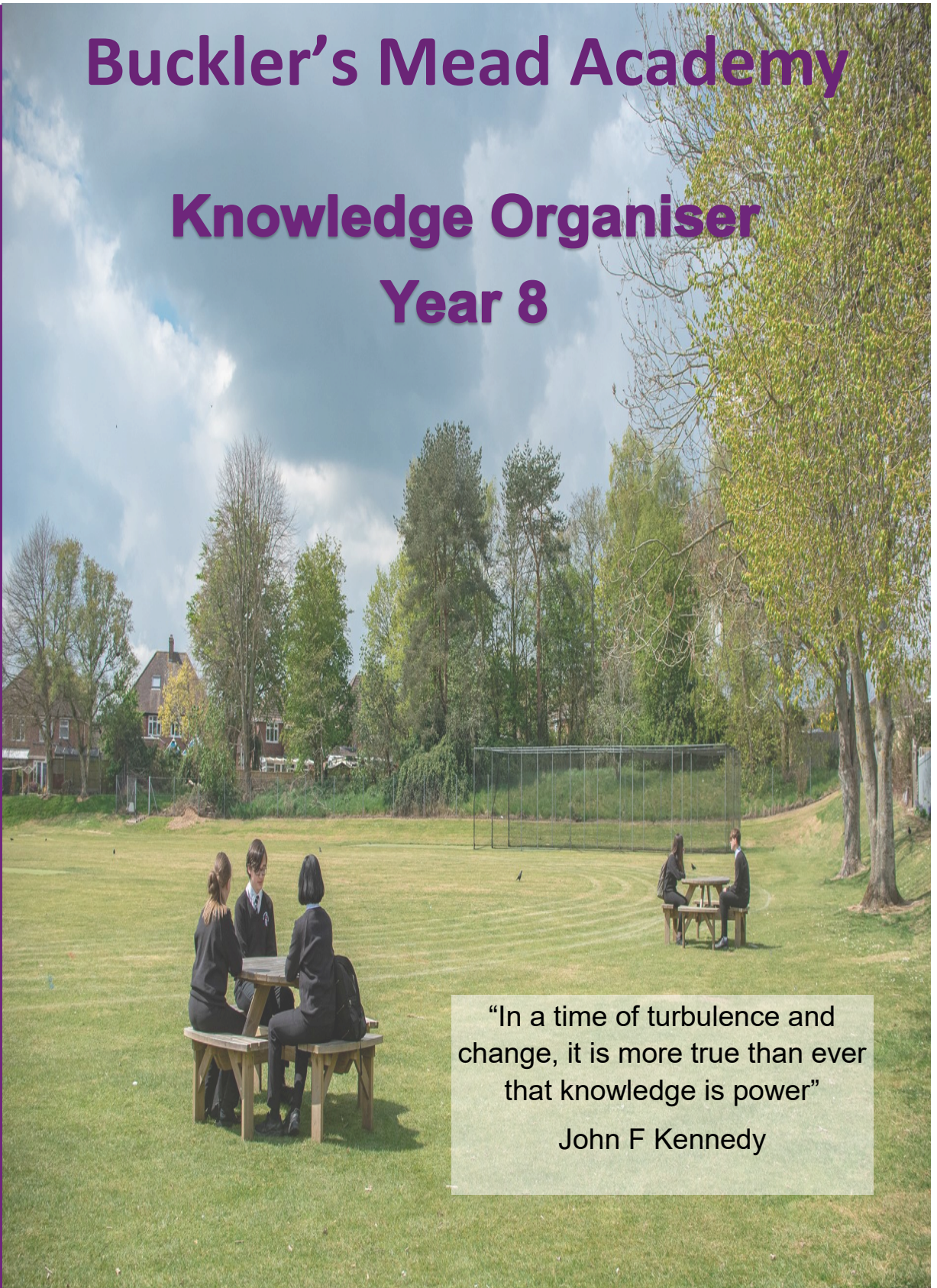


# Buckler's Mead Academy

## Knowledge Organiser Year 8

### Learning Cycle 1



“In a time of turbulence and change, it is more true than ever that knowledge is power”

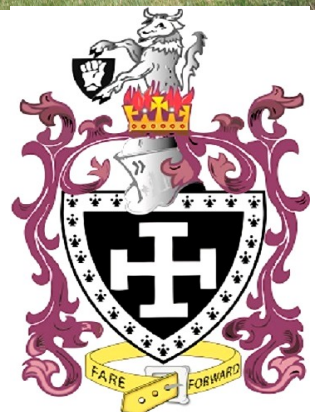
John F Kennedy

***Inspiring Education for All***

**Name:**

**Tutor:**

***Ready, Responsible, Respect***



# Homework Timetable

## Learning Cycle 1

	Week A	Week B
Monday		
Tuesday		
Wednesday		
Thursday		

Success

Enjoyment

*"Inspiring Education for All"*

Opportunity

Community

# Your Knowledge Organiser

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# How to Use Your Knowledge Organiser

## Self –Quizzing

Your Knowledge Organiser contains all of the key information you need to know for each subject area.

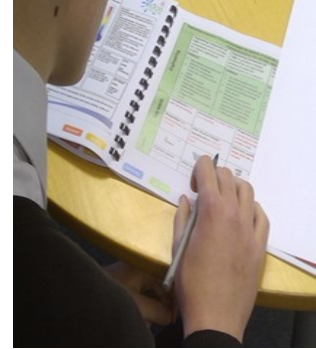
Your Knowledge Organiser will allow you to revise this key information and make sure it is stored in your long-term memory

The best way to use this resource is by self-quizzing.

**“look, cover, write and check”**

# Look, Cover, Write, Check, Correct

**First**, look through and read the information on a section of your knowledge organiser



**Then**, cover the section so you can no longer see the information

**Next**, Try and **write out** the key definitions or facts that you need to know



**Now**, uncover the section of your Knowledge Organiser and check how correct you were

**Finally**, correct anything that you wrote down that was incorrect in **purple**

# Knowledge Quiz

You teacher will quiz you on your knowledge organiser during the learning cycle .

Record your score from each quiz in the mark box.

