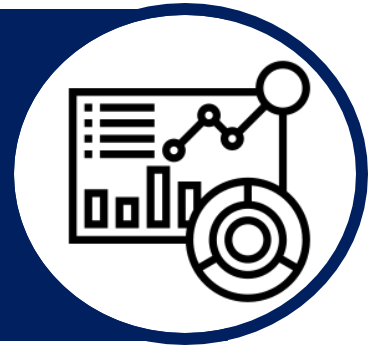
Name:_____

BROADOAK ACADEMY

Knowledge Organisers



Term 1-2

Year 8

Contents

- How to learn over time
- Revision Strategies
- Knowledge Organisers:
  - English
  - Maths
  - Science
  - Humanities
  - Languages
  - The Arts

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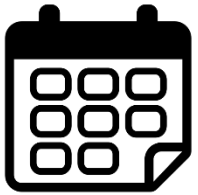
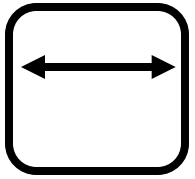
How to learn over time

Successful Learning Takes Place Over Time

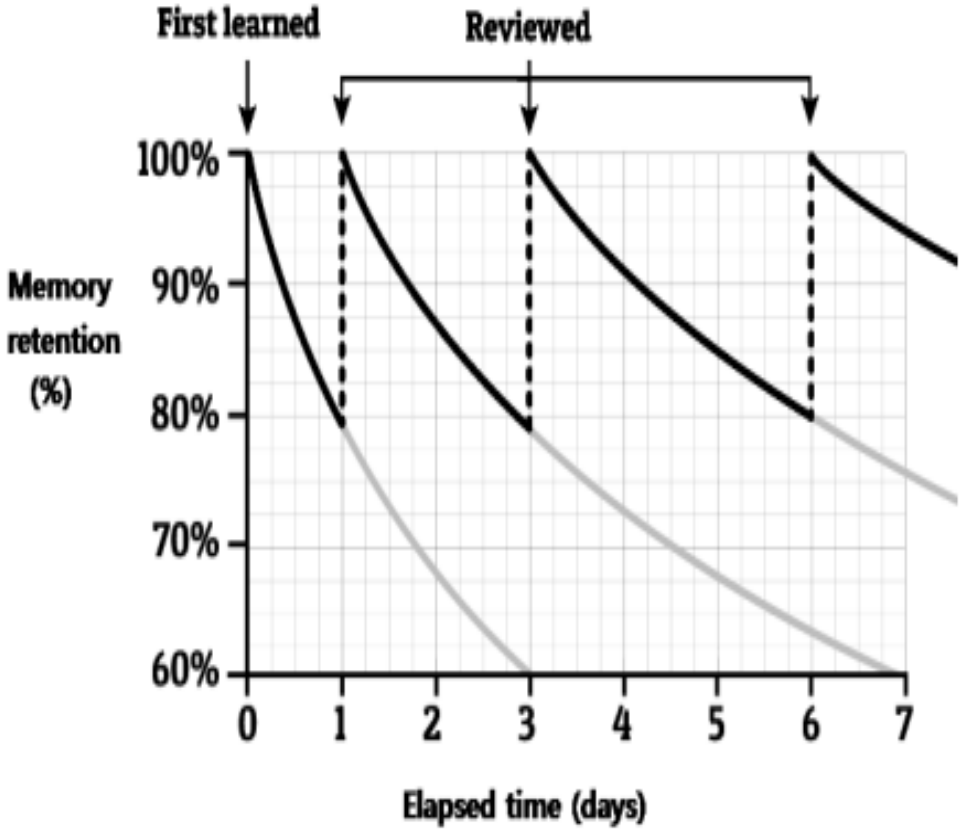


It's rare for anyone to be completely comfortable with something they learn for the first time. This could be a new piece of music, dance move, language or chemistry. We all have to practice. In most instances, the aim is to be at your optimum on the day it matters, e.g. the performance, race or exam. Everything leading up to this point is part of the process of improving. It's about the long-term rather than the short-term, which also means there are no quick fixes. During this period, it's okay to make mistakes; it's okay to feel frustrated. What matters is what you do about it.

Space out your learning on a subject



Spacing out your learning over time is far more effective than last-minute cramming. This is based on research into how we forget and how we remember. The speed at which we forget something will depend on many factors such as the difficulty of the material, how meaningful it was to us, how we learned it and how frequently we relearn or remember it. The last factor tells us that when we learn something for the first time, we need to review it quickly afterwards. The more times we force ourselves to remember something, the longer the gap between reviews, which the diagram below illustrates nicely. The Leitner system and Cornell Notes mentioned earlier provides a wonderful way of achieving this, but the principle applies to all of the learning strategies mentioned in this booklet.



Revision Strategies

List It

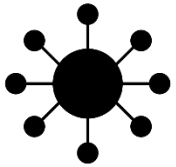
This is a simple free recall task that is very versatile. It can feel challenging, but this is a good thing, and it provides clear feedback on what you do and don't know. Choose a topic, set yourself a time limit and…

- List as many keywords as you can
- List as many facts as you can
- List as many key events/quotes/individuals as you can
- List as many causes of X as you can
- List as many consequences of Y as you can

Flashcards

Flashcards have the potential to be a powerful learning aid. However, how successful this is will depend on the thought you put into making them in the first place and then how they're used. It's very important to remember that they're for testing, not summarising.

Mapping



Mapping is a brilliant way of organising and learning information, demonstrated on various pages in this booklet. It helps you break down complex information, memorise it, and see the connections between different ideas.

Self-testing

Research has shown that every time you bring a memory to mind, you strengthen it. And the more challenging you make this retrieval, the greater the benefit. Self-testing improves the recall of information, transfer of knowledge and making inferences between information. Equally, there are many indirect effects, such as a greater appreciation of what you do and don't know, which helps you plan your next steps.

Flashcards

Flashcards are small sheets of paper or card with matching pieces of information on either side. They are a useful tool for learning facts and allow you to quickly check whether you have remembered something correctly.

When making and using flashcards:

Do:

- ✓ …make flashcards quickly.
- ✓ …put a single piece of information of each flashcard.
- ✓ …sort your flashcards according to your confidence with them (see below).
- ✓ …test yourself on the flashcards from memory.

Don't:

- X …spend more time making flashcards than actually using them.
- X …put lots of information onto each flashcard.
- X …revise the flashcards in the same order every time that you use them.
- X …only read through flashcards.

1861	groynes	osmosis	Where is the pharmacy?
Pasteur published his paper about germ theory.	A low wall on the coastline which slows longshore drift	Net movement of water from a high concentration to low concentration across a partially permeable membrane	Où est la pharmacie?

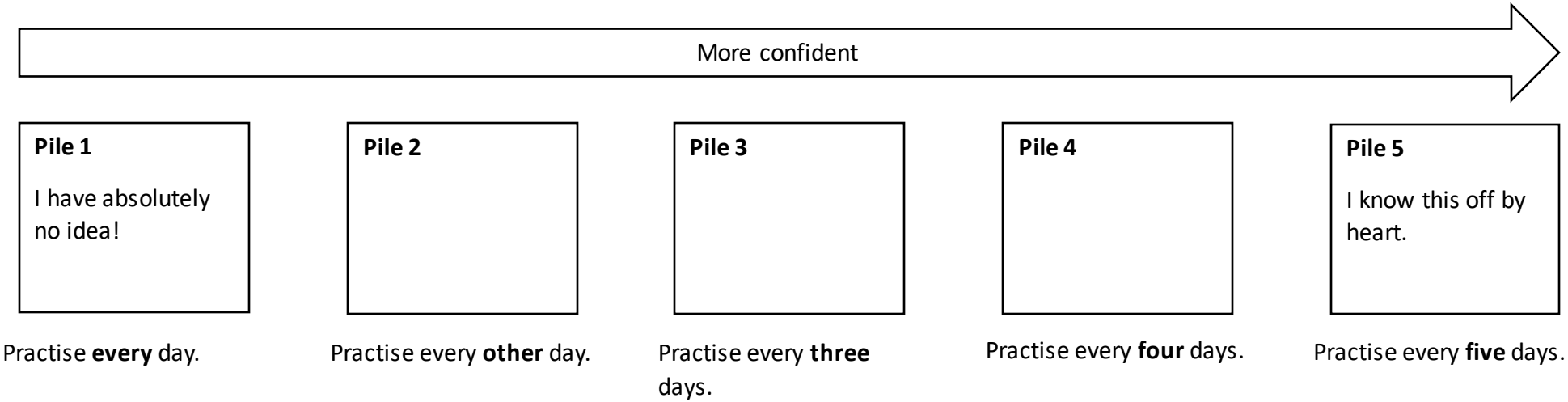
How to make flashcards:

- You can by a set of flashcards or use a free website such as Quizlet.
- Find the information you want to put onto flashcards using your existing revision resources (e.g. a knowledge organiser).
- Fold a piece of A4 paper into 10.
- Write the questions on the top half of the paper.
- Write the answers on the bottom half of the paper.
- Cut the paper along the dotted lines shown here.
- Fold the strips of paper so that the writing is on either side.

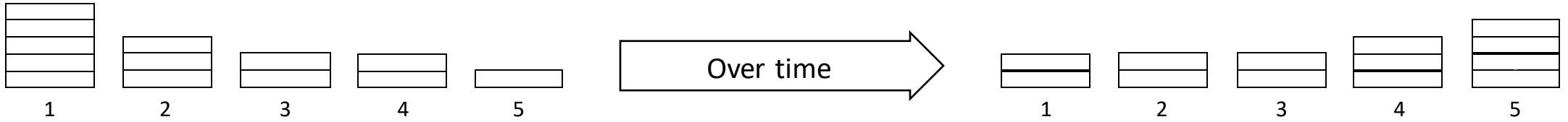
Definition 1	Definition 2	Definition 3	Definition 4	Definition 5
Answer 1	Answer 2	Answer 3	Answer 4	Answer 5

How to use flashcards:

1. Test yourself using the flashcards.
2. As you test yourself, sort the flashcards into up to five piles according to how confident you are with the content.
3. Put the piles into numbered envelopes (1-5).
4. Test yourself on the different piles on different days (see below):



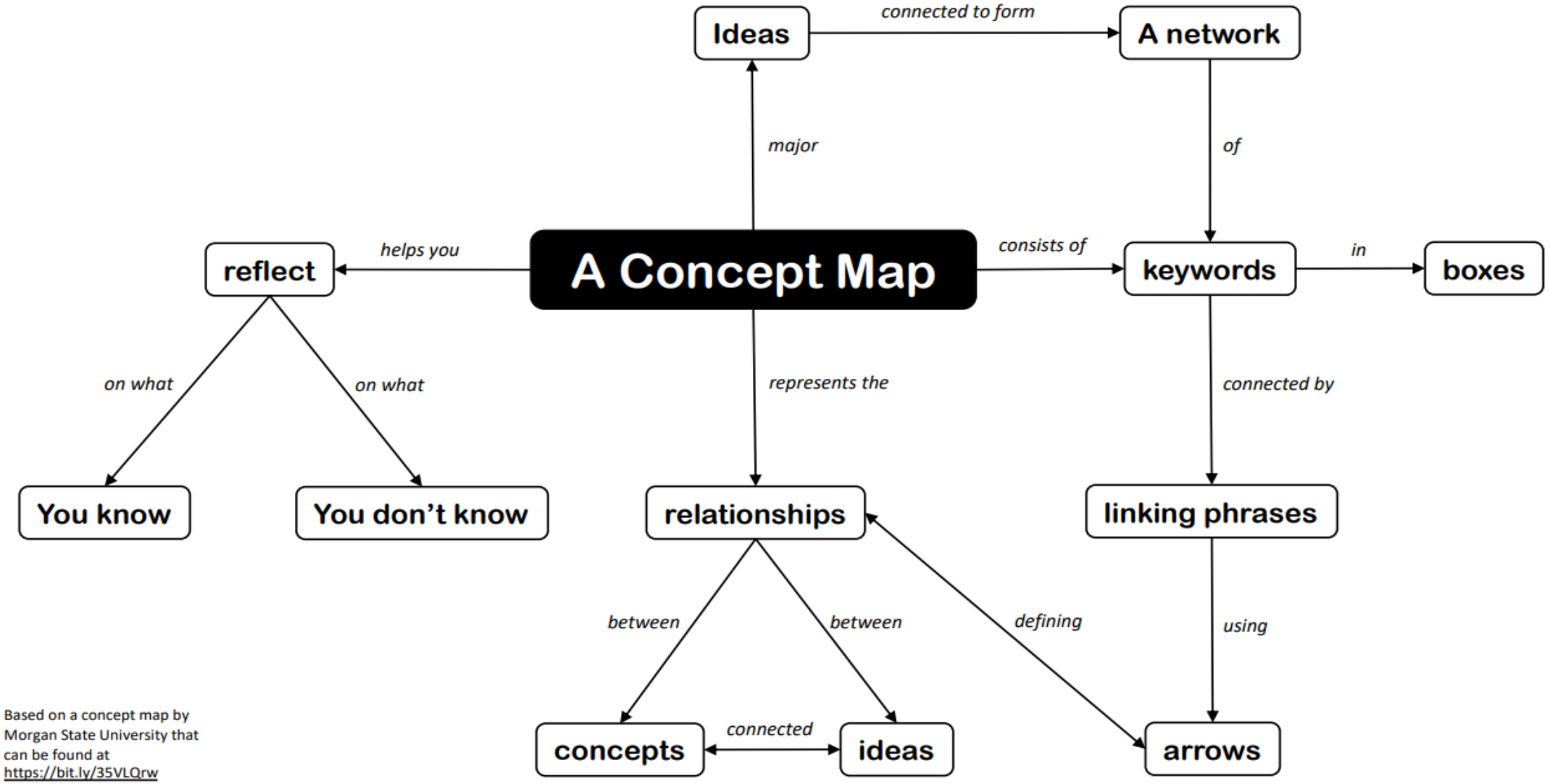
5. As you test yourself on the different piles, move the cards into different piles as you become more confident.



