



Sheffield Park Academy

The best in everyone™

Part of United Learning



Knowledge Organiser

Term 1

Name:

Tutor Group:

Tutor & Room:

AMBITION • KNOWLEDGE • DETERMINATION

How do I complete Knowledge Organiser homeworks?	2
Your Knowledge Organiser and Self-Quizzing Book	3
Art	4
Computer Science	5
Drama	6
English	7-9
Food	10
French	11
Geography	12
History	13-14
Literacy	15-16
Maths	17-19
Music	20
Oracy	21
Religious Education	22
Science	23-33

How do I complete Knowledge Organiser homeworks?

You will be set a MINIMUM of 2 Knowledge Organiser homeworks in every subject each half term

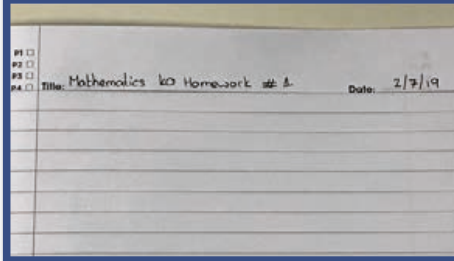
STEP 1

Identify what words/ definitions/facts you have been asked to learn.



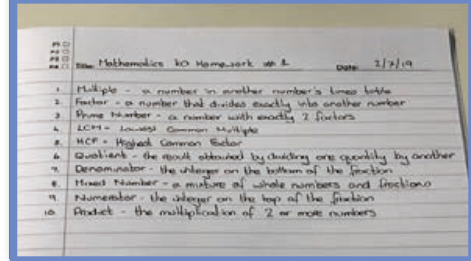
STEP 2

Write today's date and the title from your Knowledge Organiser.



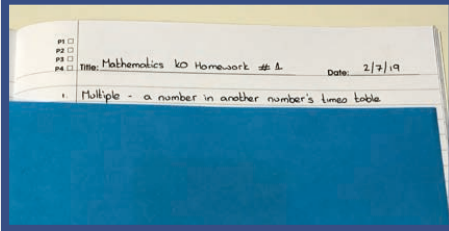
STEP 3

Write out the keywords/definitions/facts you have been set in FULL.



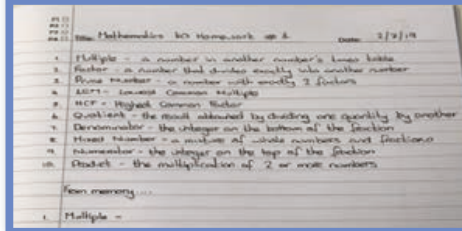
STEP 4

Cover the definitions in your SELF-QUIZZING BOOK, apart from the first. **Read it, Cover it, Say it** in your head, check it... REPEAT until confident.



STEP 5

Cover up ALL the definitions/facts and write them out from memory in your SELF-QUIZZING BOOK.



STEP 6

Check your answers and correct where required. Repeat Steps 4 to 6 until you are confident.

You will be tested on the words/definitions/facts as a starter activity in your lesson on the day that the homework is due.

This will be completed in your normal exercise book and you will mark it in class.

Your Knowledge Organiser and Self-Quizzing Book



Knowledge Organisers

Knowledge Organisers contain critical, fundamental knowledge that you **MUST** know in order to be successful in Year 9 and subsequent years.

They will help you recap, revisit and revise what you have learnt in lessons in order to move the knowledge within from your short-term memory to long-term memory.

Self-Quizzing Book

This is the book that all Knowledge Organiser homework is to be completed in. You must follow the simple rules as to how they are to be used.



You **must** bring your Knowledge Organiser and Self-Quizzing Book to **every** lesson and place it on your desk at the beginning of each lesson.

You **must** keep all of your Knowledge Organisers and Self Quizzing Books because the fundamental knowledge required in Year 9 will also be required in in Key Stage 4.

Knowledge Organisers are **NOT** a replacement for revision guides but they include the fundamental knowledge that ALL students in Year 9 require.



Y9 Art and Design – Mechanical

Key Words

1	Viewfinder	A tool that frames or crops a particular area of an image. It is usually a square or a rectangle made out of card or plastic through which you look at an area in more detail.
2	Tone	The lightness and darkness of something.
3	Shadows	The darkest areas of an image.
4	Highlights	The lightest areas of an image.
5	Form	The way something looks three-Dimensional
6	Shape	A two-Dimensional area defined by an outline.
7	Composition	The arrangement or layout of parts of a picture/piece of art.
8	Design	Generating ideas for a piece of artwork.



Techniques

9	Observational Drawing	Drawing or painting from life.
10	Close up Observation	Zooming in on an area of an image or object in detail.
11	Monoprint	A form of print making where the image can only be made once.
12	Mark Making	The creation of different lines, patterns and textures we create in a piece of art.
13	Sgraffito	A technique which consists of layering two materials and scratching an image into the top layer to reveal the colour of the bottom layer.
14	Mixed Media	The use of a variety of materials to create a piece of art.
15	Artist Research	Investigating an artist relevant to the theme of the project.

Year 9

Computer Science Term 1 Knowledge Organiser

Key Concepts – Python		
1	print('hello!')	Print a value on screen (in this case, hello!)
2	input ("")	Input a value into the computer
3	x=input ("")	Input a value and stores it in a variable x
4	x=int(input(""))	Input a value into x, whilst also making it into an integer
5	print(str(x))	Prints the variable x, but converts it into a string first
6	if name == "Fred":	Decides whether the variable 'name' has a string first
7	elif name == "Tim"	elif (short for else if) is for when the first if condition is not met, but you want to specify another option
8	#	# is used to make comments in code – any line which starts with a # will be ignored when the programme runs

Key Concepts – Python		
1	Python	A high-level programming language.
2	Programming	The process of writing computer programs.
3	Code	The instructions that a program uses.
4	Sequence	Parts of the code that run-in order and the pathway of the program reads and runs very line in order
5	Selection	Selects a pathway through the code based on whether a condition is true
6	Iteration	Code is repeated (looped), either while something is true or for a number of times
7	Algorithm	A set of rules/instructions to be followed by a computer system
8	Variable	A value that will change whilst the program is executed. (eg. temperature, speed)
9	Comparative Operator	When comparing data, an operator is used to solve the equality such as < > != or ==
10	Syntax	The punctuation/way that code must be written so that the computer can understand it. Each
11	Data Type	This indicates how the data will be stored. The most common data types are integer, string, and float/real.
12	String	A collection of letters, numbers or characters. (e.g., Hello, WR10 1XA)
13	Integer	A whole number. (e.g., 1, 189)
14	Float/Real	A decimal number, not a whole number. (e.g., 3.14, -26.9)
15	Boolean	1 of 2 values. (e.g., True, False, Yes, No)

Y9 Physical Theatre and Romeo and Juliet - Term 1

Areas for Assessment

1. Creating	The ability to work within a group to create and develop performance work.
2. Performing	The ability to present a character using physical and vocal skills.
3. Evaluating	The ability to discuss the qualities of a performance using dramatic language.