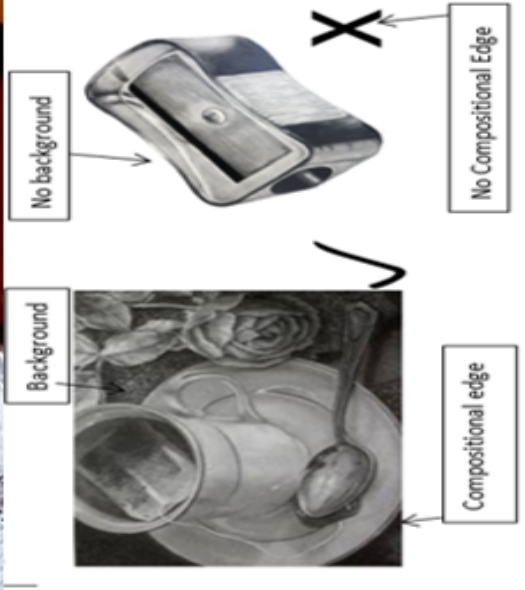
Quiz 1					
Quiz 2					
Quiz 3					

Quiz 1					
Quiz 2					
Quiz 3					

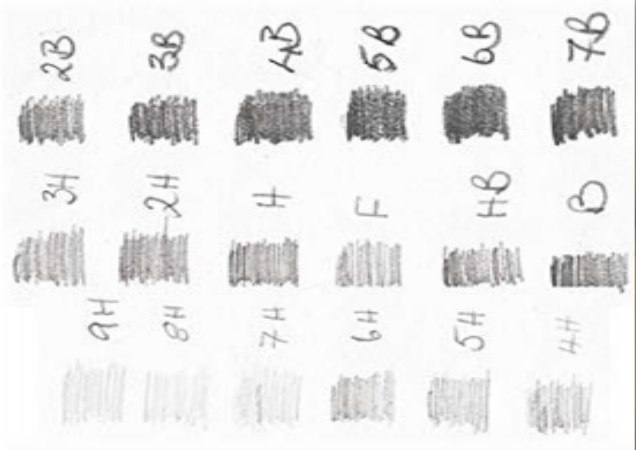
Quiz 1					
Quiz 2					
Quiz 3					

<b>LINE</b>	the path left by a moving point, e.g. a pencil or a brush dipped in paint. It can take many forms, e.g. horizontal, diagonal or curved.
<b>-tone</b>	means the lightness or darkness of something. This could be a <u>shade</u> or <u>how dark</u> or <u>light</u> a <u>colour</u> appears
<b>Texture</b>	the surface quality of something, the way something feels or looks like it feels. There are two types: <u>Actual</u> and <u>Visual</u>
<b>SHAPE</b>	an area enclosed by a <u>line</u> . It could be just an outline or it could be <u>shaded</u> in.
<b>PATTERN</b>	a design that is created by repeating <u>lines</u> , <u>shapes</u> , <u>tones</u> or <u>colours</u> . can be <u>manmade</u> , like a <u>design</u> on fabric, or <u>natural</u> , such as the markings on animal fur.
<b>COLOUR</b>	There are 2 types including <u>Primary</u> and <u>Secondary</u> . By mixing any two <u>Primary</u> together we get a <u>Secondary</u>

Observational drawing  
**Anything can be drawn from observation**, including objects and still life arrangements, figure and portrait studies, landscapes and other realistic views.



Sketching graphite Pencils come in a range of grades, from 9B to 9H, that describe the tone of the line that each pencil will produce. The H stands for hard and the B for black. The harder pencil leaves less graphite on the surface resulting in lighter mark-making.



# Computing

Python -> English	
<code>print('hello!')</code>	Prints a value on screen (in this case, hello!)
<code>input('')</code>	Inputs a value into the computer.
<code>x=input('')</code>	Inputs a value and stores it into the variable x.
<code>x=int(input(''))</code>	Inputs a value into x, whilst also making it into an integer.
<code>print(str(x))</code>	Prints the variable x, but converts it into a string first.
<code>if name == "Fred":</code>	Decides whether the variable 'name' has a value which is equal to 'Fred'.
<code>else:</code>	The other option if the conditions for an if statement are not met (eg. name = 'Bob' when it should be Fred)
<code>elif name == "Tim"</code>	elif (short for else if) is for when the first if condition is not met, but you want to specify another option.
<code>#</code>	# is used to make comments in code – any line which starts with a # will be ignored when the program runs.

Comparative Operators	
<code>==</code>	Equal to
<code>!=</code>	Not equal to
<code>&gt;</code>	Greater than
<code>&lt;</code>	Less than
<code>&gt;=</code>	Greater than or equal to
<code>&lt;=</code>	Less than or equal to

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



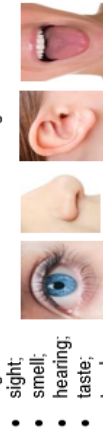
Name:

Date:

## Sensory science

### Using our senses

A range of senses are used when eating food:



A combination of these senses helps to evaluate a food.

### Appearance

The size, shape, colour, temperature and surface texture all play an important part in helping to determine first reactions to a food.

### Taste

There are five basic tastes:

- bitter;
- salt;
- sour;
- sweet;
- umami.

### Smell (odour or aroma)

The nose detects volatile aromas released from food. An odour may be described by association with a particular food, e.g. herby, cheesy, fishy.

The intensity can also be recorded. Odour and taste work together to produce flavour.

### Hearing (sound)

The sounds of food being prepared, cooked, served and eaten all help to influence our preferences. The sound of eating food can alter our perception of how fresh a food is, e.g. crunchy carrots.

### Tasting vocabulary (sensory attributes)

Sight	Bubbling Caramelised Clear Coarse Crumbly Dry	Flaky Firm Heavy Icy Juicy Moist	Opaque Smooth Solid Steaming Sticky Thick
Smell	Acidic Aromatic Bland Citrus Earthy Fragrant Brittle Crackle	Fresh Meaty Mild Pungent Savoury Smoky Crisp Crunch	Spicy Strong Sweet Tart Weak Zesty Pop Sizzle
Sound	Blitter Bland Floury Hot Mild Piquant Brittle Bubbly Chewy Close Cloying Coarse	Rich Salty Savoury Smoky Sour Spicy Dry Goopy Granular Greasy Moist Open	Strong Sweet Tangy Tart Umami Zesty Short Soft Solid Tacky Tender Waxy
Taste			
Touch			

### Sensory evaluation and tests

Sensory evaluation analyses and measures human responses to food and drink, e.g. appearance, touch, odour, texture, temperature and taste. In order to obtain reliable results, sensory evaluation tests should be set up in a controlled way to ensure fair testing, e.g. no distracting colours, noise or smells; same size portions; coded samples, and water to drink.

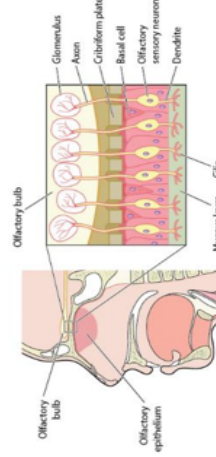
**Preference tests** - these types of tests supply information about people's likes and dislikes of a product. They are not intended to evaluate specific characteristics, such as crunchiness or smoothness. They are subjective tests and include hedonic, paired comparison and scoring.

**Discrimination tests** - these types of tests aim to evaluate specific attributes, i.e. characteristics of products (crunchiness). They are objective tests and include triangle, duo trio, ranking and paired comparison.



### Olfactory system

This is the sensory system used for olfaction, or the sense of smell. As we breathe in, the olfactory receptor cells are stimulated by odours and the olfactory membrane sends neural messages up the olfactory nerve to the brain.



### Key terms

**Fair testing:** Ensuring that sensory tests obtain reliable results.

**Food texture:** The way food is felt by the fingertips, tongue, teeth and palate.

**Olfactory system:** The sensory system used for olfaction, or the sense of smell.

**Senses:** Sight, smell, hearing, taste and touch are all used when eating food and drink.

**Sensory attributes:** Words used to describe the appearance, odour, taste and texture of a food product.

**Sensory evaluation:** Analyses and measures human responses to food and drink.

### Intensity

Foods may be described by association, e.g. meaty, minty or fruity.

The intensity (low, medium or high) can also be recorded, e.g. galkicky or salty.

