

KEY STAGE 3 KNOWLEDGE ORGANISER

POWER PACK



YEAR 9 – TERM 1

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.

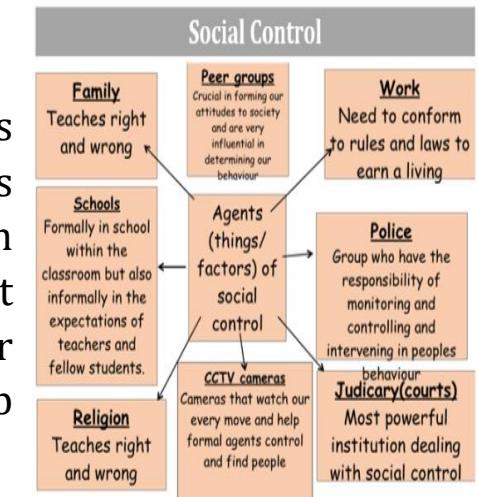


Why are Knowledge Organisers important?

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.**

- 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>Bottom:</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. <p>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 bottom, cover the key word and see if you can recall it by reading the definition. 3. See how far up 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:	<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 on applying your knowledge to show your thinking, understanding and reasoning.

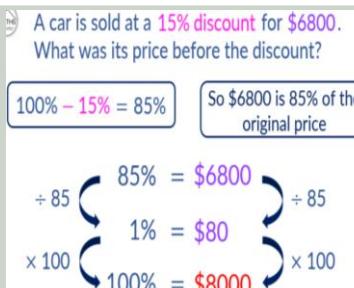
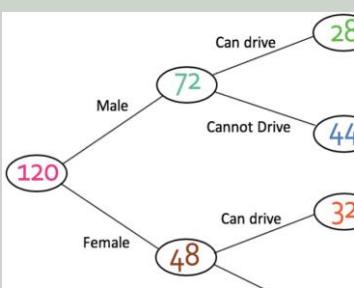
Strategy	Activity	Imagery
REFLECTION:	<p>RAG-rate:</p> <ol style="list-style-type: none"> 1. On completion of a unit of work get somebody to test you on each aspect of the <i>Knowledge Organiser</i>. 2. RAG-rate each piece: Red = don't know it, Amber = partly know it, Green = know it. 3. Revisit all 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.

POEM		CONTEXT		THEMES				POETIC TECHNIQUES		
1	'Diversity in the media and film'	Speech given in the House of Commons.		1	Diversity	Identity	Change	1	Metaphor	Where two things are compared WITHOUT using as or like. They are compared by saying that one IS the other.
2	'Search For My Tongue' By Sujata Bhatt	Born in India but lived and raised in both India and US. Multi-cultural influence.		2	Identity	Place	Change	2	Simile	A figure of speech in which two things are compared using the word "like" or "as."
3	'Name Journey' by Raman Mundair	First generation British-Asian poet born in India but refusing to be pigeon-holed.		3	Identity Language	Place		3	Personification	A figure of speech in which nonhuman things or abstract ideas are given human attributes.
4	'In My Mothers Kitchen'	Iraqi Kurdistan poet, came to England in 1993 after growing up in Iran and Turkey.		4	Belonging	Family	Change	4	Hyperbole	A figure of speech in which deliberate exaggeration is used for emphasis.
5	'Island Man' by Grace Nichols	Born in Guyana and moved to London as a teenager – 2 opposing lifestyles.		5	Belonging	Place	Change	5	Juxtaposition	A stark contrast between two ideas, words or phrases which don't seem to fit together.
6	'Where I Come From' by Elizabeth Brewster	Canadian writer who grew up in a small logging community in New Brunswick.		6	Belonging	Place	Change	6	Caesura	A natural pause or break in a line of poetry, usually near the middle of the line created by , : ; .
7	'I Ask My Mother To Sing' by Li-Young Lee	Poet of Chinese heritage born in Jakarta.		7	Family	Place	Identity	7	Enjambement	Where there is no punctuation at the end of a line of poetry, so you keep reading onto the next line, and the meaning continues too. Makes it flow from one line to the next.
8	'In Wales Wanting To Be Italian'	Contemporary poet born in Pakistan but raised in Scotland.		8	Longing	Place		8	Alliteration	The repetition of the same consonant sounds at any place, but often at the beginning of words.
9	'We Refugees' by Benjamin Zephaniah	British poet with Caribbean heritage.		9	Belonging	Place	Change	9	Sibilance	The repetition of the 'S' sound.
10	'The Emigree'	British poet inspired by foreign cultures and conflict in other parts of the world.		10	Belonging	Place	Change	10	Imagery	The use of pictures, figures of speech and description to evoke ideas feelings, objects actions, states of mind etc.
11	'The Hill We Climb' by Amanda Gorman	Written for and performed at the inauguration of President Joe Biden in 2021.		11	Identity	Hope	Unity	11	Motif	A recurring symbol (where a word or phrase represents something else).
12	'Home' by Warsan Shire	Somali British poet born in Nairobi. Kenya before being raised in London.		12	Belonging	Place	Immigration	12	Repetition	Where something is said more than once to emphasise your point.
13	'Movement Song' by Audre Lorde	American writer, radical feminist, queer, professor, philosopher and civil rights activist.		13	Love	Lost love	Journeying			
14	'Caged bird' by Maya Angelou	American memoirist, poet and civil rights activist.		14	Freedom	Oppression	Identity			
15	'Vultures' by Chinua Achebe	Nigerian poet and novelist – central figure of modern African Literature.		15	Love vs Evil	Power				

Year 9 | Term 1 | Fractions and Percentages, Probability, Standard Form and Inequalities