Physical Theatre

4. Physical theatre	A style of theatre where the actor uses their body as the primary tool for performance
5. Body as prop/object	The actor creates the shape and form of a prop or object. This replaces the use of set/props and/or physical objects on stage
6. Ensemble	The term given to a group of actors who work closely together.
7. Physical tension	The actor uses their muscles to create physical tension within their body. This gives the performance precision and accuracy for movement and positioning.

Romeo and Juliet

8. Subtext	The deeper, often hidden, meanings of what characters say and do. Subtext is often communicated through vocal and facial expressions.
9. Cannon	Speaking the same words, but starting at different times
10. Choral Speaking	Speaking as a group, using different combinations and contrasts of voices to create a meaning.
11. Unison	More than one person speaking the same words, at the same time, in the same way.

1. Context

Playwright: Shakespeare (April 23rd 1564-April 23rd 1616)

Dates: written around 1604-1605

Published: in 'The First Quarto' in 1608, revised edition published in 'The First Folio' in 1623

Era: Jacobean

Genre: Tragedy

Set: England, pre-Christian times

Structure: Five Act Play

Biography of Shakespeare

- Born in Stratford-Upon-Avon on April 23rd 1564.
- Married Anne Hathaway in 1582.
- Left his family behind around 1590 to move to London to become an actor and playwright.
- Highly successful, he established himself as the most popular playwright of his day.
- Part-owner of The Globe Theatre in London.
- His first theatre group was called Lord Chamberlain's Men, later changed to the King's Men (1603) under the patronage of King James I.
- A prolific writer who is said to have written at least thirty-seven plays, as well as narrative poems and a collection of sonnets.
- Died on his birthday in Stratford-upon-Avon in 1616.

Notable works

Shakespeare's plays can be categorised into three genres.

- Tragedy:** e.g. 'Macbeth', 'King Lear', 'Hamlet'
- History:** e.g. 'Richard III', 'Antony & Cleopatra', 'Henry V'
- Comedy:** e.g. 'Much Ado About Nothing', 'As you Like It', 'Twelfth Night'

Social, Historical & Literary Context

Historical context

- King Lear was written during the reign of King James VI, King of Scotland and England. James VI was trying to persuade the English Parliament to approve the union of the two countries into one nation.
- It was James who first used the term "Great Britain" to describe the unity of the Celtic and Saxon lands: England, Scotland, and Wales. A combination of nations is called "accession".

Origins of the play

- Shakespeare drew the main plot of the play from the story of a ruler who divides his kingdom among his children and is subsequently ruined.
- Play was inspired by several sources describing the legendary British King Leir. Lear's rejection of Cordelia also resembles several classical British fairy tales, where a father rejects a daughter as he does not believe she loves him enough.
- There are two different versions of the play (History of King Lear published in quarto form in 1608 and The Tragedy of King Lear, published in the First Folio in 1623). The folio edition is very considerably revised from the play published in 1608.

YEAR NINE- UNIT: SHAKESPEARE- THE TRAGEDY OF KING LEAR KNOWLEDGE ORGANISER

2. Key Characters

King Lear: an aging king of Britain and the protagonist of the play.

Cordelia: Lear's youngest daughter.

Goneril: Lear's eldest daughter.

Regan: Lear's middle daughter & the wife of the Duke of Cornwall.

Earl of Gloucester: a nobleman loyal to King Lear. Father to Edmund and Edgar.

Edgar: Gloucester's younger, legitimate son.

Edmund: Gloucester's older, illegitimate son.

Kent: a nobleman of the same rank as Gloucester who is loyal to King Lear.

Albany: the husband of Lear's daughter Goneril.

Cornwall: the husband of Lear's daughter Regan.

Fool: Lear's jester.

Oswald: the steward, or chief servant, in Goneril's house.

3. Key Terminology

Tragedy	A play ending with the suffering and death of the main character.
literary conventions	Defining features of particular literary genres, such as novel, short story, ballad, sonnet, and play.
soliloquy	A speech or passage in a drama when a character on stage speaks to himself or herself, expressing their inner thoughts and feelings.
hamartia	The fatal flaw of a tragic hero.
anagnorisis	The point in the plot, especially of a tragedy, at which the protagonist recognises their own character's true identity, or discovers the true nature of their situation.
catharsis	The process of releasing strong or pent-up emotions which can bring spiritual renewal or a release from tension.

4. Key Vocabulary

	Definition
assertive	Confident, forceful, decisive
abdicate	When a monarch renounces (gives up) their throne.
realm	A kingdom.
disintegration	The process of losing cohesion, strength or breaking down.
illegitimate	A child born to parents who are not married.
treacherous	Guilty of, or involving betrayal or deception.
tyrant	A cruel and oppressive ruler.
corrupt	Having or showing a willingness to act dishonestly in return for money or personal gain.
Machiavellian	Cunning, scheming, and unscrupulous, especially in politics.
transgressive	Violating (crossing) moral and social boundaries.
downfall	A loss of power, prosperity or status.
arrogance	Unpleasantly proud and behaving as if you are more important than, or know more than, other people
hubris	Excessive pride or self confidence
vanity	Excessive pride in or admiration of one's own appearance or achievements.
barbarous	extremely brutal
Primogeniture	The right of succession belonging to the first born, usually the son.

3. Key Terminology

aside	A remark or passage in a play that is intended to be heard by the audience but is supposed to be unheard by the other characters on the stage.
blank verse	Unrhymed lines written in a poetic meter and usually written in iambic pentameter (see below).
rhymed verse	Poem or verse having a regular correspondence of sounds, especially at the end of lines. In Shakespeare plays, verse usually uses rhyming couplets .
rhyming couplets	Two successive lines of verse of which the final words rhyme with another.
prose	Ordinary writing not organised with rhymes or fixed line lengths (opposite to verse). It is the language that people speak in.
iambic pentameter	A line of verse with five metrical feet, each consisting of one short (or unstressed) syllable followed by one long (or stressed) syllable, with the accent (or emphasis) placed on the second syllable.

