections. Slow down difficult sections.	2	Balance	Ensuring that no individual part is too soft or loud.
3	Communication	Watching the leader or others for cues, eye contact, specific movements, etc.	3	Following a band leader	Watching for cues from the leader for when to change section, dynamic or anything else.
4	Performance Etiquette	Professional behaviour on stage or during a performance.	4	Expressive performance	Using dynamics, phrasing, and articulation effectively.
			5	Posture and technique	Using instruments correctly and using breath control for a more confident and effective performance.

FULLY UTILISE YOUR KNOWLEDGE ORGANISERS



Use the following templates alongside the corresponding instructions to carry out your independent work.



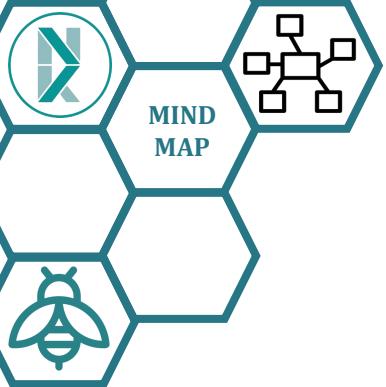
HOW DO I MAKE USEFUL SKETCH NOTES?

- 1) Pick a focus area for your notes – this could be a topic, theme, exam question, unit question, etc.
- 2) Make notes in a logical order but rather than making detailed written notes, use a range of the following techniques:
 - Use upper case (capital letters) to emphasise particular words.
 - Turn words into images e.g. the A in shArk turns into a fin;
 - Add images and/or icons into the text;
 - Use diagrams and tables to break down key areas;
 - Use arrows and lines to link different things together;
 - Use different shapes, thought-bubbles, etc.
 - Use a range of colours to emphasise different aspects of your notes/page.



Once you have completed your sketch note page try photocopying it in black and white and then use colours to RAG-rate the information – you will then create a real focus for your revision by prioritising first the Red and then the Amber!

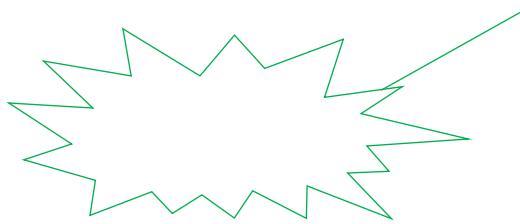




MIND MAP

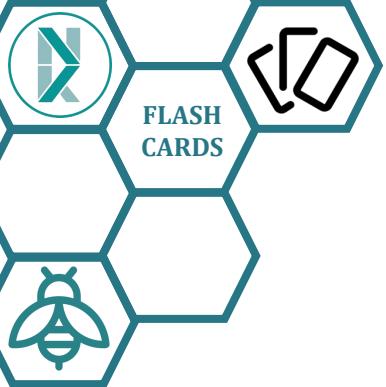
HOW DO I CREATE AN EFFECTIVE MIND MAP?

- 1) Decide on the overall focus – this could be a topic/unit question, an exam question, key theme, etc – and then write this in the centre of the page.
- 2) Break this down into key areas, factors, ideas, etc and add these as main branches around the centre.
- 3) Break these main branches down further by adding more information – each main branch might break down into several more and each of these into several more.
- 4) Colour-code your branches, highlight key information and add any images, icons, diagrams, etc.
- 5) TOP TIP: Write on your branches and only use the most key information and words – this will help you to fit as much as possible on one page!



The aim of a mind-map is to fit as much as possible all on one page! Therefore, avoid writing in full sentences and focus on using the branches to organise your notes.





FLASH
CARDS



HOW DO I MAKE FLASH CARDS?

- 1) Think about what you want the focus of each card to be – it could be a key question, piece of vocabulary, exam question, factor, etc.
- 2) Record this on the 'front' card (left-hand column) – adding an image, diagram, some colour, etc, to make it memorable, is helpful. You can also number your cards.
- 3) Think about what information links to this – it could be written notes, an answer to a question, a definition, potential ideas, etc.
- 4) Record this on the 'back card' – try to break it down into bullet-points, use icons and imagery, colour, diagrams, once again to make it memorable.
- 5) Cut your cards out, fold the middle and glue them together – you can now use them to test yourself... or even better, get somebody else to test you.

FRONT (key term or question)

BACK (answer)