Useful resources:

www.quizlet.com – This free website allows you to quickly create flashcards which you can print, use on a computer, or use on your phone.

Mapping



Based on a concept map by Morgan State University that can be found at https://bit.ly/35VLQrw

ENGLISH Year 8 Unit 1: Power and Corruption

Key vocabulary:

Propaganda - information, especially of a misleading nature, used to promote a political cause or point of view.

Corruption – dishonest behaviour or conduct by those in power.

Tyranny - cruel and oppressive rule.

Rebellion - an act of armed resistance to an established government or leader.

Resistance - the refusal to accept or comply with something.

Manipulation – behaviour used to influence or control others.

Oppression – prolonged cruel or unjust treatment of a certain group of people.

Hierarchy - a system of ranking within society.

Core text: Animal Farm by George Orwell

'Animal Farm' context:

Democracy – In a democracy (form of government), people have a say in how things are run.

Totalitarianism – A system of government that is run by a dictator and requires total obedience by the people.

Russian Revolution - The Russian Revolution took place in 1917 when the peasants and working class people of Russia revolted against the government of Tsar Nicholas II.

Literary and Linguistic terminology:

Allegory – a story within a story.

Fable - a short story that has morals or teaches you a lesson.

Rhetoric – A form of persuasion.

Hyperbole - exaggeration.

Dystopia – an imagined world where there is injustice and great suffering.

Utopia – an imagined world that is ideal and perfect.

Symbolism – when an image stands for or represents something else.

Statement – a definite or clear expression of something.

Question – A sentence worded to get information.

Command – an order or demand.

Exclamation - a sudden cry or remark expressing surprise, strong emotion, or pain

ENGLISH Year 8 Unit 1: Power and Corruption

BROADOAK ACADEMY

Animal Farm and Oracy Knowledge Organiser

The Seven Commandments

1. Whatever goes upon two legs is an enemy.
2. Whatever goes upon four legs, or has wings, is a friend.
3. No animal shall wear clothes.
4. No animal shall sleep in a bed.
5. No animal shall drink alcohol.
6. No animal shall kill any other animal.
7. All animals are equal.

The characters

Snowball 	Snowball is one of the other leading pigs, who challenges Napoleon for leadership of the farm after the rebellion. He represents Leon Trotsky. He is intelligent and passionate, yet he does not resort to the same levels of cunning and manipulation as Napoleon.	**Napoleon** 	Napoleon is the pig who emerges as the leader of Animal Farm after the rebellion. Napoleon's character is based on Joseph Stalin – the leader of the communist Soviet Union. Napoleon is cunning, treacherous, lazy and selfish. He uses Squealer (propaganda) and the dogs (military force) to exert power over others.
Squealer 	Squealer represents propaganda. He is a pig who is a gifted and persuasive speaker, and is used to spread positivity about Napoleon, and negativity about Napoleon's competition. He uses false statistics to suggest that the farm thrives under Napoleon, and twists the truth to ensure that the pigs retain political and social control.	**Boxer** 	Boxer is a cart-horse, who demonstrates incredible strength, work ethic, and loyalty. He represents those in the working classes who were hugely overworked. Boxer completes the most work on the farm, and is admired by others for his physical accomplishments and mental grit. His downfall is his slow wit, which ensures that he is unable to think for himself and is easily manipulated.
Mr Jones	Drunken owner of Animal Farm. Embodies the tyranny of man.	**The dogs**	Instruments of fear and control, educated by Napoleon.

Key Quote

'All animals are equal, but some animals are more equal than others'

Context - George Orwell (the author) wrote the book as a way to criticize the events of the Russian Revolution

Karl Marx	**Old Major** represents **Karl Marx.** Karl Marx believed in the introduction of a system in which wealth was communal and labour was shared. He believed this would produce a fairer, more stable way of life. This formed the basis of communism.
Trotsky	**Trotsky helped form the Bolshevik communist party. Snowball** represents **Trotsky**, a passionate component of **Animalism (Communism)** who is expelled by **Napoleon (Stalin).**
Stalin	**Napoleon** follows a similar rise to power as **Stalin**, using fear and propaganda to control the masses, including show trials and executions.
Rasputin	He was a self-proclaimed mystic and religious figure who was influential with the royal family. He is represented by Moses in the novel.

Year 8 English

BROADOAK ACADEMY

Key characters		Key themes
Mr Jones	*Drunken owner of Animal Farm. Embodies the tyranny of man.*	Leadership and Corruption Control over the intellectually inferior Lies and deceit Foolishness and naivety Violence Pride and Ceremony Dreams, hopes and future plans
Old Major	*Wise, old pig. Inspires the rebellion with his rhetoric.*	
Boxer	Devoted citizen and immensely strong. Innocent and naïve.	
Napoleon	*Expels Snowball. Executes animals. Establishes himself as dictator. Controls with fear. Becomes Jones.*	
Snowball	*Devoted to animalism and the education of lesser animals. Hero at the battle of the cowshed.*	
Squealer	*Mouthpiece of Napoleon. Uses propaganda to control the animals.*	
Clover	*Maternal, caring and loyal. Senses hypocrisy but cannot articulate it.*	
Dogs and Sheep	*Instruments of fear and control, educated by Napoleon.*	

Context and Literary Tradition
An allegorical tale with direct links to the history of the Soviet Union in the early 20th century.
The book charts the corruptions of **Communist** ideals of equality, where workers are promised equality and freedom and are eventually repressed and treated as bad, if not worse, as under the previous rule of the **capitalist 'Tsar'.**
Old Major represents **Karl Marx**, putting forward the communist ideals which will free them from the **tyranny of capitalism** (represented by **Jones**).
Snowball represents **Trotsky**, a passionate component of **Animalism (Communism)** who is expelled by **Napoleon (Stalin).**
Napoleon follows a similar rise to power as **Stalin**, using fear and propaganda to control the masses, including show trials and executions.
By the end of the novel, the **ideals of communism** have been so far abused and forgotten, that Napoleon meets and forms agreements with former oppressors.
Orwell was a British journalist and author, who wrote two of the most famous political novels of the 20th century 'Animal Farm' and 'Nineteen Eighty-Four'. When Orwell saw a kid whipping a horse, he had an idea: "It struck me that if only such animals became aware of their strength we should have no power over them, and that men exploit animals in much the same way as the rich exploit the working class". This inspired him to write the novel.

BROADOAK ACADEMY **Maths**

Measuring and drawing angles

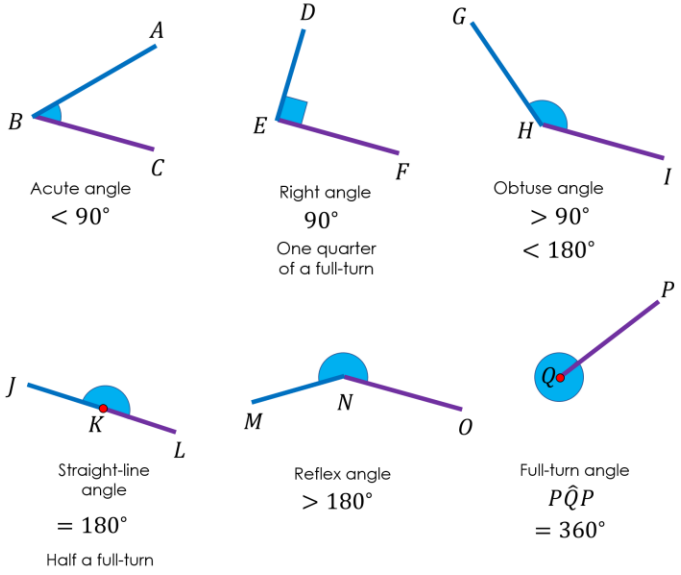
Key knowledge:

Angle is a measure of **turn.**

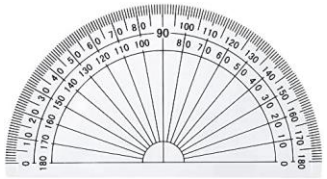
Angles are labelled using three letters.

$$A\hat{B}C$$

Types of angle:

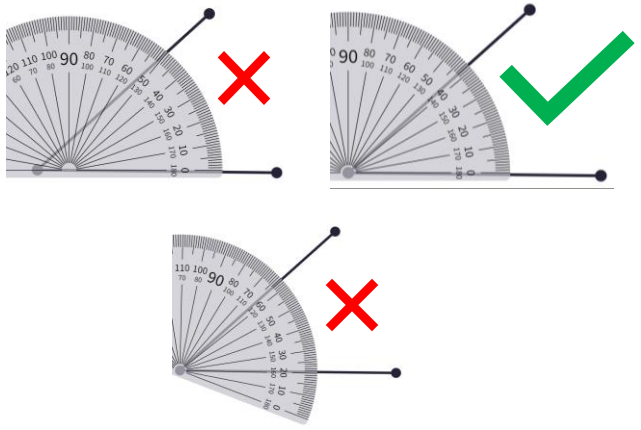


Protractor: The tool used to measure angles.

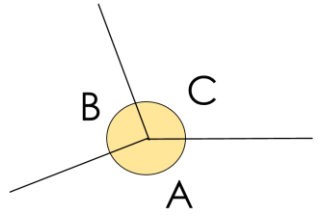


When using a protractor:

- The vertex of the angle must be in the centre of the protractor
- The zero line on the protractor must be on one of the lines the angle is between.

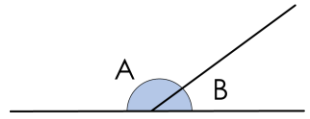


Angles at a point: Sum to 360°



A + B + C = 360°

Angles on a straight line: Sum to 180°



A + B = 180°

BROADOAK ACADEMY **Maths**

Interpreting and comparing data

Data: Information collected on a subject to be analysed.

Types of data:
Qualitative: Data on qualities, recorded as words.

Quantitative: Data recorded as numerical values.

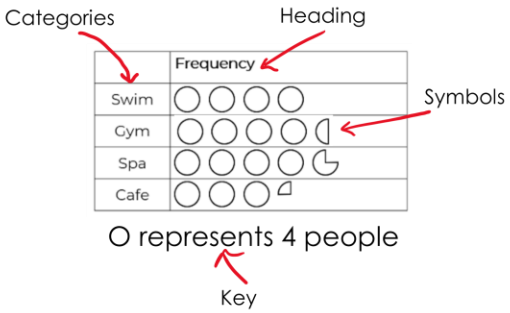
Discrete: Quantitative data that can only take certain values.

Continuous: Quantitative data that can take any value.

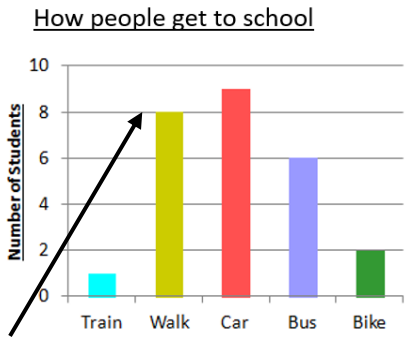
Frequency: Number of times a quality or value is observed in a data set

Pictogram: Data presentation using an image to represent frequency.

No. of Visits	No. of students
0	9
1	6
2	4
3	1

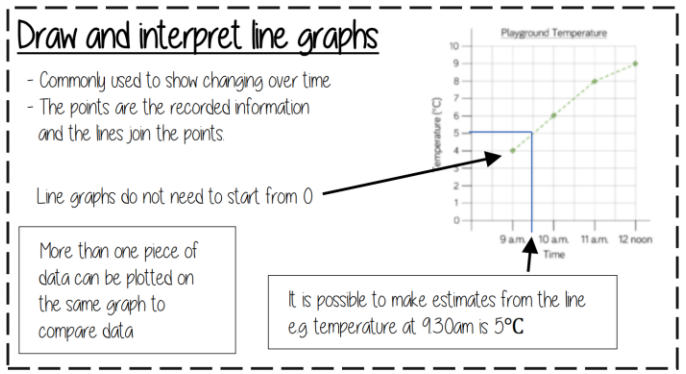


Bar chart: Data presentation using heights of bars to represent frequency.



How many people walk to school?
8 people walk to school.

Line graph: Shows how a value changes over time. Points are joined with straight lines.



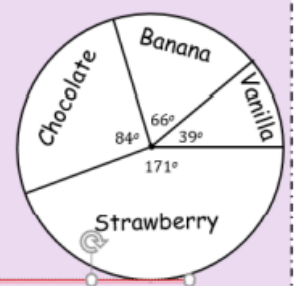
Pie Chart: Data presentation where frequencies are shown in proportion to the total frequency as fractions of a circle.

Calculating angles for a pie chart:
- Total angle = 360°

The information in the pie chart shows sales of 120 ice-creams sold from an ice-cream van one Saturday afternoon in the summer. Calculate the number of each type sold.

Ice cream	Frequency	Angle
Banana	22	66°
Vanilla	13	39°
Strawberry	57	171°
Chocolate	28	84°
Total	120	360°

÷ 3



There are 360° in a circle.
360 ÷ 120 = 3° per sale
Divide the angle by 3 to find the frequency.