1. Context	2. Key Characters
<p>Playwright: Arthur Miller (1915-2005)</p> <p>Nationality: American</p> <p>Other notable works: 'All My Sons', 'Death of a Salesman', 'A View from a Bridge'</p> <p>Dates: written in 1950-1952, performed 1952, published 1953</p> <p>Era: 1950s at the time of The Cold War</p> <p>Genre: Tragedy, tragic drama, American drama, realist drama.</p> <p>Set: Salem, Massachusetts, USA 1692 (17th Century)</p> <p>Structure: each of the four acts ends with a climax (unusual structure)</p>	<p>Abigail Williams: the 17-year-old niece of Reverend Parris. She is an orphan and a former servant to the Proctors.</p>
	<p>Reverend Parris: the minister of Salem, Betty's father, and Abigail's uncle. Tituba is his slave.</p>
	<p>Betty Parris: Reverend Parris's ten year old daughter. Cousin to Abigail Williams.</p>
<p>Playwright biography:</p> <ul style="list-style-type: none">Born in 1915 in New York City.Studied Journalism before becoming a very successful writer.Famously married to the Hollywood actress Marilyn Monroe.Winner of many accolades including: Pulitzer Prize, seven Tony Awards, an Olivier and the John F Kennedy Lifetime Achievement Award. <p>Social, Historical & Literary context:</p> <p>The Crucible</p> <ul style="list-style-type: none">The play was first performed in 1953 at the height of the McCarthy trials.Considered an attack on the anti-Communist McCarthyism. <p>The Salem Witch Trials (1692)</p> <ul style="list-style-type: none">The play is a fictionalised account of the famous 17th Century witch trials.Hysteria began when a group of girls fell ill and it could not be explained why.In a Puritan society, anything that could not be explained was said to be the work of the devil.Villagers then began to accuse each other of witchcraft, which then extended to people with grudges and jealousies.Many made accusations as revenge for petty things.Within a few weeks, dozens of people were in jail.By the end of the trials, twenty innocent men and women were hanged and hundreds were convicted. <p>McCarthyism (1947-1956)</p> <ul style="list-style-type: none">An American Senator called Joseph McCarthy rose to power by stirring up the nation into becoming terrified of Communists.Stemmed from the fear and tension between the U.S. and the Soviet Union during The Cold War.In 1947 he ordered all employees of the civil service to be screened for 'loyalty' to check they did not have Communist sympathies.Anyone named as a Communist was placed on "Blacklists" that prevented them from getting work.The McCarthy hearings (also known as McCarthy trials) ran from April to June 1954.Many non-Communists confessed to being Communists and falsely named others as Communists in order to escape punishment.Miller was brought before Congress in 1956 and convicted of contempt of Congress for refusing to cooperate (his conviction was later overturned).Eventually McCarthy was condemned and the hysteria died down, but the damage caused to the lives of hundreds of people was already done.	<p>John Proctor: a farmer, and the husband of Elizabeth. He is well respected in the local community and values his reputation.</p>
	<p>Elizabeth Proctor: loyal wife to John Proctor. She fires Abigail Williams as her servant before the play begins. Mary Warren is her servant during the events of the play.</p>
	<p>Rev John Hale: minister in the nearby Massachusetts town of Beverly, and an expert in identifying witchcraft.</p>
	<p>Thomas Putnam: an influential citizen but not well liked in the community.</p>
	<p>Ann Putman: the wife of Thomas Putnam.</p>
	<p>Rebecca Nurse: the wife of Francis Nurse and is well respected in the community.</p>
	<p>Francis Nurse: an influential citizen. He is well liked in the community but is enemies with Thomas and Ann Putnam.</p>
	<p>Giles Corey: An elderly member of the community. He is a farmer and is well known for filing lawsuits.</p>
	<p>Tituba: Rev. Parris' slave from Barbados.</p>
	<p>Mary Warren: naïve and lonely servant of the Proctors.</p>
	<p>Mercy Lewis: eighteen year old servant of Thomas and Ann Putnam.</p>
	<p>Susanna Walcott: Abigail William's friend.</p>
	<p>Deputy Governor Danforth: a Deputy governor of Massachusetts who comes to Salem to preside over the witch trials.</p>
	<p>Judge Hathorne: a bitter, remorseless Salem judge.</p>
	<p>Ezekiel Cheever: a court appointed official</p>
	<p>Marshall Herrick: a court appointed official</p>

3. Key Terminology	
Tragedy	A play ending with the suffering and death of the main character.
Literary conventions	Defining features of particular genres such as novel, short story, ballad, sonnet, and play.
Tragic hero	A literary character who makes a judgment error that inevitably leads to his/her own destruction.
Hubris	A personality trait where someone has excessive pride or self-confidence.
Hamartia	The fatal flaw of a tragic hero.
Peripeteia	A sudden or unexpected reversal of circumstances, especially in a literary work like a tragedy.
Anagnorisis	The moment in a tragedy where the protagonist makes a critical discovery about themselves, another, or a situation, leading to the resolution of the narrative.
Catharsis	The purging of the emotions of pity and fear that are aroused in the viewer of tragedy.
Protagonist	The central character or leading figure in a poem, narrative, novel or any other story. Sometimes can also be referred to as a "hero" by the audience or readers.
Antagonist	A character who actively opposes or is hostile to someone or something. Also known as an adversary.
Plot device	An object or character in the story whose purpose is purely to drive the plot, maintain its flow or resolve situations within in.
Minor character	A character in a narrative that is not the focus of the primary storyline.
Foil Character	A character who contrasts with another character to highlight qualities of the other character.
Motif	A dominant or recurring idea in an artistic work which is used to reinforce the theme.
Theme:	An idea that is dominant or recurs in a piece of literature.

YEAR NINE
UNIT: 20th Century Play
THE CRUCIBLE
Knowledge Organiser

Characterisation	A narrative device in which an author builds up a character in a narrative.
Allegory	An allegory in literature is an extended metaphor whereby characters, place or events are used to put forward a message about real life events or issues. (The Salem witch trials in the play are an allegory for the McCarthy witch hunt which took place in America in the 20 th Century.)
Symbolism	The use of symbols to express ideas or qualities.
Stage directions	Instructions written into the script of a play, indicating stage actions, movements of performers, or production requirements e.g. set design or staging.
Exposition	Refers to part of the story used to introduce background information about events, settings, characters etc. to the reader.
Climax	The point of highest tension in a narrative or scene.

4. Key Vocabulary	
	Definition
hysteria	Exaggerated or uncontrollable emotion or excitement.
hypocrisy	The practice of engaging in the same behaviour or activity for which one criticise or condemns another.
ideology	A set of beliefs and ideas on which people, parties, groups, or countries base their actions and decisions.
integrity	The quality of being honest and having strong moral principles.
patriarchy	A system of society or government in which men hold the power and women are largely excluded from it.
theocracy	A type of government where the rulers believe they are guided by God.
witch-hunt	A search for people labelled "witches" or evidence of witchcraft, often involving moral panic or mass hysteria.
witch-hunt (modern meaning)	In modern times, a 'witch-hunt' describes the attempt to find and punish a particular group of people who are being blamed for something, often because of their opinions or beliefs, not because they have actually done anything wrong.
persecution	Hostility and ill-treatment, especially because of race or political or religious beliefs; oppression.
justice	The legal or philosophical theory which fairness is administered.
subjugate	To bring under domination or control.
Puritan	A member of a group of English Protestants of the late 16 th and 17th centuries. They thought the Reformation of the Church under Elizabeth I as incomplete and wanted to simplify and regulate forms of worship.
Puritanical	Having or displaying a very strict moral attitude.
communism	A political system where all property is owned by the community and each person contributes and receives according to their ability and needs.
Social commentary	The expression of one's point of view or feelings towards society, usually through literature.
The Other	An individual or a group seen by a dominant group as not belonging.

Year 9 – Knowledge organiser

1	al dente	In Italian means 'to the bite'. Pasta should be tender but still firm to the bite, not mushy.
2	Stir-fry	To fry (meat, fish, or vegetables) rapidly over a high heat while stirring briskly.
3	Julienne	A portion of food cut into short, thin strips.
4	Bacteria	Bacteria are microscopic organisms not visible with the naked eye. Bacteria are everywhere, both inside and outside of your body.
5	Cross Contamination	Cross-contamination is the physical movement or transfer of harmful bacteria from one person, object or place to another.
6	High risk food	Foods that food poisoning bacteria like to live on. Ready to eat foods that are high in protein and moisture.
7	Danger zone	The Danger Zone is the temperature range between 5 and 63 °C in which bacteria can grow rapidly.