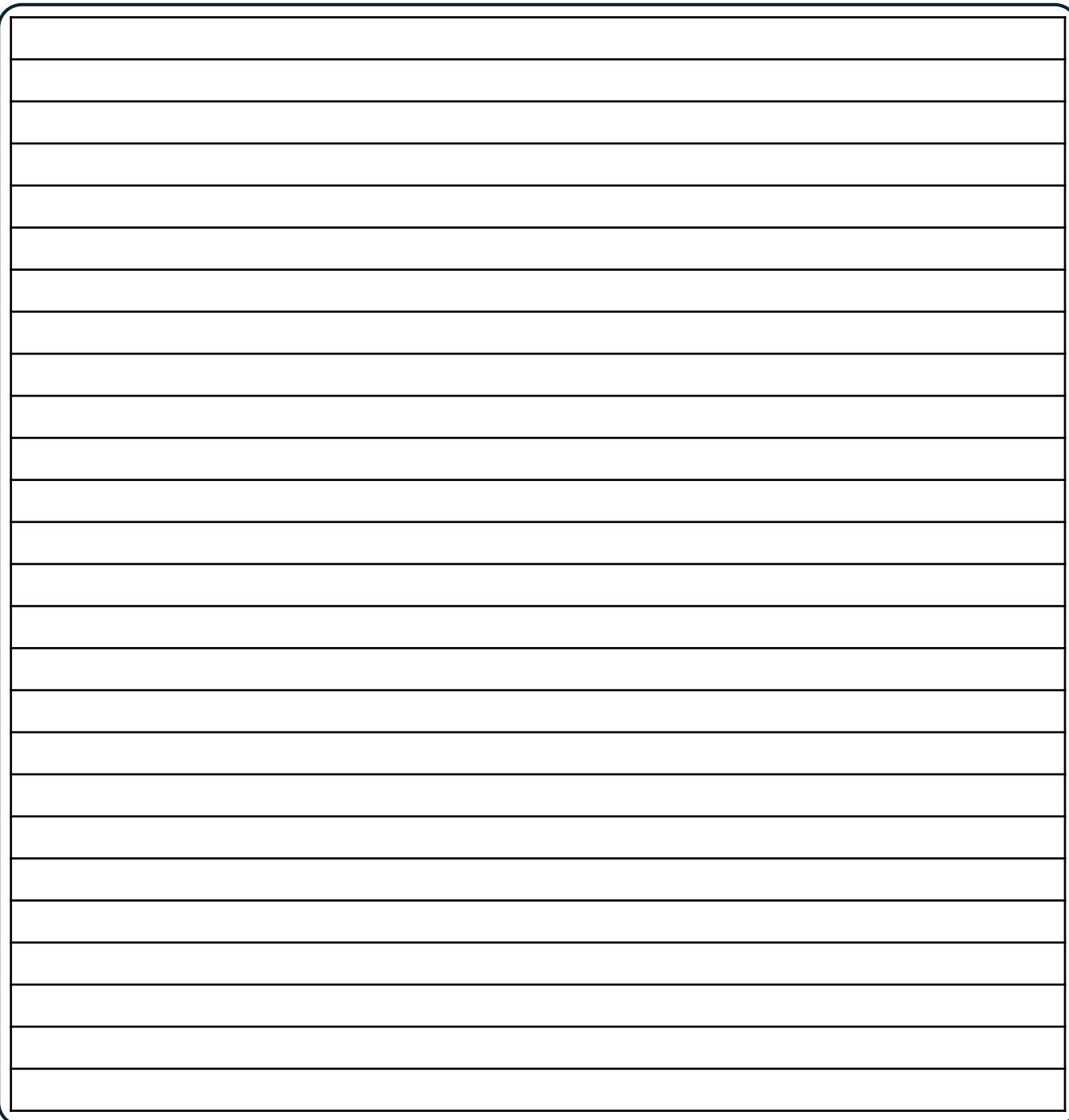
Why not RAG-rate your cards?
(*Red* = you really don't know,
Amber = you sort of know, *Green* = you completely know and understand). Then, every time you re-test yourself, you can re-RAG-rate your cards. You could do this along the bottom of each card.





HOW DO I DEVELOP MY EXPERT WRITING?

- 1) Start by putting your topic title or question as a sub-heading.
- 2) Begin by identifying the key points or aspects and writing a summary of this – think about the key vocabulary needed.
- 3) Next, try to develop these main ideas one at a time – aim to use connectives to help you do this e.g. because, therefore, so.
- 4) Now try to link these ideas to examples or evidence – you can do this separately or alongside each area in ‘step 3’.
- 5) To complete your expert piece of writing, aim to summarise the overall main point or argument or conclusions.



Talk to your teacher about the specific types of language, sentences and vocabulary that you can use to develop your 'writing like an expert' – this can vary from subject to subject and skill to skill (This is why teachers often provide you with sentence starters).





HOW DO I MAKE AN EFFECTIVE LOW-STAKES QUIZ

- 1) Choose something on your knowledge organiser and write a question where this is the answer – write this in the top box of the card.
- 2) Write 3-5 possible answers in the bottom box' – label these with numbers or letters e.g. a) to e).
- 3) Write the correct answer on the back of the card for future reference, so that you can easily check if you were right or wrong.
- 4) Put your low-stakes quiz somewhere safe and return to it a few days/weeks later - test yourself or get somebody else to test you!



Why not RAG-rate your cards? (Red = you really don't know, Amber = you sort of know, Green = you completely know and understand). Then, every time you re-test yourself, you can re-RAG-rate your cards. You could do this along the bottom of each card.





EMPOWERING POTENTIAL

EMPOWERING SUCCESS



Build foundations first: Knowledge Organisers provide the key 'foundations' to a topic or unit acts as a vital reminder of the key ideas, facts, information and concepts.



Retrieve and recall: the content of Knowledge Organisers are a regular part of the starts of lessons, lesson activities and discussion, self-testing and teacher assessment.



Revise: Knowledge Organisers are a fantastic starting point for further revision - they can be used to self-test, develop revision notes, create further revision resources.



Succeed: Ultimately, knowledge is power. Utilising the content of a Knowledge Organiser will provide the power to access the next step in learning.