### Tasks

1. Write a guide to conducting sensory evaluation tests that are fair and reliable.
2. Research umami and make a dish that is rich in the taste of umami.

To find out more, go to: <https://bit.ly/2Bzs9g5>

# Design & Technology

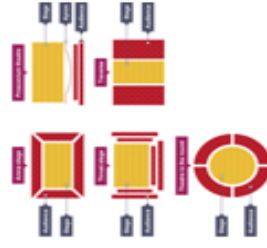
Key word/s	Definition
Anthropometric	The study of the human body and its movement, often involving research into measurements relating to people. It also involves collecting statistics or measurements relevant to the human body, called Anthropometric Data. The data is usually displayed as a table of results, diagram or graph. Anthropometric data is used by designers to make items easier to use.
Ergonomics	Ergonomics involves the study of people and their relationship with the environment around them. It often involves research into the way people interact with products and the environment. Ergonomic products will be designed with the application of anthropometric data to improve their human use.
Primary Research/Primary Data	Research/Data that is gathered first-hand <b>directly</b> from the client such as a questionnaire.
Secondary Research/Secondary Data	Research/Data which has come from second-hand sources such as the results of a survey carried out by someone else or data found on the internet.
Client	Also known as the user; the person or group of people who will buy and/or use the design solution.
Design Fixation	When a designer focuses too much on one particular design idea and doesn't consider alternatives.
Iterative design	A design strategy that follows a make-test-evaluate approach in a repetitive cycle until the perfect final outcome is produced.
User-Centred Design	A design strategy that considers the needs and wants of the user at each stage of the design process.
Systems Approach	A design strategy that starts with identifying the input, process and output elements of a system. The designer will then focus on one area at a time, e.g. the inputs/the process or the outputs, as this makes it easier to test and find errors in the system.
Collaborative Design	When a diverse team of specialists work closely together to create an innovative product.

Advantages of CAD	Disadvantages of CAD
Ideas can be drawn and developed quickly	Expensive to set up
Designs can be viewed from all angles and with a range of materials	Needs a skilled workforce
Some testing and consumer feedback can be done before costly production takes place	Difficult to keep up with constantly changing and improving technology

# Drama

<b>Drama Strategies:</b>	Narration heard over what is seen on stage.
<b>Voice-Over:</b>	Participants make <b>still images</b> with their bodies to represent a scene. A tableau can be used to quickly establish a scene that involves many characters.
<b>Tableaux:</b>	At this point, <b>thought tracking</b> can be used to find out more about each of the characters.
<b>Soundscape:</b>	Using voices or body percussion to create (like a landscape, only in sound) a particular theme or mood. e.g., the city at night
<b>Soliloquy:</b>	Act of speaking one's thoughts aloud when by oneself or regardless of any hearers.
<b>Flashback/Flash Forwards:</b>	Improvised scenes which take place seconds, minutes, days, or years before or after.
<b>Choral Speech:</b>	Speaking or chanting at the same time
<b>Thought-Tracking:</b>	Speaking aloud the thoughts or feelings of a character in a freeze-frame.
<b>Still Image/freeze frame:</b>	It is like pressing the pause button on a remote control, taking a photo, or making a statue.
<b>Conscience Alley:</b>	One person walks down an alleyway made by the group and listens to thoughts or advice
<b>Cross-Cutting:</b>	Two or more scenes are performed on stage at the same time. This makes it possible to juxtapose scenes or snippets of scenes that happen at different times or in different places, using separate areas of the performance space. The technique is used to highlight or contrast a particular theme or aspect of the story. Using different groupings, both scenes could happen at the same time, or one could be frozen while the other comes alive. This can have a similar effect to spotlighting areas of the stage.
<b>Narration and Narrating:</b>	A technique whereby one or more performers speak directly to the audience to tell a story, give information.
<b>Multiple Roles:</b>	Having more than one character in an improvised drama
<b>Marking the Moment:</b>	A technique used to highlight a key moment in a scene or improvisation. This can be done in several different ways: for example, through slow-motion, a freeze-frame, narration, thought tracking or music. It has a similar effect to using a spotlight to focus attention on one area of the stage at a particular moment during a performance.
<b>Forum Theatre:</b>	Audience stopping the performance and improving the action through feedback or by taking on the role of one character

<b>Key Words and Phrases</b>	The methods used to tell a story i.e. mime or physical theatre.
<b>Style and Form:</b>	
<b>Non-Naturalistic:</b>	Where no-one is pretending that what is happening on stage is realistic. Non-naturalistic techniques include slow motion & Soundscape.
<b>Physical Theatre:</b>	Theatre which emphasizes the use of physical movement, as in dance and mime, for expression.
<b>Symbolism:</b>	Symbolism in terms of theatre can be done with colour, movement, characters, props, and costumes. (The symbol can bring about greater meaning than any literal suggestion and can usually be used to represent something different than what you will see at face value.)
<b>Naturalism:</b>	Theatre that attempts to create an illusion of reality through a range of dramatic and theatrical strategies
<b>Protagonist:</b>	Main character in a play.
<b>Antagonist:</b>	Opponent or foil of the main character.
<b>Choreography:</b>	The art or practice of designing choreographic/movement sequences.
<b>Fourth wall:</b>	A performance convention in which an invisible, imagined wall separates actors from the audience.
<b>Proximity:</b>	How close or far you are from your co-performers can be a source of very powerful impact. For example, the threatening gangster who speaks to his victim from perhaps a couple of inches.



Proscenium Stage  
Traverse Stage  
Theatre-in-the-Round  
Promenade Theatre  
Thrust Stage

# English

## Democracy and Equality Knowledge Organiser

Key Vocabulary and Definitions: Etymology (OE: Old English, F: French, L: Latin, G: Germanic, AG - Ancient Greek, N - Norse)	
Anarchy	A state of disorder due to absence of authority G. An: without, Archos: a leader
Bias	Unfair prejudice for or against one person or group F. Biases: Slanted towards
Courageous	Strong or brave behaviour or character L. Cor: heart (to act from the heart)
Brutality	Savage physical violence; great cruelty L. Brut: stupid, mean
Censor	To remove anything offensive from books, films, etc. L. Censere: to assess
Conquer	To overcome and take control of a place or people by military force L. Conquerit: to win
Passive	accepting or allowing what happens or what others do, without resistance. L. Passivus: to pass, to suffer
Exploitation	The act of treating someone unfairly in order to benefit yourself L. Ex: out, Plicare: to fold (to unfold, to take)
Democracy	a system of government voted in by the whole population or all the eligible members of a state G. Demos: The people, Kratia: power
Ceremonial	relating to or used for formal events of a religious or public nature L. Caerimonia: to worship
Justice	Fair behaviour or treatment; fairness in the way people are treated L. Justitia: uprightness, law
Liberate	To set someone free from imprisonment, slavery or oppression L. liber: free
Massacre	The brutal killing of many people L. Macare: slaughterhouse, butcher
Oppression	Cruel or unjust treatment over a long period of time L. Oppressare: pressed against
Superior	Higher in rank, status, or quality. L. Super: Above
Protest	A strong complaint expressing disagreement, disapproval, or opposition L. Pro: publicly, Testari: assert
Reform	To make changes to something in order to improve it L. Re: a gain, formare: to shape
Pretence	an attempt to make something that is not the case appear true. L. Pretensus: to pretend