8	Staple food	A staple food is one that is basic and important in people's everyday lives.
9	Food provenance	Food provenance means: knowing where food was grown, caught or raised. Knowing how food was produced.
10	Foods caught	Food that is caught - Mackerel, haddock, mussels, scallops, tuna.
11	Foods reared	Food that is reared <ul style="list-style-type: none"> • cows – for their meat and milk. • sheep. • pigs. • chickens – for their meat and eggs.
12	Foods farmed	<ul style="list-style-type: none"> • Corn, Fruit, Tree Nuts, Rice, Soybean and Oil Crops, Sugar and Sweeteners, vegetables

Y9 French – Town and work

A.	In town	
1	Une pharmacie	A pharmacy
2	Un centre commercial	A shopping centre
3	Une poste	A post office
4	Une banque	A bank
5	Une bibliothèque	A library
6	Un parc	A park
	Un stade	A stadium
8	Un college	A school
9	Un magasin	A shop
10	Un marché	A market
11	Un supermarché	A supermarket
12	Un café	A café
	Un restaurant	A restaurant
14	Un cinéma	A cinema
15	Un theatre	A theatre
16	Une gare	A train station
17	Un village	A village
18	Au bord de la mer	By the sea
19	A la campagne	In the countryside

B.	Jobs	
1	Un mécanicien	A mechanic
2	Un infirmier	A nurse
3	Un professeur	A teacher
4	Une secrétaire	A secretary
5	Un vendeur	A salesperson
6	Un medecin	A doctor
7	Un ingénieur	An engineer
8	Un serveur	A waiter
9	Un journaliste	A journalist
10	Un dentiste	A dentist
11	Un vétérinaire	A vet
12	Un avocat	A lawyer
C.	Directions	
1	A droite	Right
2	A gauche	Left
3	Tout droit	Ahead
4	Le Nord	The North
5	Le Sud	The South
6	L'Est	The East

D.	Verbs	
1	Marcher	To walk
2	Se promener	To take a walk
3	Faire les magasins	To go shopping
4	Faire les courses	To shop (for groceries)
5	Aller	To go
6	Habiter	To live
7	Travailler	To work
8	Réparer	To fix
9	Vendre	To sell
10	S'occuper	To look after
11	Aider	To help
12	On peut	We can
13	Je voudrais	I would like

E.	Past tense & conditional	
1	J'ai	I have
2	Il a	He has
3	Elle a	She has
4	On a	We have
5	Je suis allé(e)	I went
6	J'ai regardé	I have watched
7	J'ai mangé	I have eaten
8	J'ai acheté	I have bought
9	Je voudrais être	I would like to be
10	J'aimerais habiter	I would like to live
11	Ce serait	I would be
F.	Activities in town	
1	Aller à la plage	
2	Faire des randonnées	
	Manger au fast food	
4	Visiter un musée	
5	Visiter un chateau	
6	Voir un spectacle	
7	Aller à un concert	

1. What is a NEE?		2. Development indicators		3. Employment structure	
NEE	Newly emerging economies. These are countries which are moving rapidly from a developing country to a developed country.	Quality of life	A qualitative measure of a country's development that is subjective and based on life satisfaction and whether people have access to facilities that make their life more enjoyable.	Urban population	The number of people living in urban areas (cities). This is often recorded as a % of the total in the country.
Developed countries	Richer countries, usually with advanced technology and an overall higher quality of life, and a higher HDI score, e.g. the UK, Japan, Germany, Norway.	Birth rate	The number of births per year per 1000 people.	Primary employment	Collecting raw materials, e.g. farming, fishing and mining.
Developing countries	Usually poorer countries, with a low industrial base and low HDI.	Death rate	The number of deaths per year per 1000 people.	Secondary employment	Manufacturing of goods from raw materials, e.g. car manufacturing.
MINT	Mexico, Indonesia, Nigeria, Turkey.	Access to safe drinking water	The % of the population that have access to drinking water that is unpolluted, disease free and safe to drink.	Tertiary employment	Providing a service, e.g. doctors, shop assistants and teachers.
BRIC	Brazil, Russia, India, China.	Life expectancy	The average age that a person is expected to live to (years).	Mechanisation	The use of machinery for example in farming modern technology means that they now have tractors and harvesters so less workers are needed.
Anomaly	Something that doesn't fit the trend. For example if you had a graph which showed something was increasing, but there was one section which decreased, that would be your anomaly.	Number of doctors	The average number of patients that each available doctor is responsible for, usually per 10,000.	Positive multiplier effect	An effect in economies where an increase in spending produces an increase in national income and consumption greater than the initial amount spent.
Distribution	How something is spread out/where it is located.	Literacy rate	The % of the population that can read or write over the age of 15.		
Brandt line	An imaginary boundary between the rich north and the poor south developed in the 1980s.	Infant mortality rate	The number of children who die before the age of 1 per 1000 live births.		
Rostow's model of development	This model summarises economic growth of countries into five different stages: traditional society, preconditions for take off, take off, drive to maturity, age of high mass consumption.	GDP/GNI	The total value of the goods and services produced by a country in a year including income earned from investments that its people and businesses have earned overseas.		
		Human Development Index (HDI)	A score from 0 to 1 that incorporates life expectancy, access to education and GDP per capita		

4. How do countries become emerging?	
Compound bar graph	A compound bar graph is one bar which represents 100%. This bar is split into the relevant sections, usually defined by different colours.
Superpower	A country with a dominant position, for example China.
Social	Factors which are to do with people e.g. education.
Economic	Factors which are to do with jobs and money.
Environmental	Factors which are to do with the environment e.g. air pollution.

5. Rapid urbanisation	
Urbanisation	The increase in the proportion of people living in towns and cities.
Rural-urban migration	The movement of people from rural areas (countryside) to urban areas (cities).
Push Factor	Things that make people want to leave an area e.g. a lack of jobs.
Pull factor	Things that make people want to move to an area e.g. good health care.
Migration	The movement of people from one area to another.

6. Mumbai case study	
Opportunities	Benefits for the area.
Challenges	Problems that they face.
Inequalities	Differences within a country between rich and poor.
Slum	Informal housing, often made from scrap material on undesirable land (also known as shanty towns).
Informal work	Work which involves little or no job security, no contract and workers pay no tax.
Formal work	Work which is contracted, workers pay tax and there are health and safety regulations in place.

7. TNCs	
Transnational corporation /company	These are companies which operate in more than one country. They often have factories in countries that are not as economically developed because labour is cheaper, e.g. Apple.
Globalisation	The increased interconnectivity of the world, linked to TNCs.
Foxconn	The factories in which electronic products such as Apple are made.

History - Knowledge Organiser**Y9 - Causes of The First World War****Key Monarchs**

1	Kaiser Wilhelm II	Emperor of Germany 1888-1914. Kaiser Wilhelm was determined to show Germany was as powerful as Britain in terms of empire and navy.
2	Archduke Franz-Ferdinand	The prince of Austro-Hungary who was assassinated (killed) in Sarajevo in 1914. This caused Austro-Hungary to declare war on Serbia.
3	Gavrilo Princip	The assassin (killer) who murdered Archduke Franz-Ferdinand in 1914 because he wanted Bosnia to be Serbian not Austro-Hungarian.
4	Nikola Pasic	The Serbian Prime Minister who refused Austro-Hungary's ultimatum on July 23 rd 1914 to find Franz-Ferdinand's assassins.