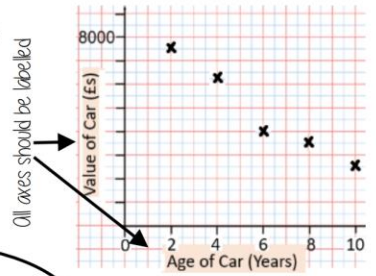
BROADOAK ACADEMY **Maths**

Scatter graphs and averages

Draw and interpret a scatter graph

Age of Car (Years)	2	4	6	8	10
Value of Car (£s)	7500	6250	4000	3500	2500

- This data may not be given in size order
- The data forms information pairs for the scatter graph
- Not all data has a relationship

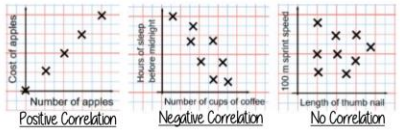


"This scatter graph show as the age of a car increases the value decreases"

The link between the data can be explained verbally

The axis should fit all the values on and be equally spread out

Linear Correlation



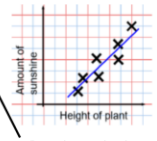
Positive Correlation	Negative Correlation	No Correlation
As one variable increases so does the other variable	As one variable increases the other variable decreases	There is no relationship between the two variables

The line of best fit (R)

The Line of best fit is used to make estimates about the information in your scatter graph

Things to know:

- The line of best fit DOES NOT need to go through the origin (The point the axes cross)
- There should be approximately the same number of points above and below the line (It may not go through any points)
- The line extends across the whole graph



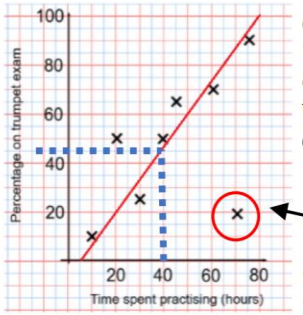
It is only an estimate because the line is designed to be an average representation of the data

It is always a straight line

Using a line of best fit

Interpolation is using the line of best fit to estimate values inside our data point

e.g. 40 hours revising predicts a percentage of 45



Extrapolation is where we use our line of best fit to predict information outside of our data

This is not always useful – in this example you cannot score more that 100%. So revising for longer can not be estimated

This point is an "**outlier**"
It is an outlier because it doesn't fit this model and stands apart from the data

Mean, Median, Mode

The Mean
A measure of average to find the central tendency… a typical value that represents the data

24, 8, 4, 11, 8,

Find the sum of the data (add the values) 55
Divide the overall total by how many pieces of data you have 55 ÷ 5
Mean = 11

The Median
The value in the center (in the middle) of the data

24, 8, 4, 11, 8,

Put the data in order 4, 8, 8, 11, 24
Find the value in the middle 4, 8, 8, 11, 24
Median = 8
NOTE: If there is no single middle value, find the mean of the two numbers left

The Mode (The modal value)
This is the number OR the item that occurs the most (it does not have to be numerical)

24, 8, 4, 11, 8,

This can still be easier if it the data is ordered first 4, 8, 8, 11, 24
Mode = 8

Choosing the appropriate average

The average should be a representative of the data set – so it should be compared to the set as a whole - to check if it is an appropriate average

Here are the weekly wages of a small firm

£240	£240	£240	£240	£240
£260	£260	£300	£350	£700

Which average best represents the weekly wage?

The Mean = £307
The Median = £250
The Mode = £240

Put the data back into context
Mean/Median – too high (most of this company earn £240)
Mode is the best average that represents this wage

It is likely that the salaries above £240 are more senior staff members – their salary doesn't represent the average weekly wage of the majority of employers

Find and interpret the range

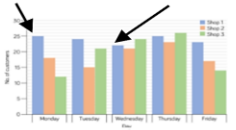
The range is a measure of **spread**

A smaller range means there is less variation in the results – it is more consistent data

A range of 0 means all the data is the same value

Difference between the biggest and smallest values

Shop 1 highest value
Shop 1 lowest value



Shop 1 has the smallest range – this indicates it has a more consistent flow of customers each week

Range of customers = 25 – 22 = 3
(Shop 1)

Comparisons should include a statement of average and central tendency, as well as a statement about spread and consistency

Here are the number of runs scored last month by Lucy and James in cricket matches:

Lucy: 45, 32, 37, 41, 48, 35
James: 60, 90, 41, 23, 14, 23

Lucy
Mean: 39.6 (1dp), **Median:** 38 **Mode:** no mode, **Range:** 16

James
Mean: 41.8 (1dp), **Median:** 32, **Mode:** 23, **Range:** 76

James has two extreme values that have a big impact on the range

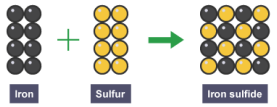
"James is less consistent that Lucy because his scores have a greater range. Lucy performed better on average because her scores have a similar mean and a higher median"

KS3 Science

Chemical Reactions

BROADOAK ACADEMY

1. Chemical Reactions



Atoms are rearranged in a chemical reaction.
The substances that:
- react together are called the **reactants**
- are formed in the reaction are called the **products**

The atoms in a compound are chemically joined together by strong **forces** called **bonds**. This is why the properties of a compound are different from the elements it contains. A **word equation** shows the names of each substance involved in a reaction, and must not include **chemical symbols**.

2. Chemical Equations

A **balanced** equation gives more information about a chemical reaction because it includes the **symbols** and **formulae** of the substances involved. There are two steps in writing a balanced equation: 1. replace the name of each substance with its symbol or formula 2. Use numbers to ensure the number of each element is equal on both sides.

For example: Copper + Oxygen → Copper Oxide

$Cu + O_2 \rightarrow CuO$ (more oxygen needed on right)

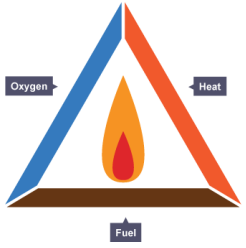
$Cu + O_2 \rightarrow 2CuO$

$2Cu + O_2 \rightarrow 2CuO$ (2 Cu needed on left)

Balanced

3. Combustion

Combustion is the scientific term for burning. There are 3 things that are needed for a fire: oxygen, fuel and heat. These things form the fire triangle. If you remove anyone of these the fire will not start or go out. **Complete combustion** occurs when there is good supply of oxygen. The general equation is:
Fuel + oxygen → carbon dioxide + water



4. Incomplete combustion

Incomplete combustion is another form of combustion which occurs where there is a lack of **oxygen**. Water vapour and carbon dioxide are still produced, but two other **products** are also produced:
carbon monoxide, CO, a colourless toxic gas and particles of carbon, which appear as soot and smoke, and which cause breathing problems.
The general **equation** is:
Fuel → carbon monoxide + water + carbon (soot)

5. Oxidation

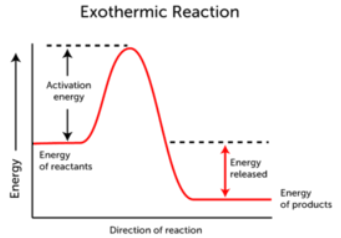
Combustion is an example of a type of reaction called **oxidation**. In an oxidation reaction, a substance gains oxygen.
Metals react with oxygen in the air to produce metal oxides. Metal oxides are **bases** they react with acids and **neutralise** them. Some metal oxides dissolve in water to produce **alkaline** solutions.
Non-metals react with oxygen in the air to produce non-metal oxides. Non-metal oxides are **acids**.

6. Thermal Decomposition

Some compounds break down when heated, forming two or more products from one reactant. This type of reaction is called **thermal decomposition**.
Many metal carbonates can take part in thermal decomposition reactions. Metal carbonates undergo thermal decomposition to produce metal oxides and carbon dioxide.
Thermal decomposition is an example of an **endothermic** reaction, a reaction that gains energy from the surroundings.

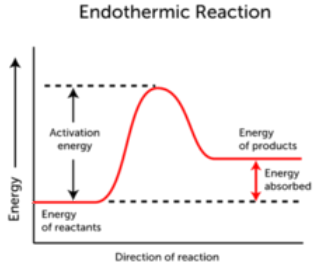
7. Exothermic Reactions

An **exothermic** reaction is one where energy is released to the surroundings shown as a temperature increase of the surroundings.
This means that the **reactants** produce both **heat energy** and **products** in the reaction. The **energy level diagram** shows the lower energy in the products.



8. Endothermic Reactions

An **endothermic** reaction is one where energy is absorbed from the surroundings shown as a temperature decrease in the surroundings.
.
This means that the **reactants** combined with **heat energy** produce **products** in the reaction. The **energy level diagram** shows the higher energy in the products.



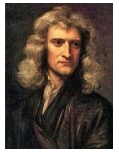
KS3 Science

Forces and Motion

BROADOAK ACADEMY

1. Forces

A force is a **push** or a **pull** that changes the **shape**, **speed** or **direction** of an object.
You cannot see forces but you can see the effects of them.



The unit of force is the **Newton (N)** named after Sir Isaac Newton. He came up with many theories including those to do with gravity and the **three laws of motion**. We measure force using a piece of equipment called a Newton metre.

2. Types of Force

Forces can be divided into two types: contact and non-contact.

1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

Examples of forces include **push, pull, friction, air resistance, water resistance, thrust, upthrust, reaction, weight, magnetism, gravity, lift and tension.**

3. Balanced Forces

When we talk about the total force acting on object we call this the **resultant force.** When the forces acting in opposite directions are the same magnitude (size) we say the forces are **balanced**.
This means one of two things:

1. The object is stationary (not moving)
2. The object is moving at a constant speed

For example, the vertical resultant force acting on the duck is 5N-5N=0N

Floating duck

Submarine at constant speed and depth

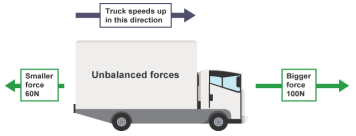
4. Unbalanced Forces

If the forces are unbalanced on an object there are two things that could happen:

1. If the object is stationary then it will move in the direction of the resultant force
2. If the object is moving, then the object will speed up or slow down in the direction of the resultant force

Hot air balloon rising

100N - 60N
= 40N (to the right)



5. Speed, Distance and Time

How do you find the average speed of an object?

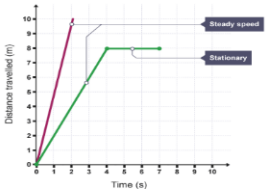
1) Measure the distance travelled
2) Measure the time taken to travel that distance

Average speed = distance / time

Worked example:
Q) A car travels 2 km in 100 s.
Calculate its average speed.
2 km = 2000 m
2000 m / 100 s = 20 m/s

6. Distance Time Graphs

In a distance-time graph, the gradient of the line is equal to the speed of the object. The greater the gradient (and the steeper the line) the faster the object is moving.



You can calculate the speed of an object by calculating the gradient of the line (distance travelled / time taken). The speed of the object shown by the green line is 8m/4s = 2m/s. Is the purple line travelling faster or slower?

7. Reducing forces for the better

Friction opposes the direction of motion, making it more difficult to move.

This can be helpful:

- Your shoes and the floor to stop you slipping
- Tyres and the road to prevent skidding
- Brakes and the wheel to slow you down

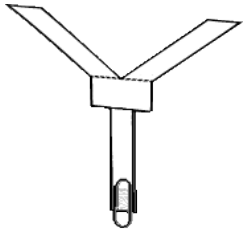
This can be unhelpful:
If you do not lubricate your bike chain using oils, friction between the chain and the axles make it difficult to pedal.

Like friction, air resistance and water resistance forces can also be reduced. This is known as streamlining.

8. Investigating Forces

Scientific Question: Does wing length affect the time taken to land?

Independent variable:
wing length (cm)
Dependent variable:
time taken to land (seconds)
Control variable:
height dropped from (cm)
mass of helicopter (g)



Conclusion: The longer the wings, the greater the force of air resistance.

KS3 Science

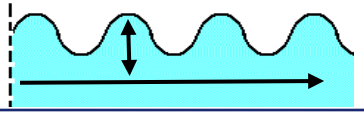
Waves 1: Sound

BROADOAK ACADEMY

1. Water waves

If you throw a pebble into a pond, ripples spread out from where it went in. These ripples are waves travelling through the water. The waves move with a transverse motion. The undulations (up and down movement) are at 90° to the direction of travel.

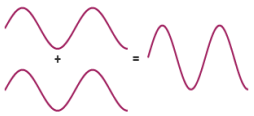
For example, if you stand still in the sea, the water rises and falls as the waves move past you.



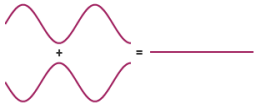
2. Superposition

When two waves meet, they affect each other, this is called **superposition.**

If waves meet 'in step' they will add together, increasing the **amplitude.**

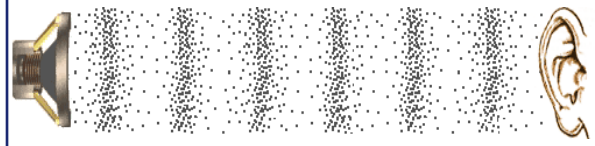


If waves meet 'out of step' they subtract, cancelling each other out.



3. Sound waves

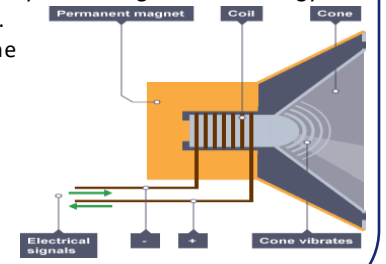
Sound waves are **longitudinal waves** - the vibrations are in the same direction as the direction of travel.



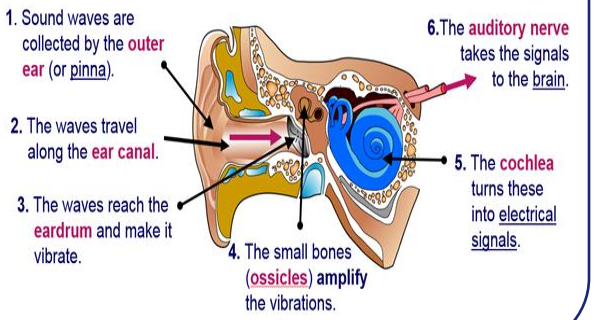
Sound travels fastest in a solid. Particles can pass energy on quickly because they are arranged in a regular pattern and are tightly packed

4. Loudspeakers

Sound waves are produced by all vibrating objects. Loudspeakers work by converting electrical energy into kinetic energy. This moves the cone which creates the sound waves.