<b>Roots and Suffixes</b>	Spelling rule: when to use 'ies' to make something plural. When a word ends in a vowel + y just add 's' to make it plural. When it ends in consonant + y remove the y and add 'ies'.
Op- (Ob) - against	Keys, delays, trolleys, babies, difficulties, companies, academies, capacities, hierarchies, surveys, monkeys, allies, possibilities, emergencies, countries, holidays, memories, enemies, parties, stories
Super—above	
Cor—heart	

Terminology	
Pronoun	Words that refers either to the participants in the discourse (e.g. I, you) or to someone or something mentioned elsewhere in the discourse (e.g. she, it, this).
Anecdote	A short personal story or response
Tone	The feeling or mood of a piece of writing
Rhetorical Question	A question posed by the author of a text that is designed to make the reader think about the topic
Emotive language	Words that create a strong emotional response in a reader
Ballad	A poem/song that usually rhymes and tells a tragic story
Repetition	A repeated idea/image
Opinion	A personal viewpoint
Symbol	An image that carries hidden or subconscious meaning

SPaG Focus	
Simple sentences	An independent clause with a noun and a subject e.g. Tim mowed the grass
Compound sentences	Two independent clauses joined by a conjunction (and, whilst, before) e.g. Tim mowed the grass and Georgina fed the cat.
Complex sentences	A series of independent and dependent clauses joined together e.g. Tim, who had prayed for good weather, mowed the grass whilst Georgina fed the cat, who gulped his dinner down quickly.
Commas	Punctuation that denotes a list or a dependent clause
Prepositions	A word that tells you where or when something is in relation to something else. Examples: after, before, on, under, inside and outside.

Context	
<b>Absolute Monarchy</b>	is when the King or Queen inherit their title and have total control in making decisions that affect their country. <b>Constitutional Monarchy</b> is when the King or Queen act as a figurehead for a democratically appointed Government.
<b>The Industrial Revolution</b>	began in Britain in the late 1700s and was a shift from manual labour to powered, special-purpose machinery, factories and mass production. Child labour in these factories was common. People moved to the cities but they were overcrowded and working conditions were terrible.
<b>The Peterloo Massacre</b>	began as a peaceful protest, where people were appealing for the right to vote for working class men. The cavalry were sent to break the protest up but their charge injured and killed many.
<b>The name is reference to Waterloo</b>	, where many British soldiers died fighting for their country against Napoleon. Lots who survived were then killed protesting their right to vote at Peterloo.
<b>The suffragettes</b>	were a group of (mainly) women who fought for their right to vote when voting was only offered to men.
<b>The class system</b>	is a way of organising people into different classes based on their wealth. The two main classes in Britain are <b>working class</b> and <b>middle class</b> . Simply put, <b>working class</b> people have to work to earn an income and support themselves whereas <b>middle class</b> people are more well off.
<b>Above the middle class is the higher class and aristocracy.</b>	
<b>The slave trade</b>	started in the US in the 17 <sup>th</sup> century, when a group of African slaves were taken to the US. This practice continued until it was abolished in the 18 <sup>th</sup> century. Unfortunately, the unjust, prejudicial treatment of someone based on their race continued and was enforced through policies of racial segregation.

# Geography

Key Terms	
HIC	high-income country; a well-developed country that has good healthcare, lots of well-paid jobs and good housing
LIC	low-income country; a developing country that has poor healthcare, few jobs and poor-quality housing
NIE	newly emerging economy, a country that has begun to get richer and develop quickly
Malnourished	being weak or ill because of having too little food
Development	the economic progress of a country and improvements to quality of life
Indicator	a measurement of a country's level of development
Life expectancy	how long a person can be expected to live
GNI	gross national income, the amount of money a country makes in a year
Literacy rate	how many people can read and write, as a percentage total population over the age of 15
Infant mortality rate	the number of children who die before their first birthday per 1000 live births
Conflict	disagreement, which can sometimes become violent, between groups of people
Diarrhoea	symptom of an infection in the intestine that can kill if left untreated
Colonise	one country rules another country
Migrant	a person who moves from one place to live in another
Push Factor	negative things that make people want to move to a new area
Pull Factor	are positive things that make people want to move to a new area
Resources	something that has a value or purpose, such as food, water and energy
Resource insecurity	lack of resources like food, water and energy
Resource security	plentiful supply of resources like food, water and energy
Famine	an extreme shortage of food, which can cause illness and death
Drought	a long period of very little or no rain
Aid	money, food and emergency supplies donated to help improve people's lives
Food insecurity	lack of enough food for a country to feed its people
Food security	enough nutritious food for people to stay healthy
Over nutrition	eating too much unhealthy food – eg junk food or consuming too many calories
Obesity	being very overweight
Contaminated	infected by a poisonous or polluting substance, such as chemicals or human waste
Sanitation	having clean water, good sewerage and good waste disposal to help prevent disease and protect people's health
Fairtrade	a global organisation that farmers get a fair price for the crops and goods they sell

9.1 Global development	9.2 Escaping inequality
<ul style="list-style-type: none"> <li>Most people in HICs are rich, while most people in LICs are poor.</li> <li>Many people in poor countries do not have enough food to eat, and do not have access to a good education, or services such as healthcare, sanitation and clean water.</li> <li>Inequality between rich and poor countries means that it is more difficult for poorer countries to develop economically and improve the quality of people's lives.</li> <li>The development of a country can be measured using indicators, such as life expectancy, GNI, birth rate, literacy rate and HDI.</li> </ul> 	<ul style="list-style-type: none"> <li>Some countries may find it difficult to develop economically because of their location or climate, a lack of good healthcare and education, for social and political reasons, or because of the legacy of their colonial past.</li> <li>People may choose to leave their home country to escape poverty, war or persecution, and to seek opportunities for a better quality of life.</li> <li>The journey for migrants is sometimes dangerous.</li> </ul> 
9.3 Food inequality	9.4 Health inequality
<ul style="list-style-type: none"> <li>A country experiences food insecurity when it does not have enough food to feed its people. This can cause undernutrition and famine, and the price of available food increases, making it difficult for people to afford.</li> <li>South Sudan is a poor country that has been experiencing a famine since 2017 because of poverty, conflict and drought.</li> <li>Food security is where a country has enough nutritious food for people to eat and stay healthy.</li> <li>Food security can result in overnutrition, where people eat too many calories. In many LICs have problems with obesity, which is caused by eating more calories than is healthy, drinking alcohol, an unhealthy lifestyle and lack of exercise.</li> </ul> 	<ul style="list-style-type: none"> <li>In HICs, higher standards of living and access to good healthcare means that people are healthier than in LICs, where people are poorer, living standards are lower, and many people do not have access to healthcare.</li> <li>In India many people cannot access or afford healthcare, especially in rural areas. In Japan there is a modern healthcare system that is available to everyone, with regular health checks and most of the cost met by the government.</li> </ul> 