Key terms**Definition**

1	Militarism	Countries building up their armies and weapons eg Germany and Britain building Dreadnought ships.
2	Alliances	A formal agreement by countries to protect each other if attacked and support each other.
3	Imperialism	Countries trying to build up empires by controlling other countries eg Morocco controlled by France.
4	Nationalism	The belief that your country and people are better than other countries and people.
5	Britain	The united countries of England, Scotland, Ireland and Wales. It's incorrect say 'England won WW1'.
6	Soldier	Someone whose job it is to fight for an army. One of the most commonly mis-spelled words.
7	Triple Entente	The increasing friendliness between Britain, France and Russia in 1907.
8	Triple Alliance	The formal alliance between Germany, Austro-Hungary and Italy formalised in 1882.
9	Kaiser/Tsar	The German and Russian words meaning 'Emperor' or 'King'. From the old Latin word for Caesar.
10	Schlieffen Plan	The German plan to defeat France quickly by cutting through Belgium to stop war on two fronts.



History - Knowledge Organiser

Y9 - The First World War

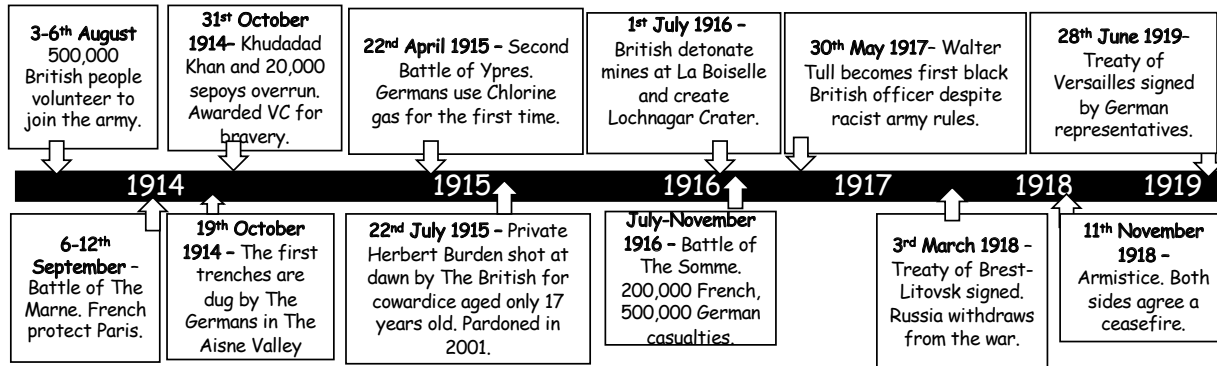
Key Monarchs

1	Field Marshal Haig	The British commander-in chief during The Battle of The Somme in 1916. Nicknamed 'The Butcher of The Somme' as 400,000 British casualties.
2	Walter Tull	Tull became the first black British soldier to reach the rank of officer even though army rules said people of 'colour' couldn't rise above sergeant.
3	Khudadad Khan	Khudadad Khan was a sepoy from India (now Pakistan) who was awarded a Victoria Cross for bravery after defending vital ports from Germans.
4	Vladimir Lenin	The leader of The Bolshevik Party in Russia. He led a revolution in October 1917 which took Russia out of The First World War.

Key terms

Definition

1	Propaganda	One sided information designed to persuade eg recruitment posters showing army positives.
2	Colonies	A country ruled over by a foreign country as part of an empire. Eg India was a British colony.
3	The Western Front	The name given to the front line of fighting between Germany, Britain, France and Belgium
4	The Eastern Front	The name given to the front line of fighting between Russia, Germany, and Austro-Hungary.
5	Stalemate	A deadlock situation in which neither side can gain an advantage eg trench warfare.
6	Gas eg Chlorine or Mustard Gas	Poisonous gas first used by The Germans. Only killed 3000 in total but terrifying.
7	Bolshevik	The Communist Party in Russia that thought everyone should be equal.
8	Shell Shock	A mental health condition suffered by soldiers. Nowadays known as PTSD
9	Empire	A collection of countries or territories ruled over by a foreign power eg India ruled by Britain.
10	Treaty	A formal agreement signed between countries eg The Treaty of Versailles agreed peace terms.



Can I write in paragraphs?

The **TIPTOP** rule

You move onto a new paragraph when you change **time**, **place**, **topic** or **person**.

1. I always start an essay with an introduction which addresses the question.
2. I finish an essay with a conclusion to summarise the main points of my argument and to address the question again.
3. I use connectives in each paragraph to link my ideas and to put them in a logical order.

Furthermore
Whereas
Nevertheless
Alternatively
Consequently

But
Since
Yet
Therefore
Besides

Meanwhile
Nonetheless
However
Although
Moreover

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

◆ **No slang** that lesson was ~~begin~~

◆ **No informal language** I'm ~~gonna~~ do my homework now

◆ **Other things to consider:**

- ✓ I am clear about the purpose of this piece of writing
- ✓ I know who my audience is
- ✓ I will use a suitable layout and text type

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar**.
- I have paragraphed my work using **TIPTOP**.
- My writing is suitable for the person I am writing for

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock
Aren't
Can't
Couldn't
Didn't
Doesn't
Don't
Hadn't
Hasn't
Haven't
He'd
He'll
He's
How'd
How's

I'd
I'll
I'm
Isn't
It'd
It'll
It's
Mightn't
Mustn't
She'd
She'll
She's
Shouldn't
They'd
They'll

We'd
We'll
We're
Weren't
What's
When's
Where'd
Where's
Who'd
Who'll
Who's
Why'd
Why'll
Why's

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object

- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: **for, and, nor, but, or, yet, so.**

- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as **because, since, after, although, or when**.

- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

affect/effect
bare/bear
brake/break
buy/by
grate/great
hair/hare
hole/whole
hour/our
knight/night
know/no
meat/meet

one/won
passed/past
peace/piece
practice (n)/practise (v)
read/red
sea/see
sight/site
to/too/two
wait/weight
weak/week
wear/where
witch/which

Basics:

- Every sentence must start with a capital letter.
- Every sentence must finish with some form of punctuation: .?!
 - Proper nouns need capital letters. These are **unique people, places or things** e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.
 - When writing titles of works such as books, films or plays:
 - Capitalise the first word
 - Capitalise any main/important words
 - Don't capitalise minor words such as 'and', 'of' or 'the' e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire
 - When writing speech:
 - ✓ Go to a new line when a different person speaks e.g. "Good morning" said the Headteacher.
 - "It's the afternoon!" replied the student.
 - ✓ Each person's speech is marked with speech marks e.g. "Walk on the left" said Mr Mathews.

Can I spell accurately?

1. Sound out the word
2. Think about how it looks
3. Think about a similar word
4. Is there a memory sentence for this word? (e.g. big elephants cannot always use small exits)
5. Find the word in a list –
 - Key words list
 - Frequently used words list
 - Your own word bank
7. Ask a friend or teacher
8. To learn it: look, cover, write, check
9. Once you've solved it, add the correct spelling to your own word bank.

Can I use punctuation?