5. Detecting sounds



6. Microphones

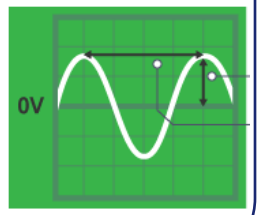
Mobile phones and telephones contain microphones. These devices contain a diaphragm, which does a similar job to an ear drum. The vibrations in air make the diaphragm vibrate, and these vibrations are changed to electrical impulses. In the lab, the electrical impulses can be sent to an oscilloscope, which represents them as a graph on a screen

7. Oscilloscope traces

Amplitude is the height of the wave from its resting position – the greater the amplitude, the louder the sound

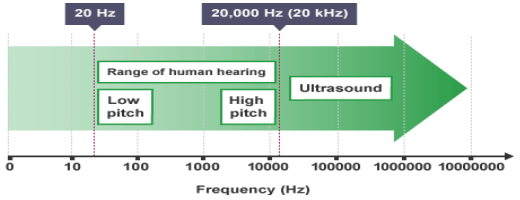
Wavelength is the distance between the crests (tops) of two waves

Frequency is the number of waves per second – the higher the frequency, the closer together the waves are and the higher the pitch



8. Human Hearing range

The frequency of sound waves is measured in hertz, which has the symbol Hz. The bigger the number, the greater the frequency and the higher the pitch of the sound. Human beings can generally hear sounds as low as 20 Hz and as high as 20,000 Hz (20



KS3 Science

Waves 2: Light

BROADOAK ACADEMY

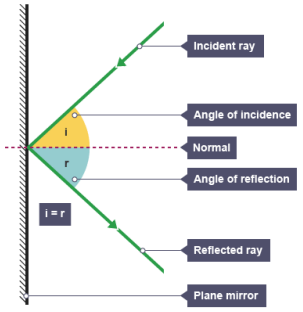
1. Sound and Light

Light travels at 300,000,000 m/s, much faster than sound, which travels at 343 m/s. This is why you see lightning before you hear it.

	Light waves	Sound waves
Type of wave	Transverse	Longitudinal
Can they travel through matter (solids, liquids and gases)?	Yes (if transparent or translucent)	Yes
Can they travel through a vacuum?	Yes	No
How are they detected?	Eyes, cameras	Ears, microphones
Can they be reflected?	Yes	Yes
Can they be refracted?	Yes	Yes

2. Reflection

When light reaches a mirror, it reflects off the surface of the mirror:
the **incident ray** is the light going towards the mirror
the **reflected ray** is the light coming away from the mirror



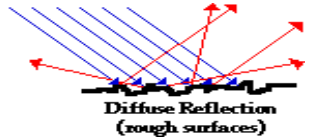
3. The law of reflection

The **law of reflection** states that the angle of incidence equals the angle of reflection, i = r.
For example, if the angle of reflection is 30° then the angle of incidence is 30°.

If a light ray travelling along the normal hits a mirror, it is reflected straight back the way it came. The reflection of light from a flat surface such as a mirror is called **specular reflection** – light meeting the surface in one direction is all reflected in one direction.

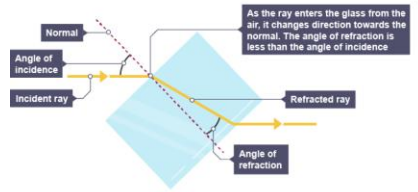
4. Scattering

If light meets a rough surface, each ray obeys the law of reflection. However, the different parts of the rough surface point in different directions, so the light is not all reflected in one direction. Instead, the light is reflected in all directions. This is called **diffuse scattering**. It explains why you can see a clear image of yourself in a shiny flat mirror, but not in a dull rough



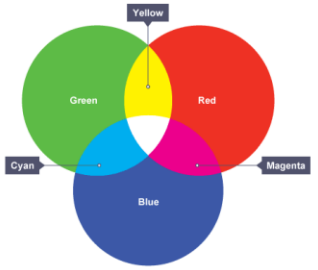
5. Refraction

Light waves change speed when they pass across the boundary between two substances with a different **density**, such as air and glass. This causes them to change direction, an effect called **refraction**.



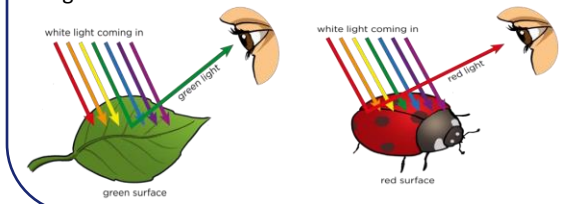
6. Coloured light

There are three primary colours in light: red, green and blue. Light in these colours can be added together to make the secondary colours magenta, cyan and yellow.
All three primary colours add together make white light.



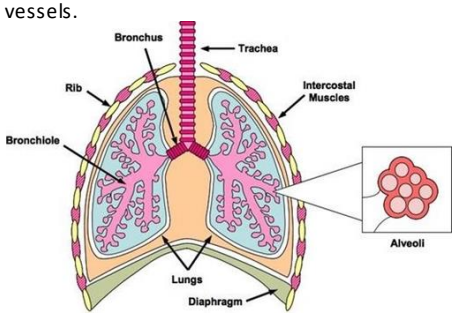
7. Seeing in colour

Any coloured object reflects the colour that it is and absorbs the rest
Black objects absorb all colours
White objects absorb no colours and reflect all the light



The Respiratory System

The respiratory system consists of the lungs, heart and blood vessels.



Aerobic Respiration

Respiration is the process of breaking down glucose to make energy. The energy is used to processes such as: growth, repair and movement. This process happens in the mitochondria of cells. Aerobic respiration needs oxygen in order to work.
The equation for aerobic respiration is:

Glucose + oxygen → water + carbon dioxide + (energy)

Respiration and Exercise

When our bodies undergo exercise several changes happen in our bodies. Our breathing rate increases and so does our heart rate.

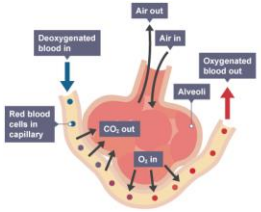
Breathing rate increases in order to draw more oxygen into our bodies which is needed for respiration. This also removes the carbon dioxide which is being produced quickly through respiration.

Our heart rate increases in order to pump oxygen around the body faster to the muscles. This oxygen is needed for the increase in respiration. The increased heart rate also waste carbon dioxide to be removed from the muscles and taken back the lungs to be exhaled.

Adaptations of the Alveoli

Alveoli are the small air sacs in the lungs are the site of gas exchange. There have several adaptations that make them suited to their function.

- **Large surface area** to allow for maximum gas exchange
- Walls **one cell thick** to minimise the diffusion distance.
- **Large blood supply** to ensure gases are transported quickly.
- **Moist walls** to allows gases to dissolve.



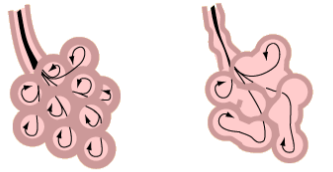
KS3 Science

Respiration

BROADOAK ACADEMY

Smoking and Respiration

Smoking cigarettes cause damage in the lungs. Over time the alveoli become damaged and change shape. This reduces the surface area of the alveoli and reduces the amount of gas exchange that can take place. This causes symptoms like fatigue and shortness of breath.



Healthy alveolus

Alveolus damaged by pulmonary disease

Ventilation

Ventilation is the scientific word for breathing. Breathing is a process that takes oxygen into the body and removes carbon dioxide. Breathing in is called i**nhalation** and breathing out is called **exhalation.**

	Inhaling	Exhaling
Diaphragm	Contracts and moves downwards	Relaxes and moves upwards
Intercostal muscles	Contract, moving the ribs upwards and outwards	Relax, letting the ribs move downwards and inwards
Volume of ribcage	Increases	Decreases
Pressure inside the chest	Decreases below atmospheric pressure	Increases above atmospheric pressure
Movement of air	Moves into the lungs	Moves out of the lungs

Anaerobic Respiration

During intense exercise not enough oxygen can be supplied to our muscles. When this happens our bodies switch over to anaerobic respiration.
The equation for anaerobic respiration is:

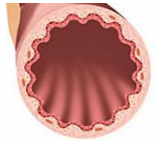
Glucose → lactic acid

The lactic acid is later broken down into carbon dioxide and water after the period of intense exercise is over. This process is known as the oxygen debt.

Asthma and Respiration

Asthma is a condition that affects the bronchioles in the lungs. The bronchioles become inflamed and produce mucus making it harder for air to enter and leave the lungs. This causes shortness of breath and tightness in the chest. Inhalers are used as a treatment for asthma and they cause the bronchioles to widen allowing air flow to return to normal.

Inflamed bronchial tube of an asthmatic



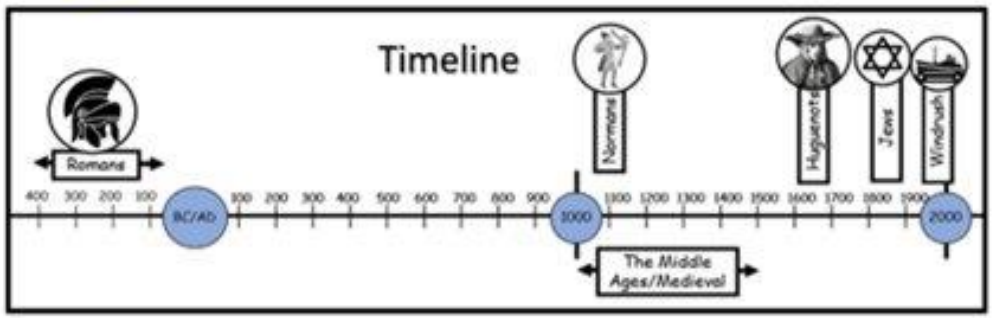
Normal bronchial tube

History at Broadoak: Migration

Migration:

What factors have caused people to come to Britain?

What have attitudes towards migrants been in Britain?



Reasons for migration

Who?	Why?
First people 20,000BC.	Wandered across the land bridge which linked Britain to Europe.
Roman Empire, 43 – 410 AD	Conquer new land, extend the Empire to obtain more goods and power. They also wanted revenge for British support of Gaul.
Normans, 1066	William of Normandy invaded declaring he had a claim to the English throne.
French Huguenots, 1670 – 1710.	Persecuted in Catholic France. Many were skilled craftsmen who set up businesses in England.
Eastern European Jews, 1880s	Persecuted and fled to England. Many moved to the East End of London.
Windrush generation late 1940s – 1960s.	After WWII, Britain encouraged immigration from Commonwealth countries. To a large extent this was to help rebuild the country as there was a shortage of labour at the time.

Key Words

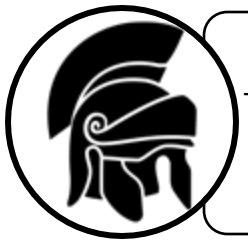
Migration	The movement of a person or people from one country, locality, place of residence, etc., to settle in another; an instance of this.
Aliens	The official name given to people from other counties in the Middle Ages.
Commonwealth	an international association consisting of the UK together with some states that were previously part of the British Empire.
Conquer	overcome and take control of (a place or people) by military force
Emigration	leaving one's own country to settle permanently in another; moving abroad.
Huguenot	French Protestants.
Racism	prejudice or discrimination directed against someone of a different race based on the belief that one's own race is superior.
Refugee	a displaced person who has been forced to cross national boundaries and who cannot return home safely.
Windrush	people who emigrated from the Caribbean to Britain on the British ship the Empire Windrush in 1948.

Key reasons for migration

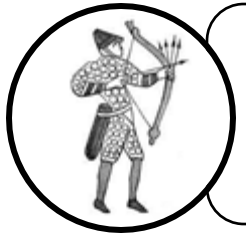
Employment	Work
Empire	When one country rules over other countries , e.g. British Empire
Persecution	Hostility and ill-treatment, especially because of race or political or religious beliefs; oppression.

History at Broadoak: Migration

Attitudes migrants have faced

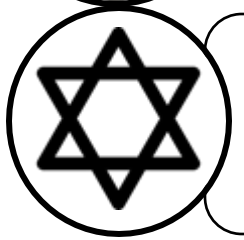


Romans
The Romans faced several rebellions. eg. Boudicca, some areas were never really conquered. Many tribes worked with them as shown by the Hallaton Helmet.



Normans
William created the Domesday Book and taxed people heavily, which they resented. Many Normans took over Anglo-Saxons jobs and people resented this.

Huguenots
King Charles II gave them the right to become English citizens. Many were skilled and successful, some were supported by English communities. Others faced prejudice and were mocked for their clothing.



Jews
Areas such as London and Manchester developed large Jewish communities. Although there was some support, many Jewish people experienced Anti – Semitism.

Windrush Generation
Although they had been invited to fill a skills shortage, many experienced racism on arrival. Some struggled to find accommodation and many skilled workers worked in low paid, unskilled jobs.