MATHS

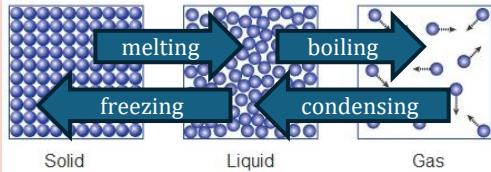
CALCULATION RULES			REVERSE PERCENTAGE PROBLEMS	VOCABULARY	
1	Find a fraction of an amount	Divide by the denominator, multiply by the numerator.		1 Percentage multiplier	A percentage multiplier is a number which is used to calculate a percentage of an amount or used to increase or decrease an amount by a percentage.
2	Ordering FDP	Values must all be changed to one shared equivalent counterpart. The values can then be ordered. You MUST use the ORIGINAL values.	<p></p>	2 Percentage	'Per cent' a rate, number or amount in each hundred.
3	Theoretical probability	Calculating the probability of an event occurring using the information given.		3 Simple interest	A percentage of an amount of money that is given to the owner. This amount stays the same no matter how much money is in the account.
4	Experimental probability	Find the probability of an even occurring as a decimal value or fraction and multiply by frequency of experiment.		4 Theoretical probability	The chance of a specified event happening based off the frequency of the specified event compared to all the possible events.
5	Multiplying and dividing standard form	Multiply/divide first value, then use index laws to calculate power. Make sure answer is given in standard form.		5 Experimental probability	The process of estimating the frequency of a specified event based off its probability.
6	Adding and subtracting standard form	Convert each standard form value to have the same power. Add or subtract the first value. Convert answer into standard form.	<p></p>	6 Inequality	Algebraic formation of terms that are compared to each other using the inequality symbols.
7	Double linear inequalities	When solving you MUST affect all parts of the inequality to solve.		7 Reading inequalities	Always read inequalities from the position of the variable. E.g. $2 < x \leq 5$, x is greater than 2 but less than or equal to 5. $x = 3, 4$ or 5.
8	Constructing inequalities	Whenever a question uses phrases like 'more than' or 'less than' the question is looking for a solution with an inequality.		8 Double inequalities	An inequality that uses two symbols. These inequalities will give a variable a range of values.
KEY FORMULAE OR CONVERSIONS			ADDITION WITH STANDARD FORM	STEP BY STEP	
1	Percentage increase % = Percentage change	$\frac{(100+ \%)}{100} \times \text{Original Value}$	$5 \times 10^2 + 3.7 \times 10^4$ $5 \times 10^2 = 500$ $3.7 \times 10^4 = 37\,000$ $500 + 37\,000$	1	Solve the inequality and find all the integers for n. $-6 \leq 3n - 12 < 3$ $+12 \quad +12 \quad +12$ $6 \leq 3n < 15$ $\div 3 \quad \div 3 \quad \div 3$ $2 \leq n < 5$ $n = 2, 3, 4$
2	Percentage decrease % = Percentage change	$\frac{(100- \%)}{100} \times \text{Original Value}$			
3	Simple Interest Ov = Original Value Yr = Number of years	$\left(\frac{\%}{100}\right) \times Ov \times Yr$			

GENERATING ELECTRICITY

1	Burning fossil fuels	Non-renewable fuels which contribute to pollution and climate change.
2	Using nuclear fuel	A non-renewable fuel which produces less pollution, but has some risks associated with it.
3	Renewable energy resources	Energy resources which can be replaced in our life-time, such as biofuel, solar, hydroelectric or geothermal power.
4	Carbon-neutral	A process which (overall) does not increase the carbon dioxide concentration in the atmosphere.
5	Social, moral, economic impact	The impact which the use (or a change) of processes has on people.
6	Energy resources	A material or phenomenon which can be used to transform energy for use or storage.

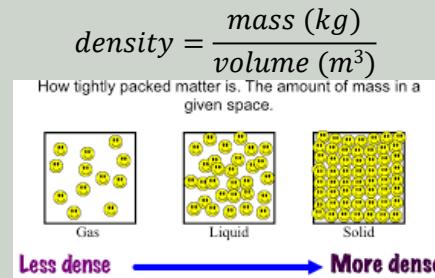
STATES OF MATTER

Melting point: the temperature at which a solid starts to become liquid.

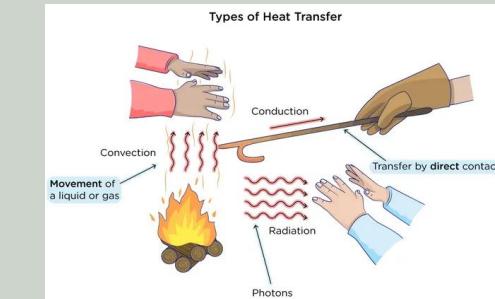


Freezing point: The temperature at which a liquid starts to solidify.

DENSITY

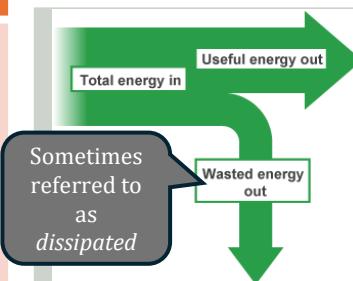


TRANSFER OF HEAT



The unit of energy is Joules (J).
The unit of mass is kilograms (kg).

ENERGY EFFICIENCY, WORK DONE & POWER



(A Sankey diagram)

$$\text{Efficiency} = \frac{\text{Useful out}}{\text{Total in}}$$

Work done = force x distance

Power =
$$\frac{\text{work done}}{\text{time}}$$

KEY VOCABULARY

1	Temperature	The average amount of heat energy in a material.
2	Thermometer	An instrument to measure temperature.
3	Particles	A simplified model for any type of material.
4	(Thermal) Equilibrium	Outgoing and incoming energy are balanced, so that the temperature does not change.
5	Thermal conductor	A material which allows heat energy to be transferred through it quickly.
6	Thermal insulator	A material which does not allow for a quick transfer of heat energy.
7	Infra-red (IR)	A type of light with a wavelength a little longer than visible light.
8	Emitting	An object is giving out energy, such as light or heat.
9	Absorbing	An object is taking in energy, such as light or heat.
10	Reflecting	An object which is not absorbing incident heat or light radiation, such as a mirror.
11	Kinetic energy	The movement energy of an object.
12	Conservation of energy (or mass)	Energy (or mass) can neither be created nor destroyed (by simple physical or chemical means).
13	Gravitational potential energy	The energy contained in an object at a height.
14	Friction	A force opposing the direction of travel of an object.
15	Mass	The amount of atoms something is made of.
16	Velocity	A speed with a direction (as a straight line).
17	Spring constant	A description of the stiffness of a given spring.
18	Elastic potential energy	The amount of energy which could be released by allowing an elastic material to return to its original shape.
19	Specific heat capacity	The amount of heat energy required to change the temperature of 1 kg of a material by 1 degree.



| Year 9 | Term 1 |

Why was there little progress in Medieval medicine?