The Apostrophe I always aim to use apostrophes correctly.

There are two main reasons why we use **apostrophes**: for possession and to replace a letter or letters

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	" "	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	()	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession

(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.

- The dog's bone
- The boy's homework
- Jones's bakery
- Yesterday's lesson
- However, if it is plural (more than one), an apostrophe comes after the 's'.
- The dogs' bones
- The boys' homework
- Joneses' bakeries (lots of Jones families)
- Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:

- ❖ **There** shows position *Your seat is over there*
- ❖ **Their** shows that **'they' own something** Their blazers are navy blue
- ❖ **They're** is short for **they are** as in *They're revising every day*

Its

Note: **its**, which shows that something owns something (like our, his etc), **does not** take an apostrophe: *the dog ate its bone and we ate our dinner*

Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:

- ❖ **Your** is possessive as in *this is your pen*
- ❖ **You're** is short for **you are** as in *you're coming over to my house*

Place Value

Decimal Place Value Chart											
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths	Millionths
Whole part							.	Decimal part			

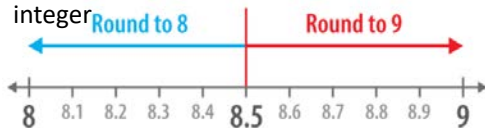
- Ascending** = ordered from lowest to highest
- Descending** = ordered from highest to lowest

Rounding and Estimation

3. Integer = a whole number

4. Round = Rounding means making a number simpler but keeping its value close to what it was.

Example: Round 8.6 to the nearest integer



8.6 rounds to 9

Four Rules - Decimals

Line up the decimal points...

$$\begin{array}{r}
 528 + 7.49 \\
 528.00 \\
 + 7.49 \\
 \hline
 535.49
 \end{array}$$

Just turn that whole number into a decimal!

Indices

Key Word	Definition & Example	Key Word	Definition & Example
5. Square Numbers	Formed by multiplying an integer by itself E.g. $3^2 = 3 \times 3 = 9$ 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144 ...	7. Square Root	The inverse of squaring E.g. $\sqrt{9} = 3$
6. Cube Numbers	Formed by multiplying an integer by itself 3 times E.g. $5^3 = 5 \times 5 \times 5 = 125$ 1, 8, 27, 64, 125, 216, 343, 512, 729, 1000 ...	8. Cube Root	The inverse of cubing E.g. $\sqrt[3]{125} = 5$

Factors, Multiples & Primes

Key Word	Definition & Example
9. Factor	An integer that divides into another integer exactly. E.g. <i>List the factors of 28</i> 1, 28, 2, 14, 4, 7
10. Multiple	A number in that numbers times tables. E.g. <i>List the first ten multiple's of 7</i> 7, 14, 21, 28, 35, 42, 49, 56, 63, 70
11. Highest Common Factor (HCF)	The largest number that is a factor of at least two numbers. E.g. <i>Find the HCF of 28 and 12</i> <i>Factors of 28:</i> 1, 28, 2, 14, 4, 7 <i>Factors of 12:</i> 1, 12, 2, 6, 3, 4 $HCF = 4$
12. Lowest Common Multiple (LCM)	The smallest number that is a multiple of at least two numbers. E.g. <i>Find the LCM of 8 and 12</i> <i>Multiples of 8:</i> 8, 16, 24 ... <i>Multiples of 12:</i> 12, 24 ... $LCM = 24$
13. Prime	A number with EXACTLY 2 factors. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37 ...
14. Product	To find the product means to multiply. E.g. The product of 6 and 7 is 42.

Sharing in a given Ratio

Match ratio parts to the given value

Divide the amount by the parts

and

Multiply the ratio by the value of one part

e.g. share £420 in the ratio 2:5

$$2 + 5 = 7$$

$$420 \div 7 = £60$$

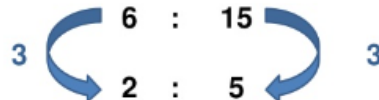
$$2:5$$

$$(x60) \quad (x60)$$

$$£120 : £300$$

Simplifying Ratio

Divide both sides by the highest common factor



Fractions

Add and Subtract – ensure the fractions have the same denominator before adding numerators

$$\frac{4}{5} - \frac{1}{3} =$$

$$\frac{12}{15} - \frac{5}{15} = \frac{7}{15}$$

Multiply – multiply numerators and denominators

$$\frac{4}{5} \times \frac{1}{3} =$$

$$\frac{4 \times 1}{5 \times 3} = \frac{4}{15}$$

Divide – take reciprocal of the second fraction and then multiply the new numerators and denominators

$$\frac{4}{5} \div \frac{1}{3} = \frac{4}{5} \times \frac{3}{1} = \frac{12}{5} = 2\frac{2}{5}$$

Percentages

Finding percentages of an amount:

1%	÷100
5%	÷20
20%	÷5
25%	÷4
50%	÷2

Multipliers:

To find the multiplier for a percentage, divide by 100

Use multipliers on a calculator paper

e.g.

$$35\% \text{ of } 370 = 0.35 \times 370$$

Increasing and decreasing a given amount:

Calculator:





$$\text{Original Amount} \times \text{multiplier} = \text{new amount}$$

Finding percentage increase or decrease (profit/loss):

$$\frac{\text{value of increase/decrease}}{\text{original}} \times 100$$

Writing an amount as a percentage of the original:

$$\frac{\text{amount}}{\text{original}} \times 100$$

	Term	Definition
1	 Bass clef	Musical symbol that indicates to play the lower pitched of music.
2	Harmony	Notes blending together creating layers.
3	Discord	A chord where the notes create tension, 'clashing' together creating a harsh sound.
4	Concord	A chord where the notes sound 'comfortable' or 'happy' with each other.
5	Pitch	Music that moves high or low. Extreme high or low pitch create tension and a scary sound.
6	Sonority	The unique colour, character or quality of an instruments sound (brass can be raspy or mellow).
7	Dynamics	The volume or intensity in which a note is sounded/played.
8	Crescendo	Gradually getting louder. 
9	Repeat sign	Tells a performer to go back to a section and repeat.
10	 Flat	Lowering a note by a semitone, moving one step to the left, usually a black note.
11	 Sharp	Raising a note by a semitone moving a step to the right, usually a black note.
12	Leitmotif	A short melody associated with a character, object or location. The jaws theme.
13	Theme song	Sometimes a song used to represent a film for marketing reasons. James bond always has a theme song.
14	Diagetic	Music in the film that is part of the action, the characters can hear .
15	Non-diagetic	Music in the film that the characters can not hear but the audience can.
16	Under score	Where music is played at the same time as the action.
17	Syncing point	An exact moment in a piece of film/tv where sound/music is applied to fit over the action.

Art:

- ☐ To further develop my idea, I could...
- ☐ In my opinion...
- ☐ I have taken inspiration from...

Maths:

- ☐ ... is incorrect because...
- ☐ Another way to work this out is...
- ☐ The mistake is that...

Science:

- ☐ I can conclude from the data that ... as ... increases/decreases, ... increases/decreases.
- ☐ The pattern the data shows is...
- ☐ One key fact from the topic was...

History:

- ☐ This links to my next point because...
- ☐ The source is a...
- ☐ The source was made in...