Impact: Migration has had on Great Britian


Social


Roads


Language


Buildings


religion


writing


Churches


Castles,


Language


Food


Forenames and Surnames


Economy


Religion


Industry


Inventions


Names


Many people


Food,


many people


Clothing

Businesses


Trade Unions

NHS


Economy


Carnival


Racism


Bristol Bus Boycott

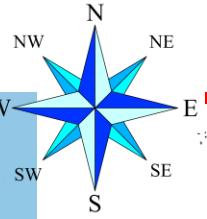

Reggae

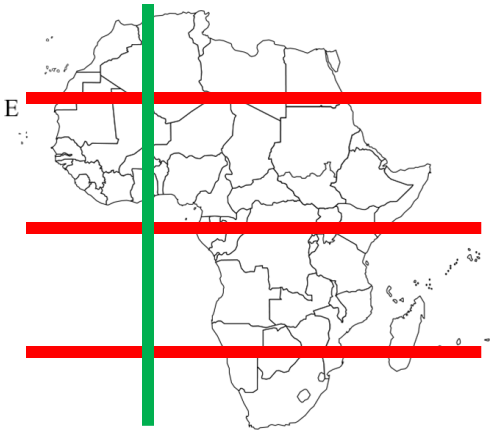

Food

Year 8 – term 1 - Geography Knowledge Organiser

BROADOAK ACADEMY

1. Location





Can you describe Africa's location in relation to other continents and oceans? E.g. Africa is to the south of Europe and to the east of the Atlantic Ocean

Label the lines of latitude and Longitude on the map:

The equator runs through the centre

The Tropic of Cancer runs through the north

The Tropic of Capricorn runs through the south

The Prime Meridian runs through the west.

2. Misconceptions

A misconception is a commonly held view that is incorrect. There are many misconceptions about Africa due to how it has been represented in the media E.g. "Africa is a county" Is a misconception. It is actually a continent with 54 countries. **Can you think of more misconceptions and correct them?**

3. Development Indicators

Indicator	Meaning	Explanation
Life Expectancy	The average number of years a person is expected to live	Tells us about the healthcare and quality of life in a country
Literacy rate	The percentage of adults who can read and write	Tells about education in a country
Birth rate	The number of births per 1000 of the population	Tells us about the healthcare and quality of life in a country
Death rate	The number of people dying per 1000 of the population	
Infant mortality rate	Number of children dying before the age of 5	Tells us about healthcare in a country
GNI (Gross National Income)	GNI is the total amount of money earned by a nation's people and businesses	Tells us about the economic development of a country
Human Development Index	HDI – a figure between 0-1 that designates the development of country accounting for life expectancy, levels of education and GNI	Combines both social and economic measures to give a more holistic view of Quality of Life in a country.

4. How does development vary in Africa?

Development varies in Africa

HICS – South Africa, Algeria

NEEs – Nigeria, Rwanda

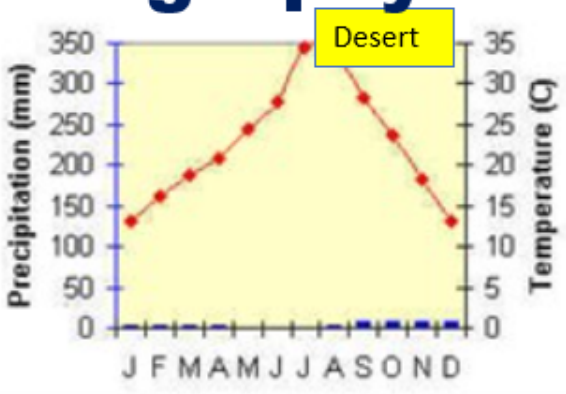
LICs – Sudan, Chad

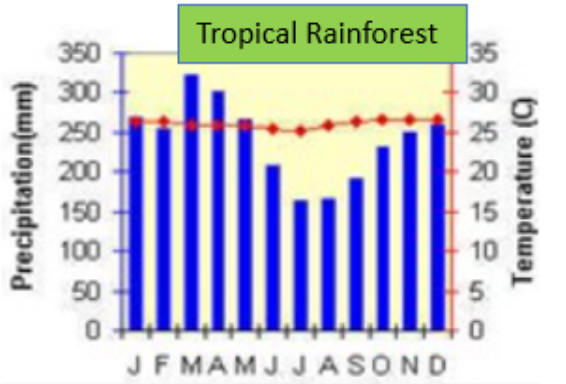
5. How has colonisation impacted development in Africa?

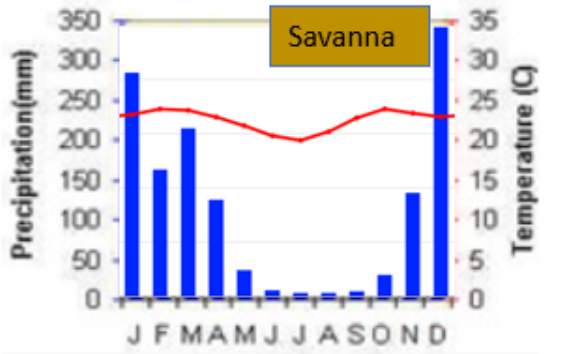
The '**Scramble for Africa**' happened between 1880 and 1914. European countries raced to **colonise** countries within Africa in order to exploit their natural resources. Most gained **independence** following WW2. However, Colonisation impacted development. This is because, following independence there was sometimes conflict and corruption, which prevented some countries developing.

Geography

Are Africa's landscapes more than just 'The Lion King'?





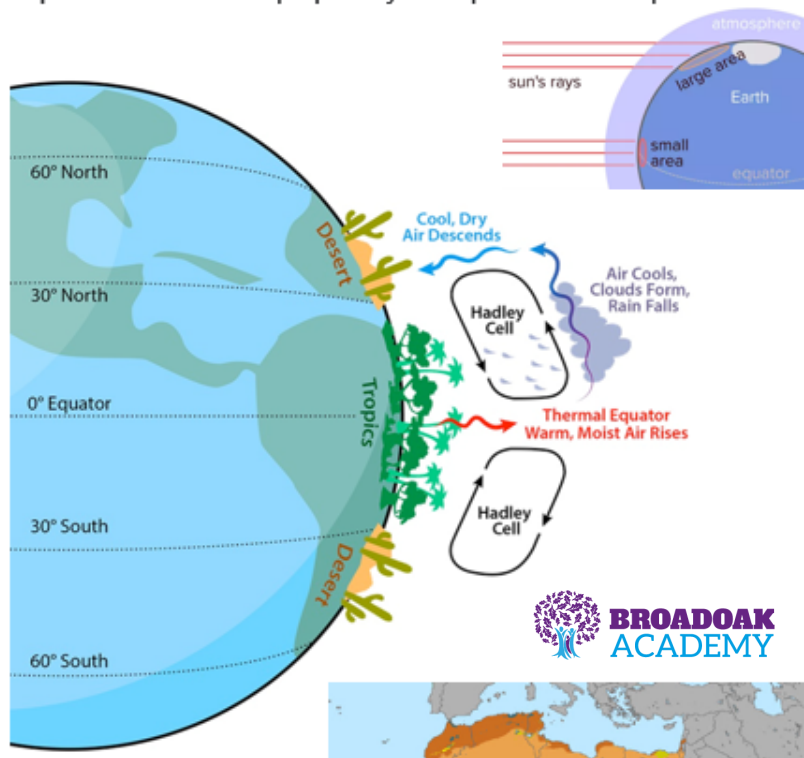


Blue bars show precipitation (rainfall).

Temperature is shown buy a red line.

Key word	Definition
Biome	An area with similar physical characteristics, climate, plants and animals eg rainforest
Climate graph	Climate graphs show average rainfall and temperatures typically experienced in a particular location. (see diagrams)
Hadley Cell	A large-scale atmospheric convection cell in which air rises at the equator and sinks at medium latitudes, typically about 30° north or south.
Equator	A line drawn on the earth same distant from the poles, dividing the earth into northern and southern hemispheres and the parallel of latitude 0
Evaporation	The process of turning from liquid into vapour.
Condensation	The conversion of a vapour or gas to a liquid eg the cloud is caused by condensation in the air
Tourism	The visiting of place that is not your home for a leisure activities and infrastructure involved in this
Opportunities	A chance for some good.
Challenges	A problem that may be overcome
Social	Factors to do with people
Environmental	Factors to do with the natural world
Economic	Factors to do with money
Multiplier effect	Positive overall impact of economic change in a location
Ecotourism	tourism directed towards unique environments, often threatened, natural environments, intended to support conservation efforts and observe wildlife.

Sunlight hits the Earth most directly at the Equator. The curve of the Earth means that sunlight is spread over a wider area the further you move from the Equator. Sunlight hits a smaller surface area at the Equator so heats up quickly compared to the poles.



BROADOAK ACADEMY

Desert

Savanna/Grassland

Tropical Rainforest

Savanna/Grassland

Desert

Geography

Are Africa's landscapes more than just 'The Lion King'?

BROADOAK ACADEMY

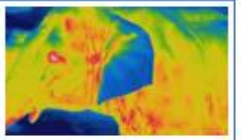
Wet season: Plants grow quickly, trees grow new leaves and grasses become very tall

Dry season: Grasses dry out, trees drop their leaves. Bush fires are common during this period.

How have plants adapted?

- Tall so that animals can't eat them (except giraffes)
- Large underground roots to survive fires (nutrients)
- Large tap root to reach water deep underground
- Thornes to deter animals
- Let out a chemical into their leaves to make them taste bad

How have animals adapted?

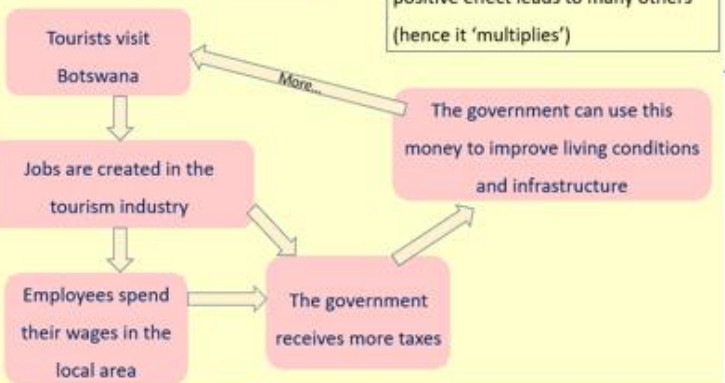


- Large ears to reduce heat
- Thick skin to protect from the sun
- Tusks are used for defending themselves and for digging for water
- They use mud to cool themselves and to get rid of bugs.

	Opportunities (Pros)	Challenges (Cons)
Mass Tourism	- Large scale so lots of potential income. - Lots of jobs created to cater for all of the guests. - Can lead to infrastructure improvement within the country eg. roads/electricity	- Environmentally unfriendly. Eg lots of water used/wasted. - Places a huge strain on the environmental attractions. - Overcrowding - Litter/pollution
Ecotourism	- Less damage environmentally. - More culturally sympathetic. - Although fewer in number, still creates jobs. - Aims to support local communities more.	- Small scale so smaller profits. - Still suffers from the general problems of tourism eg leakage of profit out of Botswana.

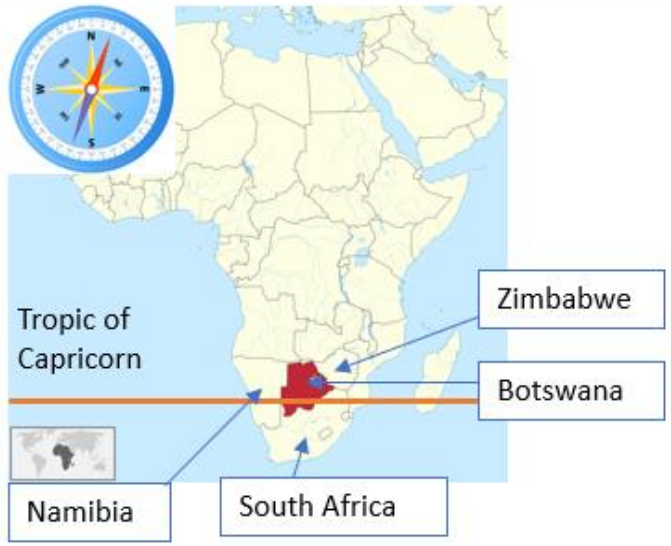
Key term: Multiplier Effect

The **multiplier effect** is when one positive effect leads to many others (hence it 'multiplies')



In order to be sustainable you must look after:

- People (social)
- Money (economic)
- The environment



Y8 & 9 Spanish

1. The Present Tense

normalmente	*normally*
generalmente	*usually*
a veces	*sometimes*

Step 1: Take the infinitive of the verb (AR/ER/IR)

Step 2: Chop off the ending (AR/ER/IR)

Step 3: Add the correct ending:

Pronouns	AR verbs	ER verbs	IR verbs
Yo	o	o	o
Tú	as	es	es
El/Ella	a	e	e
Nosotros	amos	emos	imos
Vosotros	**á**is	**é**is	**í**s
Ellos/Ellas	an	en	en

Super Five Irregular Verbs:

There are some verbs that don't follow this pattern. The 4 most important irregular verbs are on this sheet (TENER, IR, SER, and HACER).