HISTORY



5 th C. BC	2 nd C. AD	1345	1440	1500
Hippocrates develops the 'Theory of the Four Humours'	Galen develops the 'Theory of Opposites'	The black death arrives in England	The 'Printing Press' is invented by German Johannes Gutenberg	There are 1,100 Hospitals in England (30% owned and run by the Church)

GENERAL MEDICINE

1	Malnutrition	An illness caused by a lack of food.
2	Famine	Food shortage, usually due to bad harvest.
3	Diagnosing	Looking at symptoms to decide what is wrong with a patient.
4	Dissection	Cutting up the body to look inside it.
5	Vivisection	The dissection of a criminal who was alive.
6	Phlebotomy	Blood-letting/bleeding to balance the humours.
7	Purging	Taking something to make yourself sick or give you diarrhoea to rid the body of anything bad.
8	Remedy	Things that people would take to make themselves feel better.
9	Hygiene	A level of cleanliness.
10	Bathing	Having a bath to improve your health.
11	Diet	What you eat.
12	Hospitals	Offered a place to stay and recover, normally for travellers and pilgrims.
13	Quarantine	Separating the sick from the healthy.

BIG IDEAS & THINKING

1	Astrology	The study of the planets.
2	Natural	Something that can be explained by reasoning.
3	Supernatural	Something that is not natural i.e. it can't be explained.
4	Humours	Elements of the body: blood, phlegm, black bile, yellow bile.
5	Four Humours	An ancient Greek (Hippocrates) theory that the body was made up of four elements.
6	Theory of Opposites	An ancient Roman (Galen) theory that suggested balancing the humours to make somebody better.
7	Miasma	Bad air filled with harmful fumes.
8	King's Touch	People believed that the King (chosen by God) had the power to heal by touching.

MEDICAL ROLES

1	Physician	Someone who practises medicine with little proper training.
2	Surgeons	Studied surgery alongside medicine and were normally highly trained.
3	Barber Surgeons	Poorly qualified medical surgeons who performed small surgeries.
4	Phlebotomist	Somebody who drew blood to help balance the humours.
5	Apothecary	A person who studied herbs and mixed herbal remedies.
6	Monks/Nuns	Religious men and women who carried out the work of the church.
7	Flagellants	People who punished themselves in the hope that God would forgive them.

MISCELLANEOUS

1	Urine Chart	Used to diagnose illness by comparing a urine (wee) sample with the colours on it.
2	Star Chart	Used to diagnose illness by looking at the alignment of the planets.
3	Tithe	A sum of money (tenth of earnings) given to the church each month.
4	Regimen Sanitatis	A set of instructions provided by physicians to maintain good health.
5	Lazar House	A hospital that cared specifically for people with leprosy.
6	Scourge	Something that causes great suffering.
7	Pest House	A hospital that cared specifically for people with the plague.
8	Proof of the divine	An outcome (usually somebody getting better) that proves God's existence.

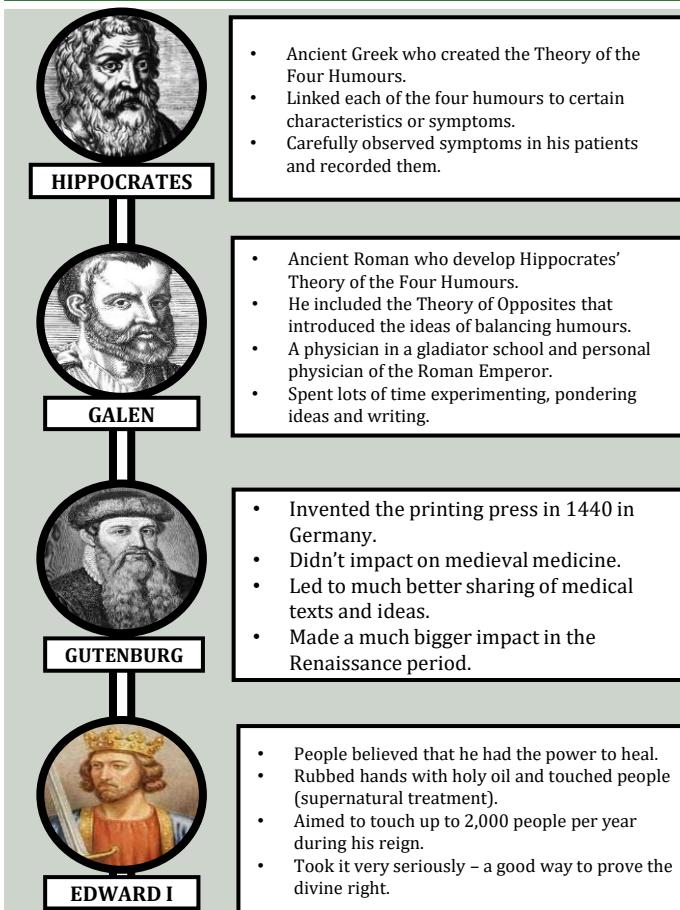
KEY QUESTIONS

How did medieval people DIAGNOSE illness and disease?	How did medieval people TREAT illness and disease?	How did medieval people PREVENT illness and disease?
Who cared for the sick and how did they do this?	What influenced people's beliefs and thinking about medicine?	What SIGNIFICANT developments impacted on medical knowledge and understanding?

ILLNESSES AND DISEASES

1	Paralysis	The loss of movement of a part of the body.
2	Dysentery	Very severe diarrhoea.
3	Leprosy	Skin disease, followed by paralysis and death.
4	Black Death	An outbreak of the bubonic plague in 1348.