# Geography

## Key Terms

<b>Economy</b>	the wealth of a country
<b>Disposable income</b>	the amount of money left to spend on what you want, once bills have been paid
<b>Colonies</b>	areas controlled by another country
<b>Subsistence farmers</b>	farmers who grow only enough food to feed themselves and their families, leaving little to sell
<b>Informal work</b>	jobs that pay cash-in-hand. Workers don't pay tax but also don't receive benefits such as sick pay
<b>Sparsely populated</b>	few people live there
<b>Terrain</b>	the physical characteristics of land, such as rocky or mountainous
<b>Oases</b>	places in a desert where water is found
<b>Traditional societies</b>	groups of people who have lived in a place for a very long time, passing down knowledge and customs through many generations
<b>Nomads</b>	people who move from place to place, travelling with their animals to find grazing
<b>Semi-nomadic</b>	nomadic people who move from place to place, but may also stay in one area for a while to grow crops
<b>Desertification</b>	where the land is being turned into desert, often through overuse
<b>Over-grazing</b>	when animals eat too many plants so the vegetation cannot recover properly
<b>Hydro-electric power</b>	electricity made by water flowing through turbines in a dam
<b>Political</b>	to do with governments and decisions they make
<b>Telecommunications</b>	communication using technology, such as radio and phone
<b>Corrupt</b>	not honest

## Year 8 Topic 2 Focus on Africa

### 10.1 What is Africa like?

- ✓ Africa is a continent, with 54 countries.
- ✓ The countries of Africa are very diverse, with many geographical, social and cultural contrasts.
- ✓ Africa has many different types of landscapes, from deserts to rainforests and mountains.
- ✓ Africa has many natural resources, such as oil, diamonds, gold, and valuable crops such as cotton, cocoa, coffee and tea.



### 10.2 Africa Populations

- ✓ Africa has been the home to many different groups and civilisations throughout history.
- ✓ Africa today is very culturally and ethnically diverse, and has thousands of different ethnic groups.
- ✓ More and more people in Africa are moving to towns and cities. In rural areas most people are subsistence farmers, and in cities many people do informal work.
- ✓ Africa has more young people than anywhere else in the world – this brings benefits, but could also bring challenges in the future.



### 10.3 The Sahara

- ✓ Few people live in the Sahara because it is very dry and very hot. It is difficult to find water, and there is little vegetation. The rocky and sandy terrain makes it hard to get from place to place.
- ✓ To get enough water, people in the Sahara live near oases, or move from place to place.
- ✓ The causes of desertification are drought, lower rainfall due to climate change, population growth, and human activity such as overgrazing.
- ✓ The Great Green Wall is a scheme to create a wide boundary of trees and vegetation along the southern edge of the Sahara, to help reduce desertification.



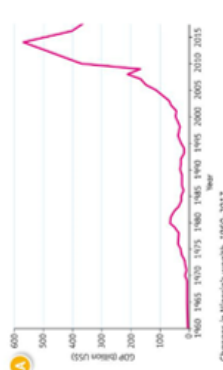
### 10.4 Nigeria – a country of contrasts

- ✓ Nigeria has a variety of different landscapes, with mountains, high plateaus and two major rivers.
- ✓ Nigeria has four different biomes: desert, rainforest, tropical savannah and semi-arid savannah.
- ✓ Nigeria has the largest population of any African country, with hundreds of different ethnic and tribal groups, and a high proportion of young people.
- ✓ Around half the population live in towns and cities. There are famous Nigerians in sport, literature and the performing arts.



### 10.5 Opportunities and Challenges in Nigeria

- ✓ Nigeria has experienced rapid economic development in recent decades. New industries have developed, bringing jobs and increased wealth.
- ✓ Nigeria's economic development has improved the quality of life for many people, with better health, education and job opportunities.
- ✓ Rapid economic growth in Nigeria has also brought economic, social and environmental challenges for many people.



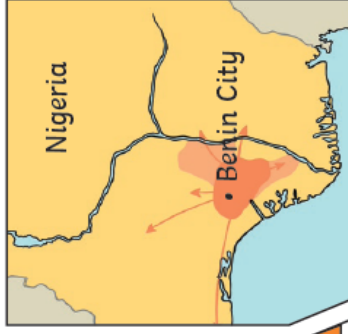
Key Events	
AD 900	The kingdom begins to develop and boundaries are established around the region called Igodomigodo in what is now Nigeria.
AD 1100	The last <b>Ogiso</b> of Igodomigodo, Owodo, dies and there is nobody to rule.
AD 1180	Eweka becomes the new ruler and changes the name Igodomigodo to <b>Edo</b> . He calls himself the <b>Oba</b> .
AD 1300-1700	The 'golden age' of <b>Edo</b> . It has a large, powerful army and skilled craftspeople.
AD 1489	The <b>Edo</b> people begin trading with the Portuguese, who call the place 'Benin'.
AD 1553	The first British ships arrive in Benin. Britain becomes one of the main countries involved in the inhumane practice of buying and selling enslaved people as if they were property. The British forcibly transport enslaved people to the Americas and are keen to gain more control in this area of Africa.
AD 1897	The British enter Benin City without permission. Fighting breaks out (the 'Benin Massacre') and only two British officers survive. As punishment, the British launch the 'Benin Punitive Expedition' and destroy Benin City, stealing many treasures. The <b>Oba</b> is exiled and the British colonise Benin.

### Timeline

0 AD 2000

Benin Kingdom

Anglo-Saxon Britain



### Religion

The people of **Edo's** beliefs were centred around a creator god named Osanobua and his many children.



People believed that, after death, Osanobua would decide their fate. They would either be reincarnated as another person or would join the spirit world. Spirits would live in villages together, watching the behaviour of their families and punishing bad behaviour.

Ceremonies were led by an **ohen** and were intended to make the **Oba** seem powerful and great, as well as to worship the gods. Ceremonies sometimes involved human sacrifices. Usually criminals or prisoners were sacrificed, although there is evidence of other sacrifices, such as women found at the bottom of wells, dressed in fine clothes.

The people of **Edo** were **animists**. Leopards, crocodiles and snakes were among the animals associated with the gods. Many warriors wore necklaces of leopards' teeth to protect them in battle.

# History

## Key Vocabulary

<b>Ogiso</b>	The title used by the early rulers of Igodomigodo. It means 'kings of the sky'. It is thought that there were around 31 <b>Ogiso</b> rulers.
<b>Oba</b>	The title used by Eweka and subsequent rulers. Eweka was from the <b>Yoruba</b> people and <b>Oba</b> is the <b>Yoruba</b> word for 'king'.
<b>Edo</b>	The name given to the kingdom of Igodomigodo by <b>Oba</b> Eweka. The people also became known as the <b>Edo</b> people.
<b>Yoruba</b>	The name of the people from the holy city of Ife. The histories of the <b>Edo</b> and <b>Yoruba</b> people are closely linked.
<b>ohen</b>	A priest who performed religious ceremonies.
<b>animists</b>	People who believe that humans, animals and objects all have souls or spirits.
<b>brass</b>	A yellowy metal made of a mixture of copper and zinc.

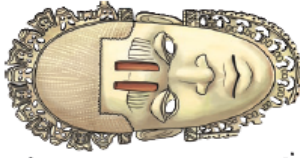
## Brass Heads

The people of **Edo** believed that the head was the most important part of a person, where the intelligence was found. When an important person died, artists would make a head of that person. **Obas'** heads, and those of gods or goddesses, were made from **brass**. People believed that the person's spirit could be contacted through the **brass** head. Artists made their work only for the **Oba** and he rewarded them with gifts.