2. The (Near) Future Tense

la semana próxima	*next week*
el fin de semana próximo	*next weekend*
mañana	*tomorrow*
el año próximo	*next year*

Step 1: Take the present tense of the verb 'ir' (to go)

ir: to go

(yo) **Voy**	*I go/am going*
(tú) **Vas**	*You go/are going (s.)*
(el/ella) **Va**	*He/she/one goes/is going*
(nosotros) **Vamos**	*We go/are going*
(vosotros) **Vais**	You *go/are going (p.)*
(ellos/ellas) **Van**	*They go/are going*

Step 2: Add the presposition 'a'

Step 3: Add an infinitive (the thing you're going to do).

e.g. I'm going to play
Voy a jugar

3. The Preterite (Past) Tense

la semana pasada	*last week*
el fin de semana pasado	*last weekend*
ayer	*yesterday*
el año pasado	last year

Regular Verbs:

Step 1: Take the infinitive of the verb (AR/ER/IR)

Step 2: Chop off the ending (AR/ER/IR)

Step 3: Add the correct ending:

Pronouns	AR verbs	ER/IR verbs
Yo (I)	**é**	**í**
Tú (You s.)	aste	iste
El/Ella (He/She)	**ó**	**ió**
Nosotros (We)	amos	imos
Vosotros (You pl.)	asteis	isteis
Ellos/Ellas (They)	aron	ieron

Ser – to be

(yo) **Soy**	*I am*
(tu) **Eres**	*You are (s.)*
(él/ella) **Es**	*He/she/ is*
(nosotros) **Somos**	*We are*
(vosotros) **Sois**	You are (p.)
(ellos/ellas) **Son**	*They are*

Hacer – to do/make

(yo) **Hago**	*I do/make*
(tu) **Haces**	*You do/make (s.)*
(él/ella) **Hace**	*He/she/ does/makes*
(nosotros) **Hacemos**	*We do/make*
(vosotros) **Hacéis**	You *do/make (p.)*
(ellos/ellas) **Hacen**	*They do/make*

Tener: to have

(yo) **Tengo**	*I have*
(tu) **Tienes**	*You have (s.)*
(él/ella) **Tiene**	*He/she/one has*
(nosotros) **Tenemos**	*We have*
(vosotros) **Tenéis**	*You have (p.)*
(ellos/ellas) **Tienen**	*They have*

6. Awesome Spanish Things to Say

¡No puedo esperar!	*I can't wait for it*!
Por lo que sé	***As far as I know***
Que yo sepa	***As far as I know***
el último / la última…	*the last/latest…*
Es mi (tipo de) cosa…	*It's my (kind of) thing*
No es mi (tipo de) cosa…	*It's not my (kind of) thing*
Mientras estaba viendo	*while I am watching TV*
Mientras estaba escuchando / escucho la música	*while I am listening/I listen to music*
Mientras estaba haciendo / hago los deberes	*while I am doing / I do homework*

Food and Drink
SPANISH

Cabot Learning Federation

¿Te gusta….?
Do you like…?

OPINION	NOUN	JUSTIFICATION	INTENSIFIERS	ADJECTIVES
Prefiero I prefer	**el pan** (bread)	**porque es** because it is	**muy** very	**sabroso / rico** (tasty)
Me encanta(n) I love	**el pescado** (fish)			**delicioso** (delicious)
	el queso (cheese)	**porque son** because they are	**bastante** quite	**sano** (healthy)
Me gusta(n) I like	**la mantequilla** (butter)			**malsano** (unhealthy)
	la leche (milk)		**un poco** a bit	**terrible** (awful)
No me gusta(n) I don't like	**el café** (coffee)			**asqueroso** (disgusting)
	el té (tea)		**demasiado** too	**picante** (spicy)
Odio I hate	**la cola** (Coke)			**dulce** (sweet)
	el azúcar (sugar)			**amargo** (bitter)
En mi opinión In my opinion	**el jamón** (ham)			**salado** (salty)
	el chocolate caliente (hot chocolate)			**grasiento** (greasy)
Pienso que I think that	**la manzana** (apple)			**bueno para la salud** (good for your health)
	la carne (meat)			**malo para la salud** (bad for your health)
	la mermelada (jam)			
	el helado (ice-cream)			
	las judías verdes (green beans)			
	las verduras (vegetables)			
	las patatas fritas (chips)			
	las papas (crisps)			
	las espinacas (spinach)			
	el huevo (egg)			
	el agua (wáter)			

REMEMBER TO MAKE THE ADJECTIVES AGREE WITH THE NOUN **-o/-a/-os/-as**

EN EL RESTAURANTE	IN THE RESTAURANT
¿Qué quieres comer?	**What do you want to eat?**
De primer plato	For the starter
De segundo plato	For the main
De postre	For dessert
Quisiera	I would like
Para mí	For me
Para beber	To drink
Para comer	To eat
Una ración de…	A portion of…
Camarero/a	Waiter/waitress
¿Tienes…?	Do you have…?
La cuenta, por favor	The bill, please
La propina	The tip

¿Cuándo comes?	When do you eat?
El desayuno	Breakfast
La comida	Lunch
La merienda	Snack
La cena	Evening meal/tea
Desayunar	To eat breakfast
Comer	To eat lunch
Merendar	To snack
Cenar	To eat dinner

EN EL MERCADO / SUPERMERCADO	IN THE MARKET / SUPERMARKET
¿ Te gustaría…?	**Would you like…?**
Un paquete de	A packet of
Un litro de	A litre of
Un kilo de	A kilo of
Un medio kilo de	Half a kilo of
Una botella de	A bottle of

¿Cuánto cuesta?	How much?
diez	10
veinte	20
veintiuno	21
treinta	30
treinta y uno	31
cuarenta	40
cincuenta	50
sesenta	60
setenta	70
ochenta	80
noventa	90
cien	100
dos cientos	200
quinientos	500
Euros	Euros
Libras	Pounds

BROADOAK ACADEMY

Y8 & 9 French

1. The Present Tense

Normalement	*normally*
D'habitude	*usually*
Quelquefois	*sometimes*

Step 1: Take the infinitive of the verb (ER/IR/RE)

Step 2: Chop off the ending (ER/IR/RE)

Step 3: Add the correct ending:

Pronouns	ER verbs	IR verbs	RE verbs
Je	e	is	s
Tu	es	is	s
Il/Elle/On	e	it	-
Nous	ons	issons	ons
Vous	ez	issez	ez
Ils/Elles	ent	issent	ent

Super Five Irregular Verbs:

There are verbs that don't follow this pattern. The 4 most important irregular verbs are on this sheet (ÊTRE, AVOIR, ALLER, and FAIRE).

2. The (Near) Future Tense

La semaine prochaine	*next week*
Le weekend prochain	*next weekend*
Demain	*tomorrow*
L'année prochaine	*next year*

Step 1: Take the present tense of the verb 'ALLER' (to go)

ALLER: to go

Je vais	*I go/am going*
Tu vas	*You go/are going (s.)*
Il/Elle/On va	*He/she/one goes/is going*
Nous allons	*We go/are going*
Vous allez	You *go/are going (p.)*
Ils/Elles vont	*They go/are going*

Step 2: Add an infinitive (the thing you're going to do).

e.g. I'm going to play
Je vais jouer

3. The Preterite (Past) Tense

La semaine dernière	*next week*
Le weekend dernier	*next weekend*
L'année dernière	*next year*

Perfect Tense verbs with 'AVOIR':

Step 1: Take the present tense of the verb avoir

For some verbs you need to use the verb être (MRS VANDERTRAMP)

AVOIR: to have

J'**ai**	*I have*
Tu **as**	*You have*
Il/elle/on **a**	*He/she/one has*
Nous **avons**	*We have*
Vous **avez**	You *have*
Ils/elles **ont**	*They have*

Step 2: Add the past participle (see rules below)

Take the infinitive – chop off the ER + add é
Take the infinitive – chop off the IR + add i
Take the infinitive – chop off the RE + add u

ÊTRE – to be

Je **suis**	*I am*
tu **es**	*You are (s)*
il/elle/on **est**	*He/she/one is*
nous **sommes**	*we are*
vous **êtes**	*you are*
ils/elles **sont**	*they are (m)*

FAIRE – to do/make

Je **fais**	I do
tu **fais**	You do (s)
il/elle/on **fait**	He/she/one does
nous **faisons**	*we do*
vous **faites**	*you do (pl)*
ils/elles **font**	*they do (m)*

Common Past Tense Verbs with ÊTRE

Je suis allé (e)	I went
Nous sommes allé(e)s	We went
Je suis resté (e)	I stayed
Nous sommes resté(e)s	We stayed

Opinions

C'est – it's
C'était – it was
Ce sera – it will be

Awesome French Things to Say

j'en ai hâte!	*I can't wait for it!*
Que je sache	*As far as I know*
les derniers/dernières…	*the latest…*
C'est mon truc	*It's my (kind of) thing*
Ce n'est pas mon truc	*It's not my (kind of) thing*
en regardant la télé	*while watching TV*
en écoutant de la musique	*while listening to music*
en faisant des devoirs	*while doing homework*

Food and Drink
FRENCH

Cabot Learning Federation

Est-ce que tu aimes… ?
Do you like…?

OPINION	NOUN	JUSTIFICATION	INTENSIFIERS	ADJECTIVES
Je préfère I prefer	**le pain** (bread)	**parce que c'est** because it is	**très** very	**agréable** (pleasant)
J'adore I love	**le poisson** (fish)		**assez** quite	**délicieux/euse** (delicious)
J'aime I like	**le fromage** (cheese)		**un peu** a bit	**fantastique** (fantastic)
Je n'aime pas I don't like	**le beurre** (butter)		**trop** too	**savoureux/euse** (tasty)
Je déteste I hate	**le lait** (milk)			**sain/e** (healthy)
À mon avis In my opinion	**le café** (coffee)			**horrible** (horrible)
Je pense que I think that	**le thé** (tea)			**terrible** (awful)
	le cola (coke)			**doux/douce** (sweet)
	le sucre (sugar)			**aigre** (sour)
	le jambon (ham)			**dégoûtant/e** (disgusting)
	le chocolat chaud (hot chocolate)			**épicé/e** (spicy)
	la pomme (apple)			**salé** (salty)
	la viande (meat)			**gras/se** (fatty)
	la confiture (jam)			**bon/ne pour la santé** (good for your health)
	la glace (ice-cream)			**mauvais/e pour la santé** (bad for your health)
	les haricots verts (green beans)			REMEMBER TO MAKE THE ADJECTIVES AGREE WITH THE NOUN
	les légumes (vegetables)			
	les frites (chips)			
	les chips (crisps)			
	les epinards (spinach)			
	l'oeuf (egg)			
	l'eau (water)			

Quand est-ce que tu manges?	When do you eat?
Le petit déjeuner	Breakfast
Le déjeuner	Lunch
Le goûter	Snack
Le dîner	Evening meal/tea

DANS LE MARCHÉ/ SUPERMARCHÉ	IN THE MARKET / SUPERMARKET
Tu voudrais…?	**Would you like…?**
Un paquet de	A packet of
Un litre de	A litre of
Un kilo de	A kilo of
Un demi kilo de	Half a kilo of
Une bouteille de	A bottle of

AU RESTAURANT	IN THE RESTAURANT
Qu'est-ce que vous voulez manger? Est-ce que je peux vous aider?	**What would you like to eat? Can I help you?**
Comme entrée	For the starter
Comme plat principal	For the main
Comme dessert	For dessert
Comme boisson	For drinks
Je voudrais	I would like
Manger/boire	To eat/ to drink
Je prends…	I'll take (have)
Un serveur/ une serveuse	A waiter/ waitress
L'addition s'il vous plaît	The bill, please
Le pourboire	The tip
C'est tout	That's all
Merci	Thank you

C'est combien ?	How much?
dix	10
vingt	20
vingt et un	21
trente	30
trente et un	31
quarante	40
cinquante	50
soixante	60
soixante-et-un	61
soixante-dix	70
soixante-onze	71
quatre-vingt	80
quatre-vingt-deux	82
quatre-vingt-dix	90
quatre-vingt-douze	92
cent	100
deux cents	200

BROADOAK ACADEMY

BROADOAK ACADEMY

Year 8 Art

Creatures & Characters

Content: In this project you will develop knowledge of: what makes a memorable character/creature and learn different artists drawing styles.

Understand- what inspired artists to create their work and how to explain what makes it successful.

Develop skills- drawing, shading, painting, and 3D media to create 3 dimensional shapes and show the influence of other artists in your own work and presentation of a final outcome.

Outcome- An original creature inspired by one or multiple artists which you have looked at over the course of the module.

Tim Burton

Known for pioneering goth culture in the American film industry, Burton is revered for his fantasy and gothic style which can been seen in both the Films he produces and his Illustrations

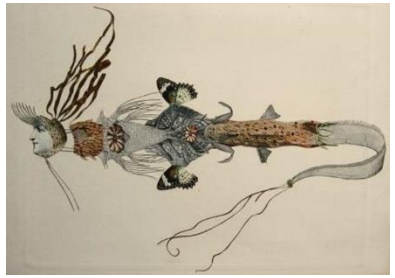
ARTISTS

Quentin Blake

John Kenn Mortensen

Paride Bertolin

Katie McCan



Ray Harryhausen

Keywords:

Mythological- something that is fictitious (made up) or imaginary. Often found in mythology and fables.

Typography - arranging letters and text in a way that makes the copy legible, clear, and visually appealing to the reader.

Surrealism-is an art style that focuses on imagination and dream like images.

Anthropomorphism- is giving human characteristics to animals or objects

Assessment:

(D) Demonstrate a deepening- knowledge, understanding and skills

(O+)On Track- Demonstrate some- knowledge, understanding and skills

(O-)On Track- Demonstrate some- knowledge, understanding and skills

(Y)Yet to be on Track- developing some- knowledge, understanding and skills

(A)Earlier Stage-minimal knowledge, understanding and skills

Analysis

All artist research pages should be annotated Artwork-

Artist name

- Describe the work-what does it look like? Use the formal elements i.e. colour, line etc.
- What techniques/materials were used?
- What is your opinion of the work? How is it relevant to your own idea?

Sentence starters

I like/dislike the way the artist has used…because

I think the colour scheme used is effective because…

I think the artist has been inspired by…because

Evaluation of Your Artwork-

What inspired you to create the piece?

What techniques did you use and why?

What does it mean to you?

How is it relevant to your idea?