KEY INDIVIDUALS



CHARACTERISTICS			ECOSYSTEMS		ADAPTATION			
1	Hot desert	A biome with very low rainfall, extreme temperature range (hot days, cold nights), and sparse vegetation.	1	Ecosystem	A community of plants, animals and their environment that interact with each other.	1	Adaptation	Special features that help plants/animals survive in extreme conditions.
2	Aridity	The dryness of a desert area due to lack of rainfall.	2	Biome	A large-scale ecosystem, e.g., rainforest, desert, tundra.	2	Xerophyte	A plant adapted to survive with little water (e.g., cactus).
3	Climate	Very low precipitation (less than 250mm/year), high daytime temps, rapid cooling at night.	3	Producer	A plant that makes its own food through photosynthesis.	3	Succulent	Plants that store water in leaves or stems (e.g., aloe).
4	Soil	Sandy or stony, thin, low in nutrients, and often dry.	4	Consumer	An animal that eats plants or other animals for energy.	4	Nocturnal	Animals that are active at night to avoid daytime heat.
5	Distribution	Found between 15° – 30° north and south of the equator (e.g., Sahara, Thar).	5	Decomposer	Organisms (fungi, bacteria) that break down dead material.	5	Camouflage	Colours or patterns that help animals blend into desert landscapes.
DESERTIFICATION								
1	Desertification	The process where land becomes increasingly dry and turns into desert.	6	Food chain	Shows the transfer of energy between organisms.	6	Long roots	Plant roots that reach deep underground to find water.
2	Overgrazing	Too many animals eat vegetation, damaging soil.	7	Food web	A network of interconnected food chains.	MANAGING DESERTIFICATION		
3	Over-cultivation	Crops are grown repeatedly, exhausting soil nutrients.	8	Nutrient cycle	The way nutrients move between the environment, plants, and animals.			
4	Deforestation	Trees cut down, removing shade and roots that protect soil.						
5	Climate change	Rising temperatures and reduced rainfall make areas drier.						
6	Population pressure	Growing populations put more demand on fragile land.						

| Year 9 | Term 1 | Wie ist ein guter Freund?

GERMAN

Charaktereigenschaften - characteristics		
1	Er/sie ist	He/she is... 
2	abenteuerlustig	Adventurous
3	aktiv	Active
4	dynamisch	Dynamic
5	frech	Cheeky
6	freundlich	Friendly
7	kreativ	Creative
8	locker	Relaxed
9	modisch	Fashionable
10	fleißig	Hard working
11	nett	Nice
12	selbstbewusst	Self confident
Aussehen- appearance		
1	Sie/er hat ...	She/ he has... 
2	braune Haare	Brown hair
3	blonde Haare	Blond hair
4	graue Haare	Grey hair
5	rotbraune Haare	Auburn hair
6	Kurze Haare	Short hair
7	glatte Haare	Straight hair
8	dunkle Haare	Dark hair
9	blaue Augen	Blue eyes
10	eine Brille	Glasses
11	Sommersprossen	Freckles
12	einen Bart	A beard

wie ist ein guten Freund? - What makes a good friend?		
1	Ein guter Freund / eine gute Freundin...	A good friend.
2	muss Zeit für mich haben	Must have time for me.
3	muss sympatisch sein	Must be kind.
4	muss mich immer unterstützen	Must always support me.
5	muss viel Geduld haben	Must have a lot of patience.
6	muss die gleichen Interessen haben	Must have the same interests.
7	kann mit mir über Alles reden	Can talk to me about everything.



Past tense



Present tense



Future tense

Tenses

Past (perfect)

1	Ich habe auf dem Computer gespielt	I played on the computer.
2	Ich bine in die Stadt gegangen	I went into town.
3	Als Kind hatte ich nie meine Hausaufgaben gemacht.	As a child I never did my homework.

Now

1	Ich darf nicht Fussball spielen	I am not allowed to play football.
2	Ich mag ihn /ihr	I like him/her.
3	Sie/er ist begabt	She/he is talented.

What will happen

1	Ich werde...	I will
2	...arbeiten	work
3	...in die Uni gehen	Go to uni
4nicht allein wohnen	Not live alone

Relationships continued...

1	...weil er/sie ...	Because he/she...
2	...(viel / keine) Geduld hat	Has a lot of / no patience.
3	...immer / nie Zeit für mich hat	Always / never has a lot of time for me.
4	...mich unterstützt	Supports me.
5	...mir auf die Nerven geht	Gets on my nerves.
6	Wir haben einen tollen Beziehung	We have a good relationship.
7	Ich streite mich mit ihr/ihm	I argue a lot with her/him.
8	Sie sagen, Ich mache nicht genug Hausaufgaben	They say I don't do enough homework.
9	Ich verbringe zu viel Zeit mit dem Handy	I spend too much time on my phone.
10	Ich darf mein Handy nicht benutzen.	I am not allowed to use my phone.

Key Questions and example answers

Q	Wie ist eine gute Freundin? What makes a good friend (F)	Wie ist dein Vater? What is your dad like?
A	Eine gute Freundin muss Zeit für mich haben und kann mit mir über Alles reden. A good friend must have time for me and can talk to me about everything.	Mein Vater hat graue Haare und einen Bart. Er ist sehr freundlich und hat immer Zeit für mich. My father has grey hair and a beard. He is very friendly and always has time for me.

KEY VOCABULARY

PILLARS OF MEDICAL ETHICS

HAS SCIENCE GONE TO FAR?

1	Medical ethics	Moral principles that shape the practice of medicine.
2	Embryo	The early stage of development.
3	Foetus	The unborn offspring in its later stages of development.
4	Abortion	Planned termination of a pregnancy.

IS LIFE SACRED?

1	Sacred	Considered to be holy and deserving respect; too important to change.
2	Euthanasia	Intentionally ending a life to relieve pain and suffering.
3	Sanctity of life	Human life is a gift from God and should be treated so.
4	Quality of life	The standard of health, comfort, and happiness experienced by an individual or group.

1	Cloning	To replicate or make a copy.
2	Christian view on cloning	Against cloning as it devalues what it is to be human.
3	Devalue	Reduce the worth.
4	Counter arguments	Argument that opposes an argument.

ARE ALL LIVES EQUAL?

1	Gestation	The period of time developing in the womb.
2	Designer babies	A baby whose genetic makeup has been altered or selected.
3	Saviour sibling	A child who is planned in order to provide either an organ or stem cells to save a sibling who has a terminal disease.
4	Stem cells	Special type of human cells that can turn into other cells, such as muscle cells or brain cells.
5	Speciesism	The assumption of human superiority leading to the exploitation of animals.