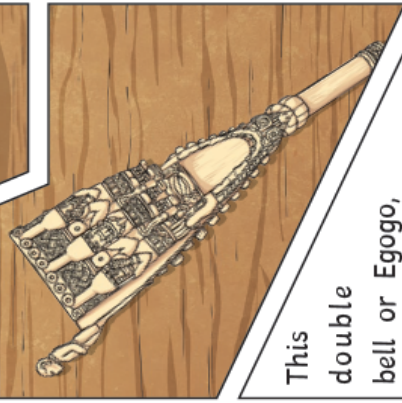


## Artefacts from the Benin Kingdom

Masks were made for use in ritual ceremonies and represented a link to the spiritual world. This mask of Queen Idia, who was the mother of **Oba** Esigie, dates back to the 16<sup>th</sup> century. It is made of ivory and features intricate carvings showing skilled craftsmanship.



This double bell or Egogo, was used by the **Oba** to scare away evil spirits during religious ceremonies and acts of worship. It is believed to be from the 16<sup>th</sup> century and it features intricate carvings showing the **Oba** and his followers.



Coral beads have a special significance in traditional **Edo** customs. The beads are made from coral stones from the seas, which are polished and shaped. **Edo** chiefs would wear necklaces of coral beads and the **Oba** would wear necklaces, collars and crowns made from them.





# Maths

## Mathematics – Year 8



In Maths you will receive a separate knowledge organiser.

Your knowledge organiser will help you to:

- Know** which **MET\*** skills you should be learning
- Track** when you have learnt, revisited and revised a skill
- Identify** any gaps where you have missed lessons
- Guide** your revision when it comes to assessments

\*The **MET (Mathematics Expertise Tower)** shows you all the skills you will master during your lessons and how each skill builds upon the last.

It is arranged into 4 topic areas:




You can see the full **MET** in the Maths Corridor!

**Maths Equipment you must have every lesson:**

Pen, pencil, rubber, ruler, protractor, compasses, scientific calculator

## USEFUL WEBSITES:


My Login:  
Password:



My Login:  
Password:



My Login:  
Password:



[www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize)    [www.khanacademy.org](http://www.khanacademy.org)

<https://corbettmaths.com>

Year 8	Term 1 September October	Term 2 November December	Term 3 January February	Term 4 March April	Term 5 May June	Term 6 July
	Expressions, Equations and Pythagoras Unit 6 Test	Indices and Transformations Unit 7 Test	Ratio and Graphs	Unit 8 Test Fractions	Accurate Drawing Unit 9 Test	Statistics and Probability Unit 10 Test

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Enjoyment

Success

La poésie Le poète L'écrivain Le chanteur/La chanteuse Un/une artiste Le tableau J'adore la peinture Les mots Les verbes Les idées Le rythme	poetry poet writer singer artist painting I love painting Words Verbs ideas rhythm	Key Words
J'aime Je n'aime pas J'adore Je déteste	I like I don't like I love I hate	Opinions
Ce que j'aime c'est / ce que je n'aime pas c'est	What I like/don't	More opinions
la musique rock classique folklorique R'n b	rock music classical music folk music R'n b	Music types
Parce que Car Cependant Par contre	because because however on the other hand	Connectives
Je pense que A mon avis	I think that In my opinion	Opinion phrases
C'est calme déprimant ennuyeux entraînent/vif modern original rapide	It is calm depressing boring lively modern original fast	Adjectives
rouge bleu noir blanc jaune brun rose orange clair/foncé	red blue black white yellow brown pink orange light/dark	Colours

Success

Enjoyment

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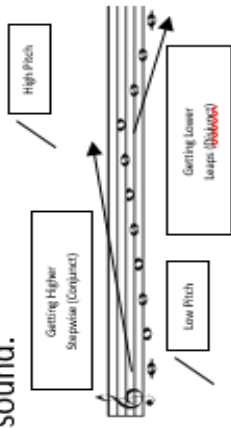

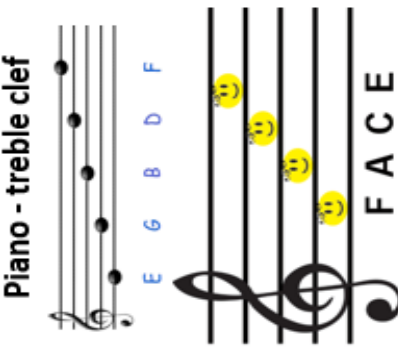
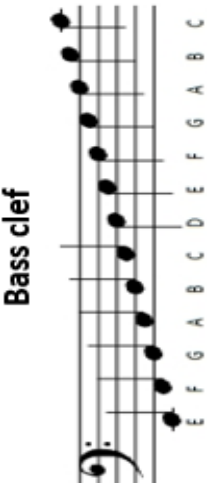

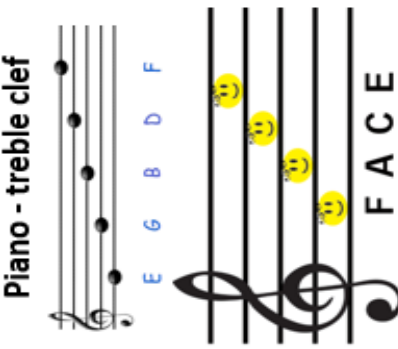
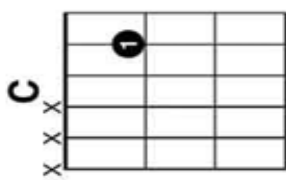
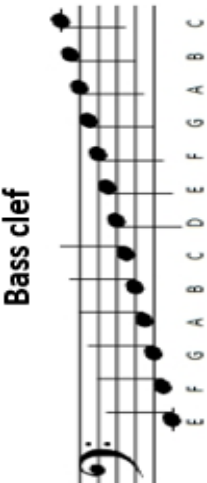
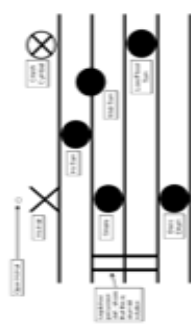
Community

# MFL - French

Die Gedichte Der Dichter/die Dichterin Der Schriftsteller/die Schriftstellerin Der Sänger/die Sängerin Der Künstler/die Künstlerin Das Bild Das Gemälde Das Wort (die Wörter) Das Verb Die Idee Der Rhythmus	poetry poet writer singer artist picture painting/picture Words Verb ideas rhythm	Key vocab
Ich mag Ich mag.....nicht Ich liebe Ich hasse	I like I don't like I love I hate	Opinions
Die Rock Musik Klassische Musik Folkmusik R'n B	rock music classical music folk music R'n b	Music types
,weil (sends verb tot he end) ,denn jedoch anderseits	because because however on the other hand	Connectives
Ich denke, dass Meiner Meinung nach	I think that In my opinion	Extended opinion
Es ist ruhig deprimierend langweilig lebhaft modern originell schnell	It is calm depressing boring lively modern original fast	Adjectives
rot blau schwarz weiß gelb braun rosa dunkel/hell	red blue black white yellow brown pink dark/light	Colours