Generic:**You can use these in any lesson:**

- ☐ I think...
- ☐ In my opinion...
- ☐ I agree/disagree with ... because...
- ☐ The answer is ... because...
- ☐ Another way of looking at this is...
- ☐ My first/second/third example is ...

Technology:

- ☐ The design could do with...
- ☐ Aspects I found difficult were...
- ☐ If I were to do this again I would...

PE:

- ☐ This is a strength because...
- ☐ This is a weakness because...
- ☐ I conclude...

Music:

- ☐ As I listened to the music, I felt...
- ☐ This sounds like...
- ☐ I would suggest they... to improve their performance

IT:

- ☐ I agree/disagree with... because...
- ☐ The answer is ... because...
- ☐ I could have improved my work by...

EAL:

- ☐ I like... because...
- ☐ I don't like... because...
- ☐ I think...

English:

- ☐ The writer first establishes the idea that ... when he/she chooses to focus on ...
- ☐ It is clear that...
- ☐ This is established/reinforced/developed through the writer's use of...

Geography:

- ☐ An example of this is...
- ☐ This means that... One positive/negative reason is...
- ☐ Overall, I believe that... The evidence in the figure/source is...

Good		
1	Good	Possessing desirable qualities which are morally right and benefit someone or something
2	Conscience	A persons internal guide between right and wrong
3	Commandments	Important instructions from a source of authority
4	Miracle	A good event caused by God
5	Angel	Beings created by God to help God communicate with humans

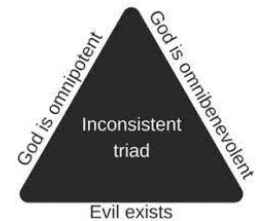
Life after death		
1	Reincarnation	The soul moving to a new body after death
2	Resurrection	Coming back to life after death
3	Eternal	Never ending
4	Funeral	A ceremony to mark the end of a person's life
5	Cremation	The burning of a body after death
6	Burial	Placing the body in the ground after death
7	Mourn	To be sad when someone dies

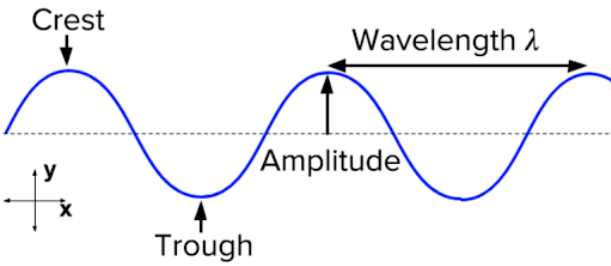
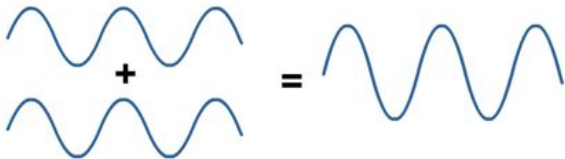
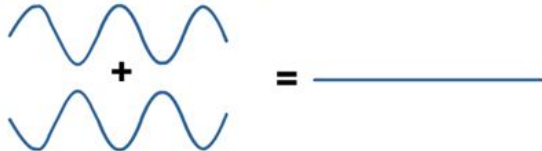
Evil and suffering		
1	Evil	Morally wrong or bad, sometimes harmful, usually causes suffering
2	Natural evil	Events caused by nature which inflict suffering on humans
3	Moral evil	Events caused by people which inflict suffering on others
4	Devil	An evil being who tempts humans to do the wrong thing
5	Consequences	The result of an action, often negative
6	Physical suffering	Hurt caused to the body e.g broken bone
7	Emotional suffering	Hurt caused to a person's feelings – e.g. upset
8	Mental suffering	Hurt caused to mental health e.g anxiety
9	Religious suffering	Hurt caused because of a person's beliefs e.g. Islamophobia


The problem of suffering		
1	Omniscient	All knowing
2	Omnipotent	All powerful
3	Omnipresent	Everywhere
4	Omnibenevolent	All loving

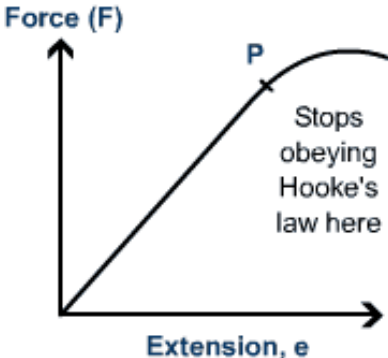
Religious Education

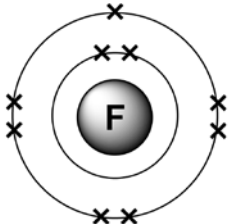
Good and Evil

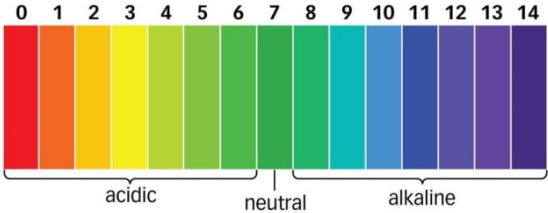



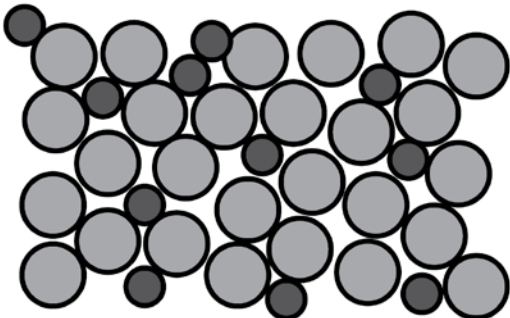
Sound			
	Key word	Definition	
1	Amplitude	Measurement from midpoint of a wave to the crest or trough.	 <p>Figure 1: Parts of a transverse wave.</p>
2	Wavelength	Measurement from one point on a wave to the next identical point.	
3	Frequency	The number of waves per second.	
4	Ultrasound	High frequency sounds above 20 000 Hz.	
5	Superposition	When two or more waves cross at a point, the displacement at that point is equal to the sum of the displacements of the individual waves.	<p>Constructive Interference</p>  <p>Destructive Interference</p> 


Forces in action			
	Key word	Definition	
1	Pivot	The central point on which a mechanism turns.	
2	Lever	A simple machine.	
3	Moment	The turning effect of a force.	<p>Moment</p> <p>Formula: $M = Fd$ (Units: Nm)</p> <p>F – force d – <u>perpendicular</u> distance of force from point of interest</p>
4	Work done	The energy transfer that occurs when an object is moved.	<p>Work Equation</p> <p>Work equals force times distance</p> <p>Work = F x d</p>