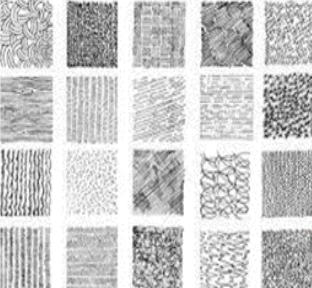
KEY PERFORMANCE SKILLS			STRANDS OF DRAMA LESSONS		KEY CHARACTERS			
1	Vocal Expression	Using voice (tone, pitch, pace, and accent) to convey character and emotion.	1 Performing: Presenting your drama to an audience. 2 Devising: Creating your own performance. 3 Appreciation: Understanding and commenting on your own performance and the performances of others. 4 Designing: Lighting, Sound, Costume and Set design that help create a vision.	1	Eddie Lyons	The upper-class twin raised by Mrs. Lyons. Kind, polite, and academic but naive about class struggles.		
2	Physicality and Movement	Using body language, gestures, and posture to show character and age.		2	Mickey Johnstone	The working-class twin who faces hardship, unemployment, and depression. Starts as playful and carefree but becomes troubled.		
3	Characterisation	Creating a believable character through voice, movement, and personality.		3	Mrs Johnstone	A struggling working-class mother who gives one of her twin sons away due to financial hardship. Warm but superstitious.		
4	Emotional Range	Expressing different emotions convincingly to engage the audience.		4	Mrs Lyons	A wealthy but lonely woman who manipulates Mrs. Johnstone into giving up one twin, later becoming paranoid and controlling.		
5	Interaction and Staging	Using space, positioning, and relationships to enhance storytelling.		5	Linda	Mickey and Eddie's childhood friend, who later becomes Mickey's wife. Caring and loyal but caught in a tragic love triangle.		
6	Awareness of Genre and Style	Understanding the play's musical and social realism elements.		6	Narrator	A mysterious figure who warns of fate and class conflict, reinforcing the play's themes of destiny and tragedy.		
KEY DESIGN SKILLS				7	Sammy Johnstone	Mickey's rebellious older brother, a troublemaker who turns to crime and influences Mickey.		
KEY THEMES								
1	Set Design	Creating locations that reflect class and setting.	REHEARSAL STRATEGIES		1	Social Class	The play highlights the stark differences between the working-class Johnstone and the middle-class Lyons, showing how social class impacts opportunities and life outcomes.	
2	Costume Design	Dressing characters to show personality, class, and time period.	1	Systematic repetition	2	Fate	The idea that Mickey and Eddie's tragic end is inevitable, reinforced by superstition and the Narrator's warnings.	
3	Lighting Design	Using light to create mood, focus, and atmosphere.	2	Rehearsal discipline	3	Nature/Nurture	The play explores whether personality and success are shaped more by upbringing (nurture) or inherent traits (nature), as seen in the contrasting lives of the twins.	
4	Sound Design	Adding music and effects to enhance emotion and realism.	3	Planning of rehearsals				
5	Props and Set Dressing	Placing objects to support character and setting.	4	Respond to feedback				
6	Makeup and Hair Design	Styling to show age, class, and character traits.	5	Own Research				

| Year 9 | Term 1 | How can we use Urban Dance styles to communicate character and mental health? DANCE

Physical Skills			Expressive Skills			Characters		
1	Balance	A steady or held position achieved by an even distribution of weight.	1	Projection	The energy the dancer uses to connect with and draw in the audience.	1	White Rabbit	His OCD makes him constantly late and he repeats lots of movements
2	Coordination	The efficient combination of body parts.	2	Focus	Use of the eyes to enhance performance or interpretative qualities.	2	Alice	Alice suffers with body dysmorphia, with lots of contrasting sized movements.
3	Control	The ability to start and stop movement, change direction and hold a shape efficiently.	3	Spatial Awareness	Consciousness of the surrounding space and its effective use.	3	Tweedle Dee and Dum	One imagines the other after he dies. Their gestures are childish.
4	Flexibility	The range of movements in the joints.	4	Facial Expression	Use of the face to show mood, feeling or character.	4	The Mad Hatter	Mental illness from chemicals used to make hats. Dynamics slow down throughout.
5	Strength	Muscular power.	5					
6	Stamina	Ability to maintain physical and mental energy over periods of time.						
7	Extension	Lengthening one or more muscles or limbs.	Musicality					

Rehearsal Strategies			Stylistic Features		
1	Movement Breakdown	Break movements down to improve movement memory and technique.	1	House	The rhythm in the music dictates a fast and complicated foot movement with smooth body movements.
2	Progression of Time	Learn steps slowly, then increase the speed until in time with the music.	2	Breaking	An athletic style, mainly consists of four kinds of movement: top-rock, down-rock, power moves and freezes. Often includes solo work.
3	Planning	Plan the rehearsal – focus on areas that require improvement.	3	Popping /waving	Characterised by sudden muscle tensing and releasing to music beats. Dancers flex muscles rhythmically, often combining hits with poses, pathways, and continuous, steady movement.
4	Systematic repetition	Structured, repeated practice of movements to build precision, memory, and technique.	4	Locking	This is a funk dance style that freezes fast movements into held poses. It uses sharp arm gestures like locks, points, and rolls, with looser, more relaxed hips and legs.
5	Mental Rehearsal	Visualising movements to enhance performance accuracy.	5	Krumping	This is a very aggressive and is danced upright to upbeat and fast-paced music. It includes jabs, arm swings, chest pops and stomps.
6	Feedback	Get peer/ teacher feedback to create targets and improve your work.			
7	Professionalism	Work with focus, concentration and confidence to complete the tasks.			

Performance Skills			Key Vocabulary	
Assessment Criteria		Key Features		
1	Repertoire choice.	Choose a management section of Skyfall that suits your vocal/instrumental range.	1	Pitch
2	Rehearsal	Practice regularly in short sessions to build your confidence.	2	Rhythm
3	Reflect	Record yourself to reflect on your timing and expression.	3	Dynamics
4	Perform	Perform in front of small audiences regularly to get used to playing in front of others.	4	Tempo
5	Stage presence	Thing about your posture, eye contact, breathing, looking confident.	5	Articulation
1	1-2	Some errors and limited expression; needs more fluency.	6	Expression
2	3-4	Mostly accurate with developing expression and control.	7	Rubato
3	5-6	Performed with confidence, fluency, expression, and accuracy.		