# Music

## The Musical Elements and Band Skills

<p><b>A. Pitch</b></p> <p>The <b>highness or lowness</b> of a sound.</p> 	<p><b>B. Tempo</b></p> <p>The <b>speed</b> of a sound or piece of music.</p> <p><b>FAST: Allegro, Vivace, Presto</b></p> <p><b>SLOW: Andante, Adagio, Lento</b></p> <p><b>GETTING FASTER – Accelerando (accel.)</b></p> <p><b>GETTING SLOWER – Ritardando (rit.) or Rallentando (rall.)</b></p>	<p><b>C. Dynamics</b></p> <p>The <b>volume</b> of a sound or piece of music.</p> <p><b>VERY LOUD: Fortissimo (ff)</b></p> <p><b>LOUD: Forte (f)</b></p> <p><b>QUITE LOUD: Mezzo Forte (mf)</b></p> <p><b>QUITE SOFT: Mezzo Piano (mp)</b></p> <p><b>SOFT: Piano (p)</b></p> <p><b>VERY SOFT: Pianissimo (pp)</b></p>	<p><b>D. Duration</b></p> <p>The <b>length</b> of a sound.</p> 
<p><b>E. Texture</b></p> <p><b>How much sound</b> we hear.</p> <p><b>THIN TEXTURE:</b> Small amount of instruments or melodies.</p> <p><b>THICK TEXTURE:</b> Lots of instruments or melodies.</p> 	<p><b>F. Timbre or Sonority</b></p> <p>Describes the <b>unique sound or tone quality</b> of different instruments voices or sounds.</p>	<p><b>G. Notation</b></p> <p>How music is <b>written down</b>.</p> <p><b>STAFF NOTATION</b> – music written on a <b>STAVE</b> (5 lines.).</p> 	<p><b>H. Silence</b></p> <p>The opposite or absence of sound, <b>no sound</b>. In music these are <b>RESTS</b>.</p> 
<p><b>Piano - treble clef</b></p> 	<p><b>Guitar - chords</b></p>  <p><b>Chords: 2 or more notes played at the same time.</b></p>	<p><b>Bass clef</b></p> 	<p><b>Drums</b></p> 

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KS3 PHYSICAL EDUCATION – KNOWLEDGE ORGANISER  
AUTUMN TERM

All students will participate in at least 4 of the following activities this term.  
They are Rugby, Hockey, Basketball, Netball and Trampolining

**INVASION GAMES:** Rugby, Hockey, Netball and Basketball

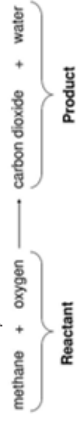
**GYMNASTICS:** Trampolining

<p><u>Invasion games:</u> Team games in which the purpose is to 'invade' the opposition's territory to score points whilst trying to make sure the other team does not score.</p>	<p><u>Spotters:</u> stand around the trampoline and ensure that the person on the trampoline is safe at all times. A spotter will prevent the trampolinist from falling off the trampoline if they get too close to the sides or the ends.</p>
<p><u>Receiving the ball:</u> when you catch a ball or receive the ball with a stick</p>	<p><u>Basic Jumps:</u> tuck, pike and straddle</p>
<p><u>Passing the ball:</u> throwing a ball to your teammate or passing it with your stick to a teammate.</p>	<p><u>Basic landing positions:</u> Seat landing, Front landing and Back landing</p>
<p><u>Spatial awareness:</u> when you recognise your position in relation to your opponent and the ball/object you are playing with.</p>	<p><u>Combinations:</u> Seat to front, front to seat, seat <math>\frac{1}{2}</math> twist to feet, <math>\frac{1}{2}</math> twist to seat, front <math>\frac{1}{2}</math> twist to feet, <math>\frac{1}{2}</math> twist to front</p>
<p><u>Defending strategies:</u> defending a space or area to stop your opponents from scoring. Defending the goal or try line.</p>	<p><u>Twists:</u> Swivel hips, Back <math>\frac{1}{2}</math> twist to feet, <math>\frac{1}{2}</math> twist into back</p>
<p><u>Attacking strategies:</u> Creating space for yourself and your teammates. Moving into space to receive a pass.</p>	<p><u>Advanced twists:</u> Roller, Cradle, Cat twist, Half turntable, Full turntable</p>
<p><u>Tackling:</u> forcing your opponent to lose possession of the ball in order for you or your teammates to gain possession.</p>	<p><u>Basic Somersaults:</u> Hands and knees turnover to feet, back pullover to feet, Back pullover to front, Back to front landing, <math>\frac{3}{4}</math> front to back landing, Front somersault, Back somersault</p>

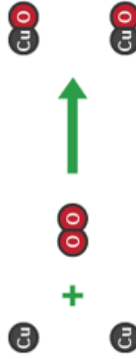
## Year 8 Types of reaction and chemical energy

### CHEMICAL REACTIONS

- A word equation shows the names of each substance involved in a reaction, and must not include any chemical symbols or formulae.



- The arrow means 'react to make'.
- In a chemical reaction, the atoms are rearranged to make new substances. The total number of atoms does NOT change. The number of atoms is conserved (no atoms are created or destroyed).



### COMBUSTION; exothermic reaction.

- The substance reacts with oxygen (from the air) to produce oxides.
- Methane + oxygen → carbon dioxide + water*
- Fossil fuels are non-renewable and will run out one day.
- Future fuels?** Scientists are finding ways to use cooking oil, chicken faeces and ethanol to fuel homes and vehicles. New cars are being developed to burn hydrogen in their engines, producing only water as the product (as this does not produce carbon dioxide, it will not contribute to global warming).

**DECOMPOSITION;** each product of decomposition reactions is simpler than the starting substances.



When you heat copper carbonate (green), the reaction makes copper oxide (black) and carbon dioxide (gas – turns limewater cloudy).

### LAW OF CONSERVATION OF MASS

- Mass is conserved in chemical reactions and in physical changes.
- Mass of reactants = mass of products



Balanced equations show; the formulae of reactants and products, how atoms are arranged and the relative amounts of reactants & products.



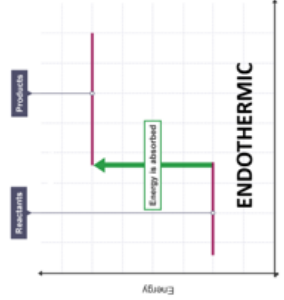
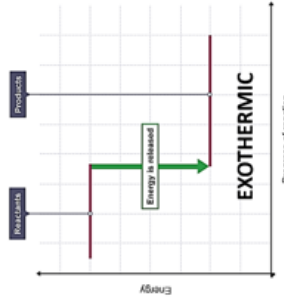
### How can we write balanced symbol equations?

**RULE:** Do not add or change any little numbers.

- Write the word equation and add formulae. magnesium + oxygen → magnesium oxide  
 $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$   
 Left = 1 Mg and 2 O    Right = 1 Mg and 1 O
- Balance the amount of oxygen.  
 $\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$   
 Left = 1 Mg and 2 O    Right = 2 Mg and 2 O
- Now balance the magnesium.  
 $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$   
 Left = 2 Mg and 2 O    Right = 2 Mg and 2 O

### BOND ENERGIES

- Bond energy = energy needed to break a bond.
  - Bond breaking = endothermic
  - Bond making = exothermic
- The difference between energy transferred in bond making and breaking determines whether a reaction is endothermic or exothermic. If more heat energy is released when making the bonds than was taken in, the reaction is exothermic.