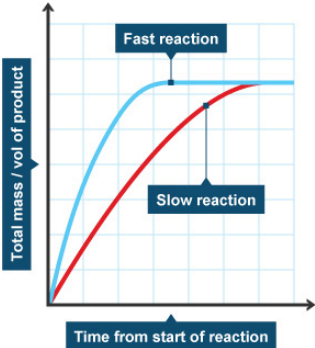
5	Hooke's law	The extension of a spring is directly proportional to the force added (until the elastic limit is reached).	
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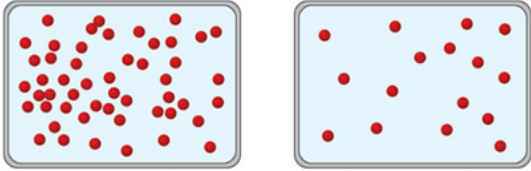
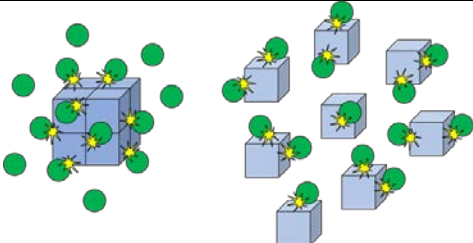
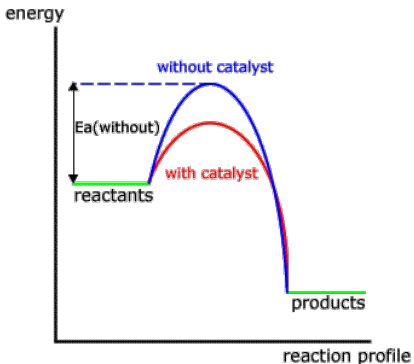
Reactivity			
	Key word	Definition	
1	Electron configuration	The correct arrangement of electrons in their shells. (Maximum of 2 electrons in the first shell then 8 in other shells.)	
2	Ion	Charged particle.	

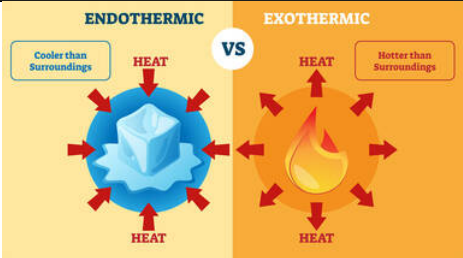
3	Relative formula mass	The sum of the masses of all atoms in a compound.	CO_2 $(1 \times 12) + (2 \times 16)$ $12 + 32$ $= 44$
4	Acid	Chemical with a pH below 7.	
5	Alkali	Chemical with a pH above 7.	
6	Salt	Neutral compound formed by reacting an acid with an alkali.	$\text{HCl(aq)} + \text{NaOH(aq)} \rightarrow \text{NaCl(aq)} + \text{H}_2\text{O(l)}$ <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;"> ACID </div> <div style="text-align: center;"> BASE </div> <div style="text-align: center;"> SALT </div> <div style="text-align: center;"> WATER </div> </div>

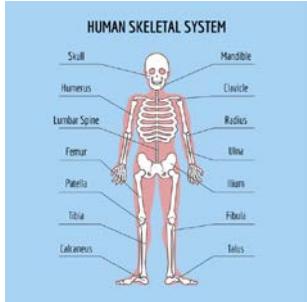

7	Reactivity series	Metals are placed in order of reactivity. The most reactive metals are at the top.	<div> <p>potassium most reactive K</p> <p>sodium Na</p> <p>calcium Ca</p> <p>magnesium Mg</p> <p>aluminium Al</p> <p>carbon C</p> <p>zinc Zn</p> <p>iron Fe</p> <p>tin Sn</p> <p>lead Pb</p> <p>hydrogen H</p> <p>copper Cu</p> <p>silver Ag</p> <p>gold Au</p> <p>platinum least reactive Pt</p> </div> 
8	Oxidation	Addition of oxygen.	
9	Reduction	Removal of oxygen.	
10	Alloy	Mixture of two or more metals.	

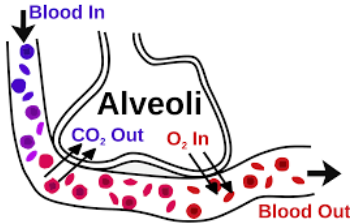
11	Crude oil	A mixture of hydrocarbons that is a useful raw material.	
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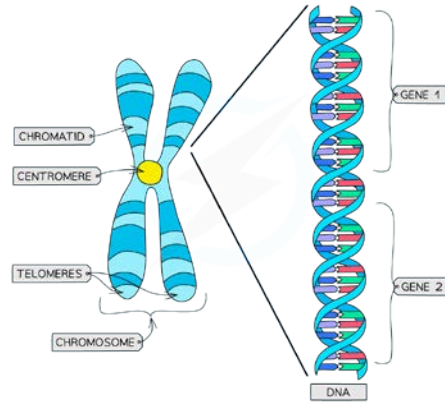
Energetics			
	Key word	Definition	
1	Rate of reaction	The speed at which a chemical reaction takes place.	















2	Concentration	The number of particles in a given volume.	 <p>High concentration Low concentration</p>
3	Surface area	The total area that the surface of a chemical occupies.	
4	Catalyst	A chemical that increases the rate of reaction without undergoing any permanent chemical change.	 <p>energy</p> <p>without catalyst</p> <p>$E_a(\text{without})$</p> <p>reactants</p> <p>with catalyst</p> <p>products</p> <p>reaction profile</p>

5	Endothermic	A reaction that takes in thermal energy from the surroundings.	
6	Exothermic	A reaction that releases thermal energy to the surroundings.	
7	Combustion	Burning – a highly exothermic reaction.	<p>propane + oxygen \rightarrow carbon dioxide + water</p> <p>$C_3H_8 + O_2 \rightarrow CO_2 + H_2O$</p>
8	Thermal decomposition	Using heat to break down a chemical.	<p>$CaCO_3 \rightarrow CaO + CO_2$</p> <p>Reactant Products</p>

Biological systems			
	Key word	Definition	
1	Skeleton	Framework of bones to support and protect an organism.	 <p>HUMAN SKELETAL SYSTEM</p> <p>Labels: Skull, Mandible, Clavicle, Radius, Ulna, Ilium, Ischium, Pubis, Femur, Tibia, Fibula, Tarsals.</p>
2	Muscle	Tissue in an animal that has the ability to contract and produce movement.	 <p>Labels: Agonist, Antagonist.</p>
3	Antagonistic muscles	Pair of muscles. As one muscle contracts the other relaxes.	

4	Alveoli	Tiny air sacs in the lungs that allow gaseous exchange.	
5	Gaseous exchange	Transfer of oxygen from inhaled air into the bloodstream and transfer of carbon dioxide into the exhaled air.	
6	Aerobic respiration	A chemical reaction that transfers energy to cells. Oxygen is needed.	<p>glucose + oxygen → carbon dioxide + water</p> $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$
7	Anaerobic respiration	Transfer of energy from glucose to cells without oxygen.	<p>glucose → lactic acid + energy</p> $\text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 2\text{C}_3\text{H}_6\text{O}_3 + \text{energy}$

8	DNA	The carrier of genetic information.	
9	Chromosome	Thin strands of DNA. There are 23 pairs in every human cell (except the gametes).	
10	Gene	A section of a chromosome which determines a specific characteristic e.g. eye colour.	

11	Punnett square	A graphical representation of the possible genotypes of an offspring.	<p>Parent 1</p> <p>A  a</p> <p>Parent 2</p> <p> A</p> <p>a</p> <table border="1" data-bbox="1075 742 1291 955"> <tr> <td> AA</td> <td> Aa</td> </tr> <tr> <td> Aa</td> <td> aa</td> </tr> </table>	 AA	 Aa	 Aa	 aa
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