KEY VOCABULARY			KEY QUESTIONS TO ANALYSE THE WORK OF OTHERS		KEY ARTISTS	
1	Mind-map	A diagram in which information is represented visually, usually with a central idea placed in the middle and associated ideas arranged around it.	1	Who are they? (keep this bit brief and relevant).	1	<ul style="list-style-type: none"> An artist and illustrator from South Wales. Her work focuses on every day subject matter. Her work is created with pens, colour pencil, gouache and collage. She creates posters, info graphics and maps using these techniques.
2	Composition	How an image is arranged.	2	What is the subject of their work (what can you see?).	2	<ul style="list-style-type: none"> American artist associated with the Pop Art movement. The Pop Artists broke traditions by using everyday common objects as the inspiration for their artworks. Jim Dine made expressive drawings, but sometimes also stuck real objects in his work.
3	Cross hatching	Mark making used to build up tone, usually done with pen.	3	What formal elements are in their work – colour, line, shape, space, pattern, form, tone, texture..	3	<ul style="list-style-type: none"> Sir Michael Craig-Martin is an Irish-born contemporary conceptual artist and painter. He is well known for his bold and graphical paintings of everyday objects.
4	Observational	Drawing from an object or an image, rather than your imagination.	4	What do you feel is the meaning behind their work?		
5	Mark Making	The range of different marks and patterns made when drawing, usually to show texture or tone.	5	Why are you looking at them?		
Drawing with biro When drawing with biro you can use different marks to show a gradual change in tone. Try using lines, dots and dashes and see what happens when you layer them up.		 MARK MAKING IDEAS	6	What materials/techniques have been used?		

KEY VOCABULARY			EFFECTS OF DIFFERENT COOKING METHODS			
			Water/fat/dry heat cooking	Cooking method	Effects on nutrition	Effect on sensory qualities
1	Conduction	Heat is transferred from one molecule to another through direct contact with a hot surface.				
2	Convection	Hot molecules rise and cooler molecules fall closer to the source of heat.	1	Cooking with fat	Shallow frying	The fat content of the foods will increase. There will be a small loss of water-soluble vitamins from heat (B group vitamins and C). Produces a crispy texture. It tenderises meat and improves the flavour. Colours can become less bright.
3	Radiation	Heat is passed by heat or electromagnetic waves from one place to another.	2	Cooking with dry heat	Baking	Baking keeps calcium and iron in the food. Vitamin C and B group vitamins are lost due to the heat. Baking give a crispy texture and a golden-brown colour. Baking will improve the flavour of baked foods such as bread and baked potatoes.
COOKING METHODS & HEAT TRANSFER						
1	Boiling	Convection				
2	Frying	Conduction				
3	Grilling	Radiation				
4	Baking	Convection				
5	Blanching	Conduction				
6	Steaming	Convection				
7	Sauteing	Conduction				
			3	Cooking with water	Blanching	Blanching is very quick, so the loss of nutrients is small. Some B group vitamins, vitamin C, iron and calcium will be lost in cooking water. Blanching keeps the crisp texture of vegetables. The colour of vegetables is preserved.
			4	Cooking with water	Steaming	Food has no contact with water so B group vitamins, vitamin C, iron and calcium will not be lost into the cooking water. There is some loss of water soluble vitamins from the heat. Steaming gives a light and fluffy texture to food. It cooks fish and seafood gently and stops it breaking up. Fruit and vegetables usually keep their colour.

KEY VOCABULARY		
1	Design Movement	A Design movement is the collective title given to a group of artefacts/artworks that share the same ideals, style or technical approach.
2	Chronological	A record of events in the order in which they occurred.
3	2D design	Software which allows you to draw digitally.
4	Net	A net is what a 3D shape would look like if it was unfolded.
5	Laser cutter	As the name suggests, laser cutters create patterns and designs by cutting into materials. A powerful laser beam is the source that melts, burns, or vaporises the material.
6	CAD	Computer Aided Design.
7	CAM	Computer Aided Manufacture.
8	LED	A light emitting diode.
9	Soldering	Soldering is a joining process used to join different types of metals together by melting solder. Solder is a metal alloy usually made of tin and lead which is melted using a hot iron. The iron is heated to temperatures above 600 degrees Fahrenheit which then cools to create a strong electrical bond.

KEY DESIGN MOVEMENTS & INFLUENCES		
1	Art Nouveau	Linear patterns of Japanese prints. French Post-impressionist art. Arts and Crafts Movement.
2	Art Deco	End of WW1, growth of mass production. Range of international styles coming into the public eye.
3	De Stijl	Means 'The Style' in Dutch. Reaction against the decorative art deco.
4	Memphis	Rebelling against functional modernism. Art Deco. Pop Art.

KEY DESIGNERS & FEATURES OF THEIR WORK			
1	Art Nouveau	Alphonse Mucha. Louis Comfort Tiffany. Charles Rennie Macintosh.	Floral and decorative patterns. Elegant and graceful lines. Use of traditional materials.
2	Art Deco	Clarice Cliff. Eileen Gray. Rene Lalique. Walker Dorwin Teague.	Stylised geometric shapes. Bold colours often paired with black, chrome and metallic. Sunburst motifs.
3	De Stijl	Theo van Doesburg. Piet Mondrian.	Simple. Primary colours. Geometric forms.
4	Memphis	Ettore Sottsass. Michele De Lucchi. Martine Bedine.	Less is More principles. Post-modernism design. Bright, colourful and sculptural design. Simple and Abstract forms. Use of non-traditional materials.