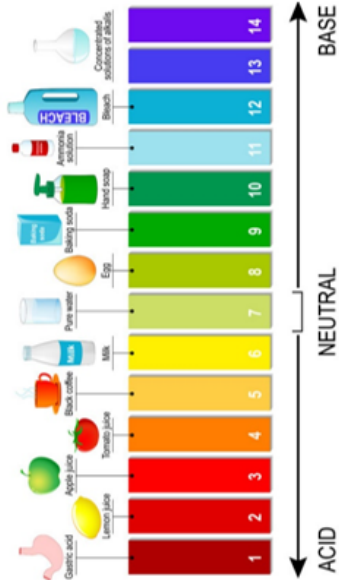
Exothermic (Exit)	Endothermic (Entrance)
Energy is transferred to the surroundings from substances that are reacting.	Energy is transferred from surroundings to substances that are reacting.
Melting and boiling, combustion, respiration neutralisation	Freezing and condensing, thermal decomposition, photosynthesis
Temperature of surroundings increase (negative energy change)	Temperature of surroundings decrease (positive energy change)
Self-heating cans, hand-warmers	Sports ice pack

KEYWORD	DEFINITION
Catalyst	Substances that speed up chemical reactions but are unchanged at the end.
Catalytic converter	A part of a car between the engine and exhaust pipe that converts harmful substances made in the engine into less harmful ones.
Chemical bonds	Force that holds atoms together in molecules.
Chemical reactions	A change in which a new substance is formed. Atoms are rearranged and joined together differently.
Combustion (burning)	A chemical reaction in which a substance reacts quickly with oxygen and gives out light and heat.
Conservation of mass	In a chemical reaction, the total mass of reactants is equal to the total mass of products. Mass is conserved in chemical reactions and physical changes.
Conserved	When the quantity of something does not change after a process takes place.
Decomposition	A chemical reaction in which a compound breaks down to form more than one product.
Endothermic reaction	Takes in energy (usually as heat) / transfers energy from surroundings.
Energy level diagrams	Diagram showing the relative energies of the reactants and products. It shows whether a reaction is endothermic or exothermic.
Exothermic reaction	Gives out energy (usually as heat or light) / transfers energy to the surroundings.
Fossil fuels	A fuel made from the remains of plants and animals that died millions of years ago. Include coal, oil and natural gas.
Fuel	A substance that stores energy in a chemical store which it can release as heat (e.g. petrol, diesel, coal...)
Non-renewable	Energy resources that have a limited supply and that cannot be replaced within a short timeframe.
Physical change	One that changes the physical properties of a substance, but no new substance is formed. It is reversible.
Products	Substances that are formed in a chemical reaction, shown on the right of the arrow in a chemical equation.
Reactants	Substances that react together, shown on the left of the arrow in a chemical equation.
Renewable	A fuel that can be easily replaced within a short timeframe.
Thermal decomposition	A chemical reaction in which a compound breaks down on heating to form more than one product.

## Year 8 Acid and alkali

Signs that a chemical reaction is taking place:

- Flames or sparks
- Smell (sweet or foul)
- Change in temperature (hot / cold)
- Loud pop / bang or gentle fizzing (a gas is being given off)



Chemical reactions are very useful as they make useful substances (medicine, fabrics or building materials). They also transfer energy (burning coal or gas to generate electricity). Sometimes they are not useful (rotting food, rust on bicycles).

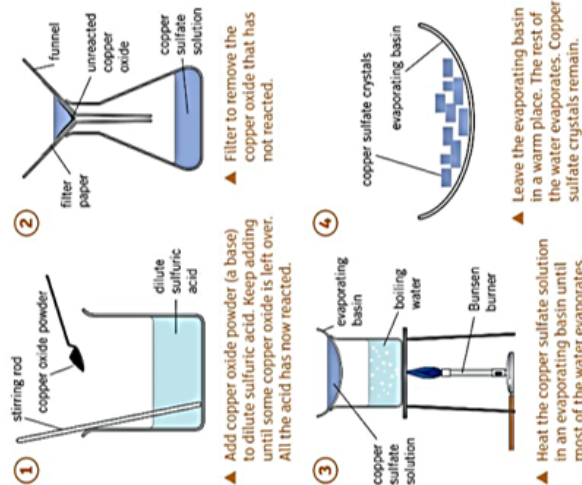
Universal indicator (solution or paper) is a mixture of different indicators. It can show us whether a solution is acid or alkali AND how strongly acidic or alkaline a solution is. This is measured using the pH scale.

**neutral solutions = pH 7 exactly**  
**acidic solutions have pH values < 7**  
**alkaline solutions have pH values > 7**

Litmus indicator solution turns red in acidic solutions and blue in alkaline solutions. It turns purple in neutral solutions.

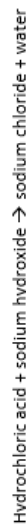
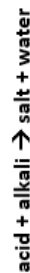
### How can you make crystals of salts?

The reactions of acids with metals or bases make salt solutions. Removing water makes salt crystals. The diagrams show how to make copper sulfate crystals.



### NEUTRALISATION

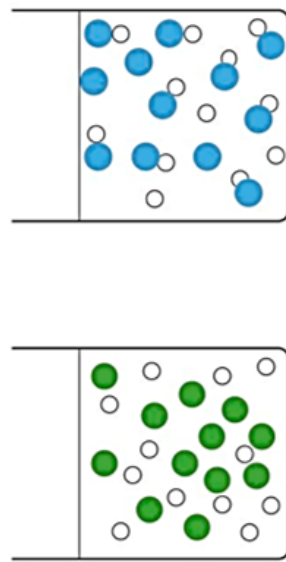
A chemical reaction happens if you mix together an acid and an alkali. The reaction is called neutralisation. A **neutral solution** is made if you add just the right amount of acid and base together. The products formed are **salt and water**.



### USES:

- Soil for crops: Can add base (alkali) to the soil to neutralise some of the soil acid. This makes it suitable to grow crops, like tea.
- Acidic lakes: Acid rain falls in lakes and makes it more acidic. Some animals and plants cannot live there. Base is added to increase the pH.

KEYWORD	DEFINITION
<b>Acid</b>	Solution with a pH value less than 7.
<b>Alkali</b>	A soluble base with a pH value more than 7
<b>Chemical reaction</b>	A change in which atoms are rearranged to create new substances.
<b>Concentrated</b>	A solution is concentrated if it has a large number of solute particles per unit volume.
<b>Concentration</b>	A measure of the number of particles in a given volume.
<b>Dilute</b>	A solution is dilute if it has a small number of solute particles per unit volume.
<b>Indicator</b>	Substances used to identify whether unknown solutions are acidic or alkaline.
<b>pH scale</b>	Shows whether a substance is acid, alkali or neutral. It ranges from 0 – 14.
<b>Physical change</b>	A change that is reversible, in which new substances are not made. E.g. ice → water.
<b>Reversible</b>	A change in which it is possible to get back to the original substance.
<b>Salt</b>	A compound in which the hydrogen atoms of an acid are replaced by atoms of a metal element.



- ▲ All particles split up in a strong acid, such as hydrochloric acid. Only a few particles split up in a weak acid, such as ethanoic acid. The water particles in the solutions are not shown. *Not to scale.*