Sentence starters

The technique I have used is…

The skill/technique I found most difficult was…because…

I think my work is successful because…

Year 8 Drama -Voice

	Key Words	Definition
15	Scene	A section of a play/act
16	Dialogue	Speech
17	Duologue	Two people speaking
18	Performance	A showcase
19	Improvise	Creating a piece of unscripted work
20	Script	Written dialogue
22	Audience	Spectators
23	Character	A person who you play in role
24	Rehearsal	Practicing a scene/performance

Developing Vocal Skills

Knowledge and understanding of how to use the voice to achieve a variety of effects, characters and geographical places.

To develop the ability to control their voice in performance and in everyday life

- To empathise with characters different from themselves
- To challenge self-consciousness by stepping out of your comfort zone

Pitch	This is how high or low a performer makes their voice when playing different roles. Pitch can show the age, gender and mood of the character.
Accent	This informs the audience where you are from e.g. cockney accent from East London.
Diction	This is how clearly you speak using enunciation and pronunciation.
Volume	This is how loud you speak, this could be from a stage whisper to shouting.
Emphasis	This is when a performer puts extra focus on a word or words within a sentence to make a point, this can be done by elongating, speaking louder or changing the tone of your voice.
Intonation	This is varying your voice so that it goes up and done, this help the fluency of your speech and helps the audience stay engaged with your dialogue.
Projection	This is speaking with strength. Opening your mouth wider creates a bigger projection.
Dialect	This is similar to speaking with an accent except it is more specific i.e. it tells the audience what region you are from e.g. London.
Tone	This is showing the mood that your character is feeling e.g. happy, sad, excited, frustrated etc.
Received Pronunciation	This is when you speak with a posh accent, taking care to enunciate each letter in every word. Performers use the front of their mouths when they are delivering their dialogue to give a nasal sound.
Enunciation	This is how well a performer speaks e.g. good enunciation means sounding out every letter in every word.
Pronunciation	This is the accent or mood you speak a line of dialogue with e.g. speaking English with a French accent.
Pace	This is how fast or slow a performer speaks. A character who is tired or bored may speak with a slow pace compared with a happy, excited character who will speak with a fast pace.

Posture

How an actor stands or sits

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Movement

The way an actor moves and where they move to on stage

Proxemics

The space and awareness of space between actors and sometimes objects. Where an actor is on stage

Facial Expression

Facial movements to show mood or emotion

How does an actor use **vocal** and **physical** skills to communicate their character?

Interaction

The physical communication between characters and sometimes objects

Gesture

Body movements, usually using hands, arms or shoulders

Speech

Pitch (high/low), Volume and Projection, Pace, Diction, Emphasis, Accent

VOCAL SKILLS

PITCH
How HIGH or LOW a voice sounds

ACCENT
A way of talking associated with a geographical location or social class

PACE
The speed in which someone speaks or responds

TONE
The emotional sound of the voice e.g. Angry, Sad, Excited

DICTION
How clear an actor pronounces their words

PROJECTION
The direction and distance an actor sends their voice

Volume
How LOUD or QUIET an actor speaks to express their emotion

EMPHASIS
Where an actor stresses a word to indicate its importance

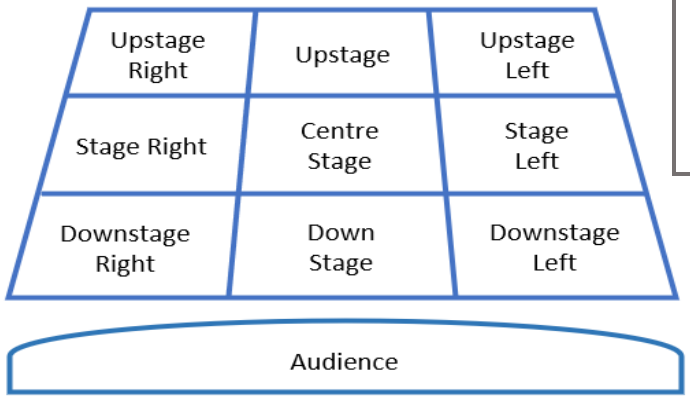
PAUSE
Stopping for a moment for dramatic impact

Drama Techniques Toolkit	Definition
Freeze Frame	When everyone on stage at one moment freezes or stands still
Narration	Where there is someone or a voice telling parts of the story not shared by the acting that the audience need to know
Mime	Performing/acting with no speaking
Role-Play	Performing/acting as if you are a specific character or in a specific situation
Split-Stage	Where there are two different things taking place on stage at the same time often to show different places or periods of time
Stage Configuration	The type, layout or design of a stage
Stage Positioning	Specific areas on a stage where actors or set are positioned
Step Out	When an actor steps away or looks up from a freeze frame to address/speak to the audience
Stock Characters	Stereo-typical characters found in a play

Monologue: A speech spoken or presented by an individual character in a play often directed to another character or to the audience

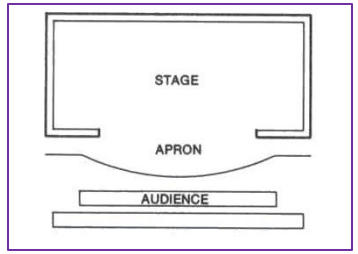
Soliloquy: A single character expressing their own thoughts to themselves regardless of other actors and audience

Stage Positioning

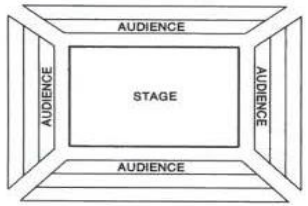


Duologue: Performance of an interactive conversation between two characters

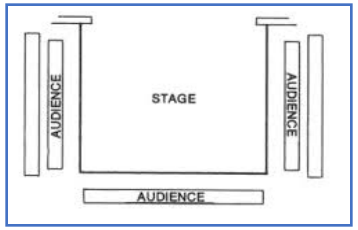
Proscenium Arch



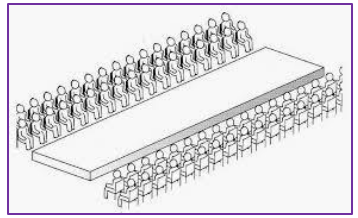
In The Round



Thrust



Traverse

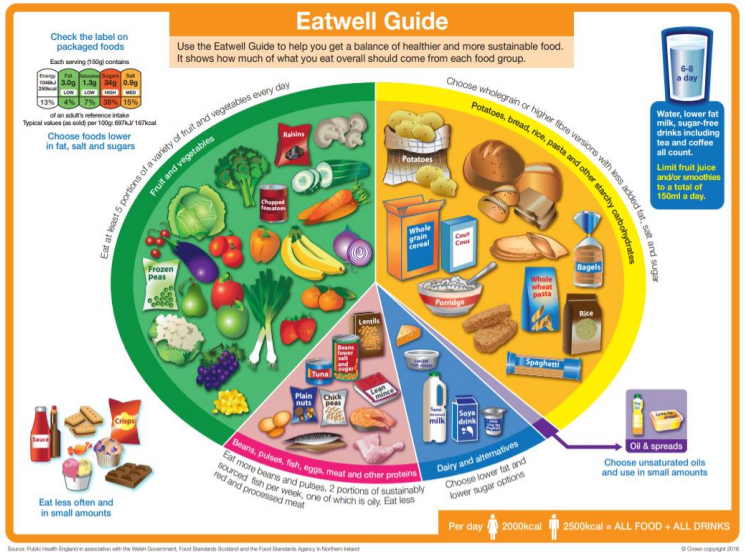


Year 8 Drama
Vocal and Physical Skills

World Food Technology Year 8

Staple Foods

Ingredients origins: You will learn about **staple foods** and where our food come from. You will learn about how their grown and **transported** around the world and **the impact** this has.



Food Miles are the distance over which a food item has travelled from producer to consumer.

EQUIPMENT


Vegetable/brown Chopping Board


Mixing Bowl


Sharp Knife


Raw meat/Red Chopping Board


Sauce Pan


Colander


Muffin/cake Tin


Wooden Spoon


Container


Apron

Sensory

VISION HEARING SMELL TASTE

Appearance

Appetising, attractive, clear, cold, colourful, crumbly, dry, fattening, fresh, greasy, hot, moist, soggy, tasty.

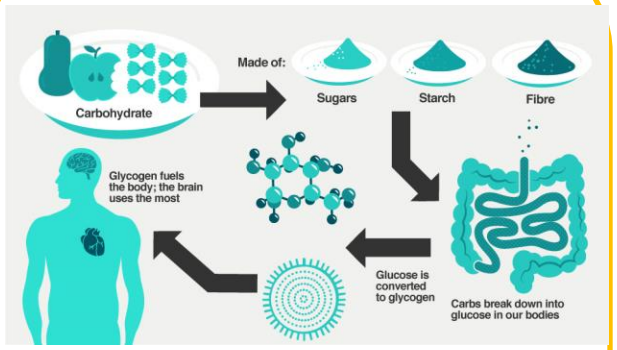
Smell/Taste

Acid, bitter, bland, burnt, creamy, dry, fatty, old, salty, sharp, soggy, sour, spicy, stale, sweet, watery, wet, tangy, tasteless, tasty, undercooked.

Texture

Airy, brittle, chewy, cold, greasy, gritty, hard, hot, juicy, lumpy, mushy, powdery, rubbery, slimy, smooth, soft, soggy, springy, sticky, Stiff, stringy, tender, thick, thin, tough, watery, warm.

Carbohydrates and Sugar



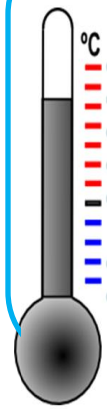
BROADOAK ACADEMY

World Food Technology Year 8

Why seasonal food?

- Foods are usually harvested when they are at their peak and typically have the most flavour and nutrients, so the food tends to be tastier, healthier and better for the environment.
- Take a look at the seasons to see when different foods are at their best.

Critical temperatures



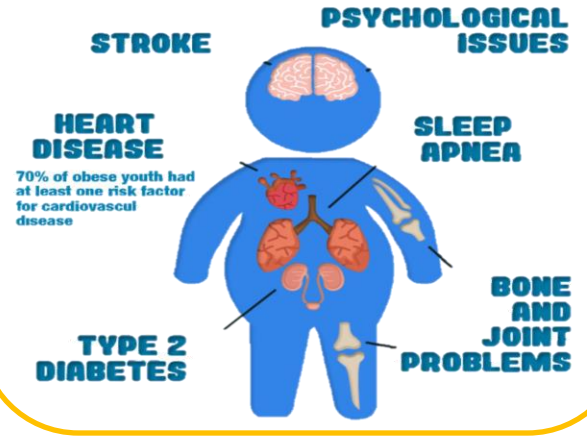
	Bacteria state
100°C = Boiling point of water	Dead
75°C = Core temp of cooked food	Dead
63°C or above = Hot held serving temp	Dead
37°C = Body Temperature	Multiplying
5-63°C = DANGER ZONE	Multiplying
0-5°C = Fridge temp	Suspended
-18°C = Freezer temp	Frozen

What is fair trade?

Fair trade is a way to connect disadvantaged farmers and workers with consumers, promote fairer trading conditions and empower farmers and workers to combat poverty, strengthen their position and take more control over their lives.

Nutritional impact:

CHILDHOOD OBESITY INCREASES RISK OF:



Macronutrients Fat, Protein, Carbohydrate required in large amounts in the diet and have a larger impact on your body.

Nutrient	Role in the body	Food Example
Carbo-hydrate	The main source of energy for the body	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

Nutrient	Role in the body	Food Example
Vitamin A	The skin and body lining. Also, normal vision and immune system	Dairy, dark green veg and orange fruit.
Vitamin D	For absorbing calcium and phosphorus for health bones.	Sun, oil fish, eggs and meat.
Vitamin E	Its an antioxidant that protects cells against damage and stress	All Vegetables, vegetable oil, seeds
Vitamin C	Its an antioxidant that also helps with body tissue and healing.	Fruits especially citrus. Green veg and tomatoes.
Vitamin K	Essential to blood clotting (making scabs)	Green veg, meat, oils and cereals
Iron	Red blood cell transporting oxygen around the body.	Meat, beans, nuts, fish, whole grains and dark green veg
Calcium	Bones, teeth, nerves and muscles. Also helps clotting	Dairy, green veg, soya beans and bread.

Hygiene: The 4 C's:

Cleaning – surfaces, equipment and personal; to make sure bacteria is cleaned away

Cooking – To cook and make food more edible also killing bacteria.

Chilling – to keep food fresh stop it from perishing, stop bacteria from multiplying/growing.

Cross contamination – to stop foreign objects and different bacteria's crossing between ingredients/foods

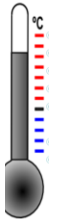
HACCP

Hazard - Anything that is likely to cause harm to the consumer

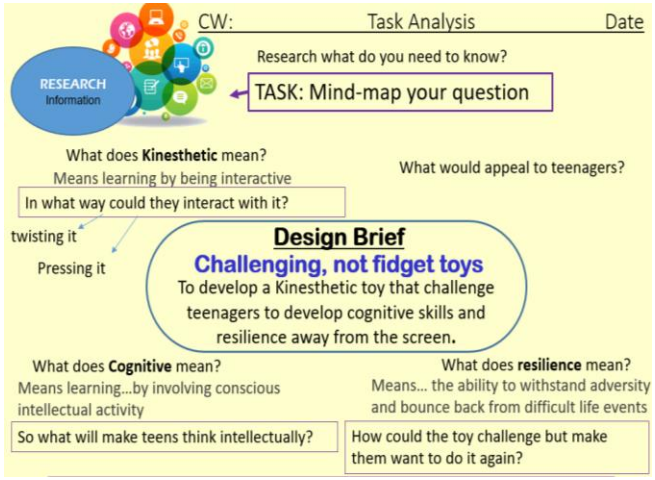
Analysis - Is when you look in detail at something

Critical - This means its very serious

Control Point - A step in the process where hazards or risks are likely to occur.