3D Animation Key Words

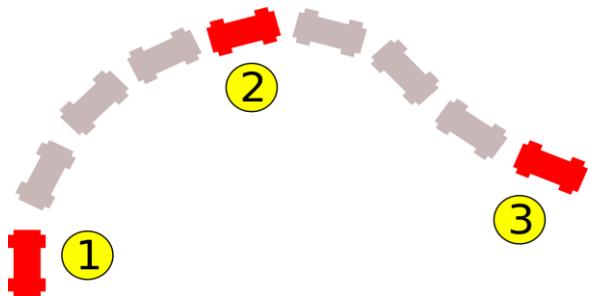
1	Key Frame	Markers used to pin point areas used to animate.
2	Parent Objects	A form of linking an object to another through a key (main) object.
3	Extrude	Thrust or force an object out.
4	Rotate	To move or cause to move in a circle round an axis or centre.
5	Keyframe Animation	Picks out specific points to show an animation moving.
6	Co-ordinates	Two letters (x, y) that locate a specific point on a grid, known as a coordinate plane.
7	Vertex	The point of a figure that is opposite to and farthest from its base. The vertex of a triangle. 2. : the point where the two sides of an angle meet or where three or more edges of a polyhedron (as a cube) meet.
8	Subdivide	Dividing an object item or model into smaller sections.
9	Scalability/ Scale	The capacity to be changed in size or scale.
10	Render	The final step in the process of 3D visualisation, which involves creating models of objects, texturing those objects, and adding lighting to the scene.



Model – is the object that is used and edited.

The Blue, Green and Red arrows are used to rotate the object and use an x, y and z index.

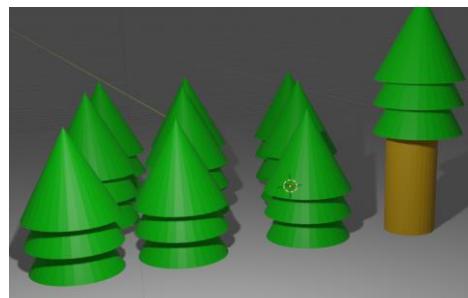
Once the model is created the model can be textured and coloured to make the final item.



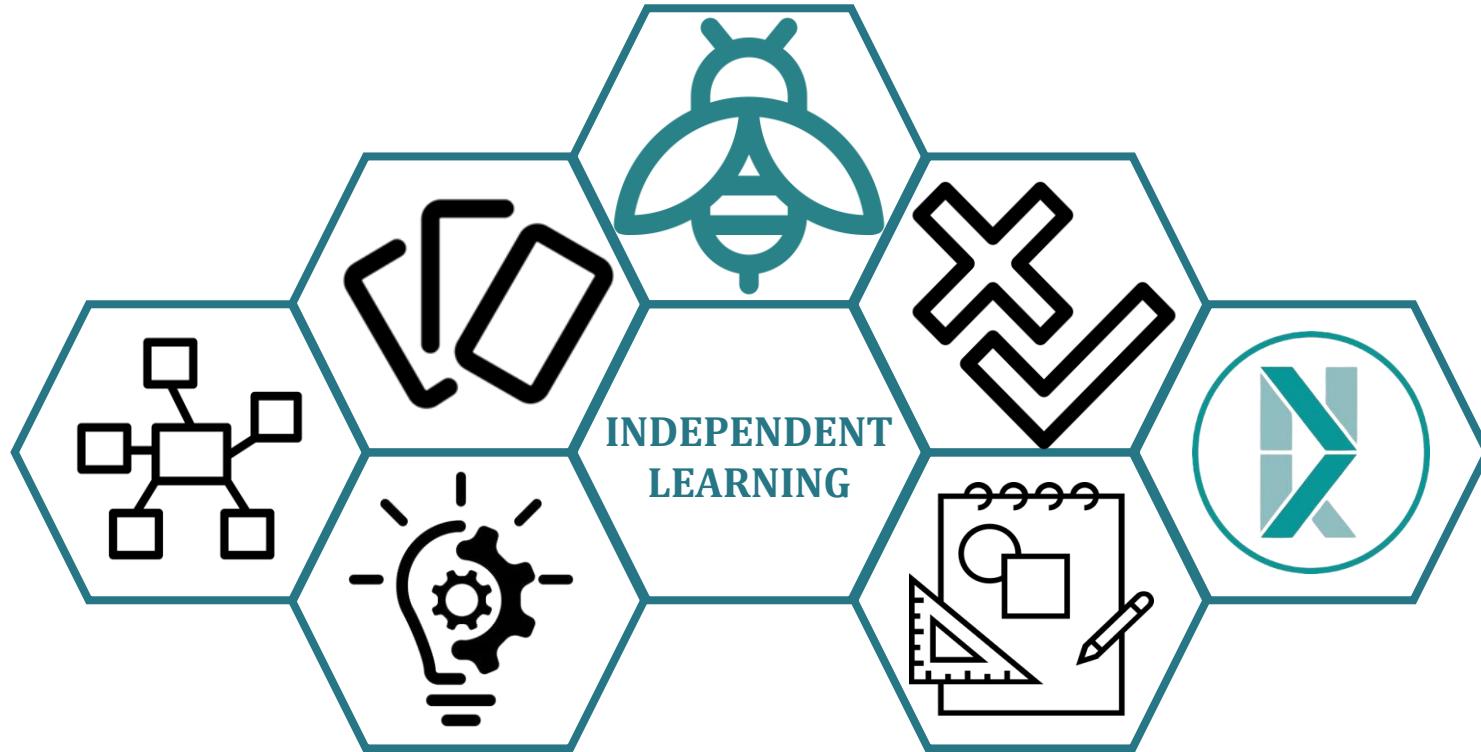
Keyframe the diagram above shows the points that can be taken for an object to move. The computer will take the coordinating points and fill in the missing gaps for the path that the object moves along.

3D Modelling Skills

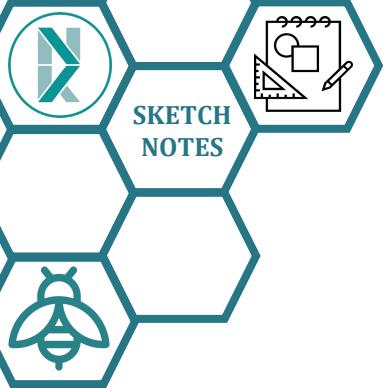
Through using a variety of techniques you can 3D model items though extruding, subdividing, rotating.



FULLY UTILISE YOUR KNOWLEDGE ORGANISERS



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



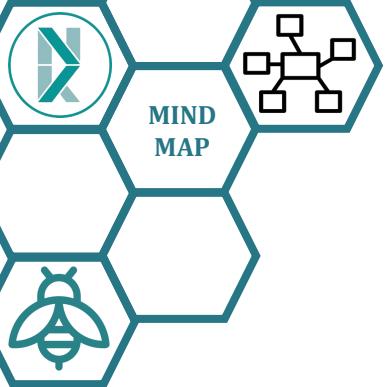
HOW DO I MAKE USEFUL SKETCH NOTES?

- 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!

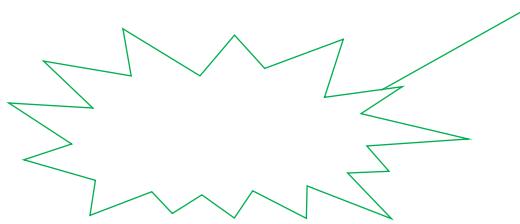




MIND MAP

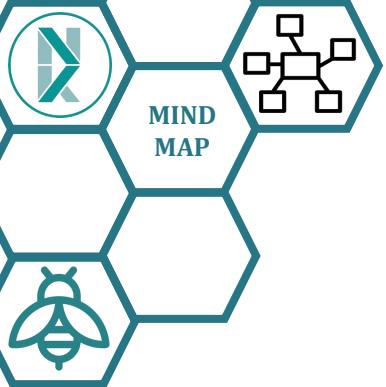
HOW DO I CREATE AN EFFECTIVE MIND MAP?

- 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.

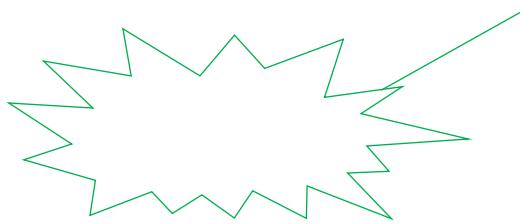




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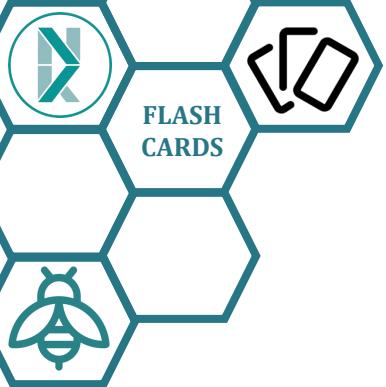
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FLASH
CARDS



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)



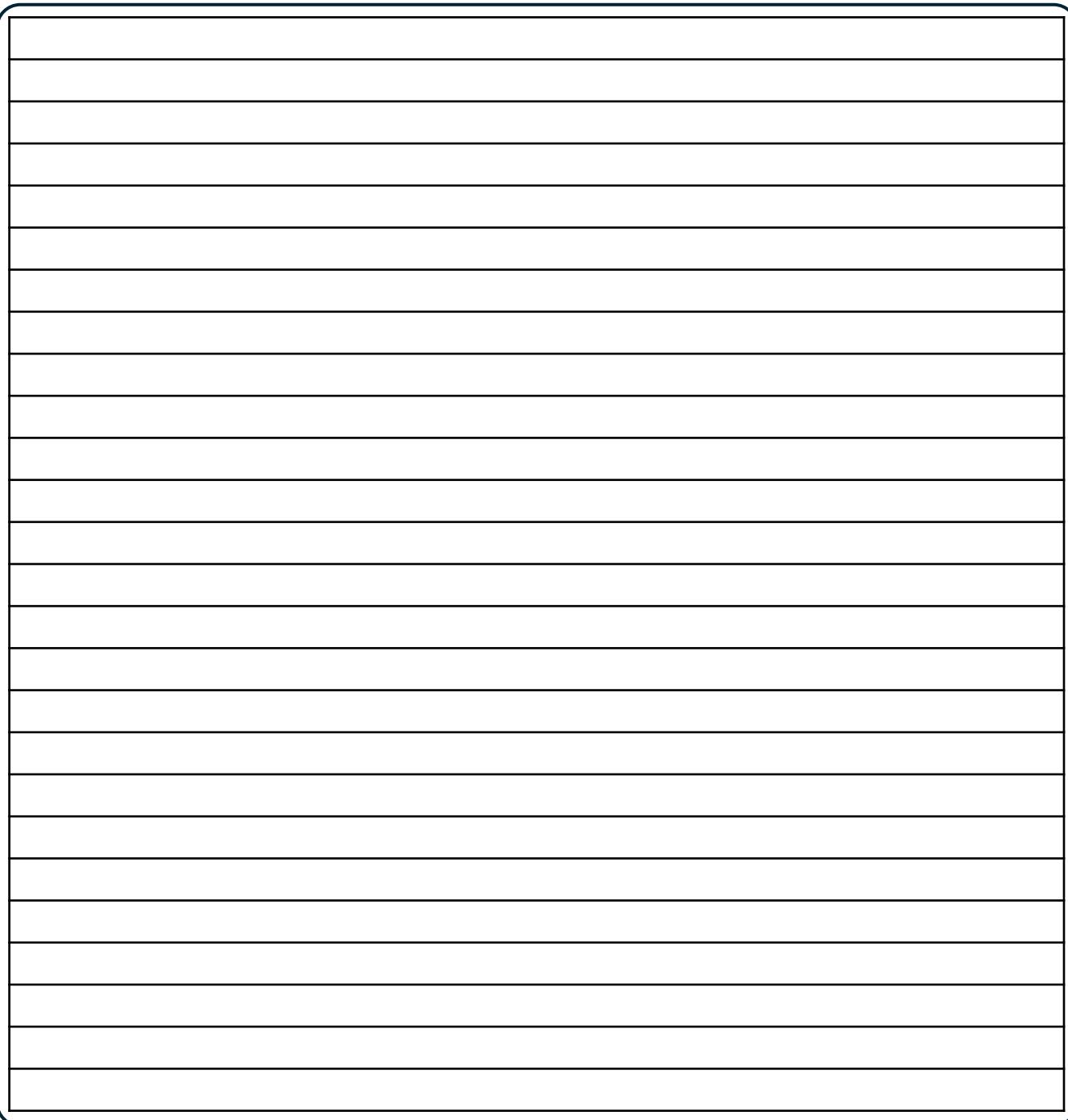
Why not RAG-rate your cards?
(*Red* = you really don't know,
Amber = you sort of know, *Green* = you completely know and understand). Then, every time you re-test yourself, you can re-RAG-rate your cards. You could do this along the bottom of each card.





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.