Design Technology Year 8
Interactive Game project



TARGET MARKET

The Target market is the group of people you will aim your product at.

This enables the design to make better design decisions by focusing on who would by it and what their needs are: Examples

Children (3-5yrs) – Bright colours, small to fit into their hands, safe smooth edges.....

Teenagers

The Elderly

Disabled

Specification:

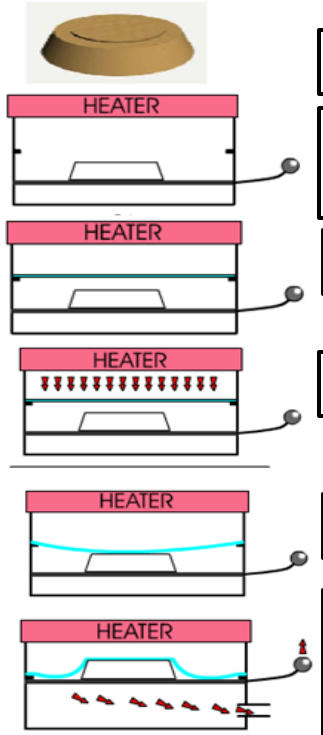
A Specification is a list of requirements, standards or things a product must include.
It should consider the:
Function – What it does
Aesthetics – What it looks like
Materials – Suitability for task
Safety – Not hurt the user
Customer – 'target market' needs

ACCESS FM:
Task: Complete you ACCESS FM list.

A	is for **Aesthetics**	What does it look like?
C	is for **Cost**	How much does it cost?
C	is for **Customer**	Who would buy or use the product?
E	is for **Environment**	Are the ingredients or packaging environmentally friendly?
S	is for **Size**	How big or small is the product?
S	is for **Safety**	How safe is it to use?
F	is for **Function**	How does it work?
M	is for **Material**	What is it made from and how?

We will be using this to analyse a range of example products to help identify some of the specifications and the reasons for them.

Vacuum forming



The mould is made from MDF (Medium Density Fibreboard).

The mould is placed on the bed of the vacuum former and is lowered.

The HIPS plastic is secured onto the vacuum former.

A heater is then applied onto the HIPS plastic.

The HIPS plastic then becomes pliable.

The MDF mould is then brought up so that the HIPs and the vacuum is switched on the plastic takes the shape of the mould.

Design Technology Year 8 Interactive game

What is a Analysis?

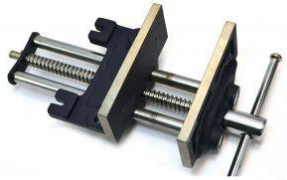
Analysis means studying how well a product or material, does its job:

"Finding what a product does and how well it does."

TOOL TYPES

Tenon Saw

Wooden Mallet



Bench Vice

Disc Sander

Drill Bits

Screwdriver

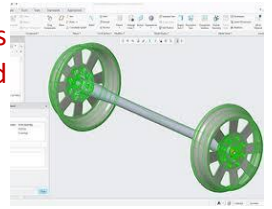
PVA Glue

Wood screws

What is CAD:

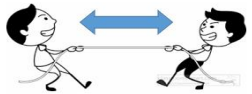
Computer Aided Design

Is using a computer to develop, show or create a design. This can be 3D which means you can turn and get a realistic view from all sides. This means that the design can be changed and developed easily. These images can also be emailed and sent to manufactures, machines or clients.



Strength has 3 properties:

Tensile – Pulled in opposite directions and not break or crack.



Compression – Pressed and squished Without cracking or breaking.

Shear – Opposing forces without cutting through.

An **Ant** can carry from 10-50 times its own body weight.

Eddie Hall – not only won the worlds strongest man But also holds the record for the heaviest deadlift 500Kg

What is soldering?

Soldering is a permanent joint, it holds Components in place on a circuit board. The soldering iron heats solder up to 185 °C degrees. Solder is an alloy and is a mixture of tin and Lead. Solder also contains flux to ensure the join is clean for the best conductivity.

INPUT(S)	PROCESS	OUTPUT(S)
Inputs = the human or environmental impact that activates the circuit.	**Process** = the circuit and its programs (micro chips) working together to make it function.	**Outputs** = What the product does. The final result e.g., heat, sound, movement.....

Push the button

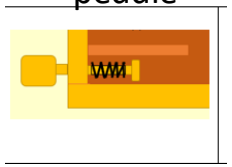
Heats up

Toast pops up!

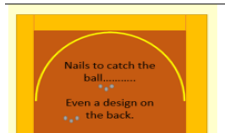
Feet push peddle

Gear drive the wheels

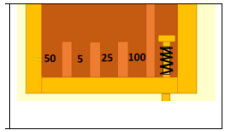
Bike moves forward



Fire



rolling ball



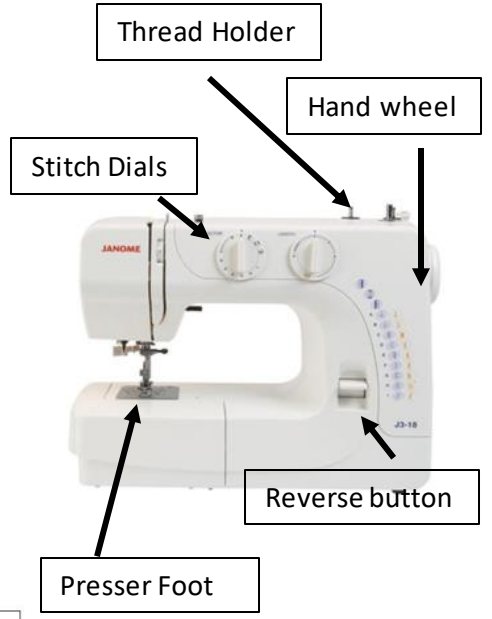
lands in score

Textiles Year 8 – Culture Cushions

Textiles play a hugely important role in many cultures.
People in different parts of the world have developed their own techniques for creating textiles, which are often unique to their own culture and tradition. They often incorporate elements of the country and people who live there. Some textiles have signature patterns, some have hidden meanings, some tell a story, and many have a role to play in a country's traditions.







Machine Applique:

- **Step 1** – Get all the sewing equipment you will need:
  - Sewing machine
  - Scissors
  - Cotton Fabric square
  - Coloured felt
- **Step 2** – Draw and cut out your image onto the coloured felt
- **Step 3** – Pin your cut out felt images to your cotton fabric square
- **Step 4** – Using a straight running stitch on the sewing machine, sew the cut out felt images to your cotton fabric square, stitching around the edge of the design – **Watch the teacher demonstration for this!**

Block Printing:

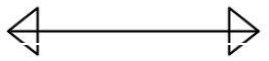
- **Step 1** – Get all the printing equipment you will need:
  - Foam sheet
  - Pencil
  - Fabric paint
  - Cotton Fabric square (write your name on it!)
- **Step 2** – Sketch out your design onto your foam sheet
- **Step 3** – Drawing over your design pressing down firmly with the pencil so that it creates a dent in the foam sheet
- **Step 4** – Paint your fabric paint onto your foam sheet, covering the design. Press your foam sheet onto your fabric firmly
- **Step 5** – Lift your foam sheet off the fabric. Let your print dry, and wash up your foam sheet in the sink

Pattern Symbols

Notches - Sewing notches are the little triangles or markings on your sewing pattern that help you match up your pieces. These notches should be marked or cut onto your fabric pieces.

Grainline - Used to determine the direction on the fabric a pattern should be cut. The direction of the woven threads make the grain of the fabric.

Dart – Darts are usually a triangle or diamond shape and are usually formed of dashed or solid lines. The lines mark each side of the dart, where the fabric should be matched up and sewn into a point.


Grainline

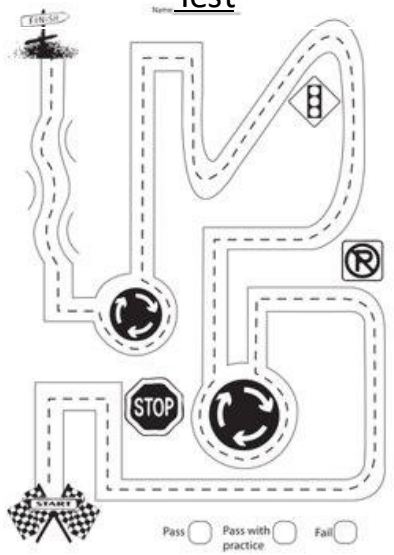
Fabric Crayons:

- **Step 1** – Get all the equipment you will need:
  - Fabric crayons
  - Pencil
  - Cotton Fabric square
- **Step 2** – Sketch out your design onto your cotton fabric square
- **Step 3** – Draw over and colour in your design using fabric crayons. Make sure that there is no white gaps on your design!
- **Step 4** – Place a piece of paper over your design and iron over it to fix the fabric crayons to the fabric

Hand Applique:

- **Step 1** – Get all the sewing equipment you will need:
  - Thread
  - Needle
  - Scissors
  - Cotton Fabric square
  - Coloured felt
- **Step 2** – Draw and cut out your image onto the coloured felt
- **Step 3** – Tie your thread onto your needle so that it in on the **double** and there is a **knot tied at the bottom** – **Watch the teacher demonstration for this!**
- **Step 4** – Attach your felt image to the cotton fabric using a running stitch – **Watch the teacher demonstration for this!**

Sewing Machine Driving Test



Textiles Year 8 – Key words and definitions

Design Brief	A design brief is the statement a client gives to a designer outlining what they want their product to be like, e.g. 'Design a drinks bottle holder for use while riding a bicycle'.
Mood board	Mood boards are an arrangement of images and text which are intended to inspire a project or concept.
Client Profile	A client profile is a summary of a specific customer and summarises key information about them, for example, what their likes and dislikes are.
ACCESSFM	Aesthetics, Customer, Cost, Environment, Size, Safety, Function
Hand Applique	Applique is a hand stitching technique in which one or more pieces of fabric are attached to a larger background fabric to create pictures or patterns.
Machine Applique	Machine applique is a sewing technique in which one or more pieces of fabric are sewn to a larger background fabric to create pictures or patterns using a sewing machine.
Block Print	Block printing is the process of printing patterns. This is done by engraving shapes and patterns into foam, wooden blocks, or lino, and then adding fabric paint to the block and pressing it onto fabric.
Fabric Crayons	Fabric crayons are used to draw and colour designs onto fabric. The design is then fixed to the fabric by ironing it.
Seam Allowance	A seam allowance is the distance between the edge of the stitch line and the edge of the fabric. This is usually between 1cm– 1.5cm wide.
Right Sides Together	When a sewing instruction is to sew your pieces of fabric together 'right sides together', this means that the sides of fabric that you want to see when the project is **finished**, are facing together when you sewing them.

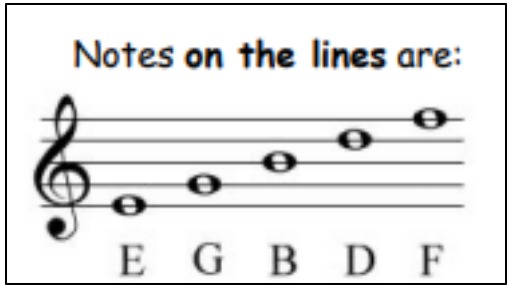
Y8 Music

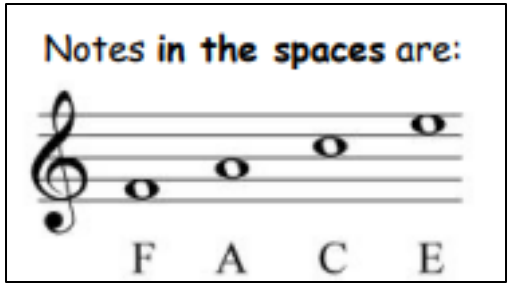
How has Music narrated the struggle for equality?

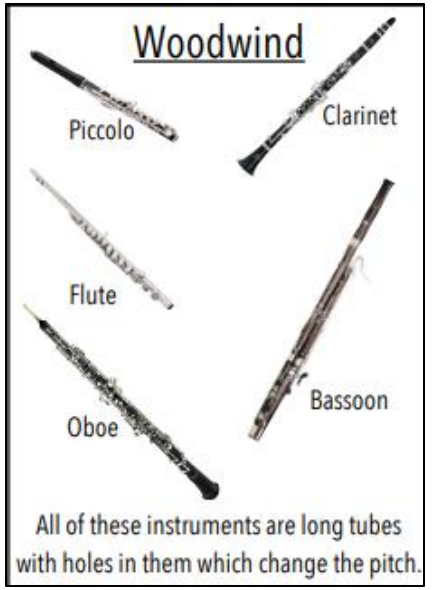
Blues Key Terms

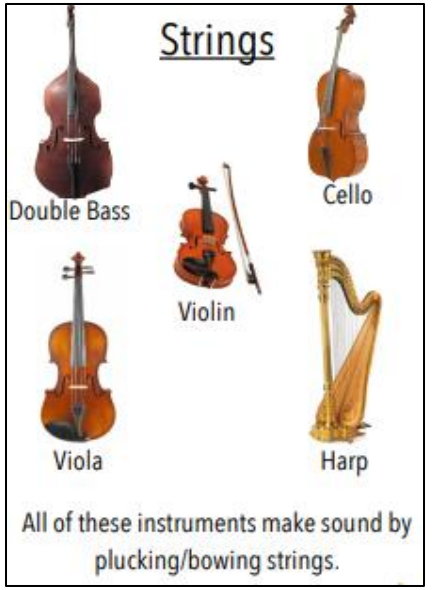
12 Bar Blues – Blues chord sequence
Bass line – low repeating pattern
Walking Bass – A bassline that keeps moving often walking up and down in pitch
Chord – 2 or more notes played together
Improvisation - Making it up as you go along
Melody – the main tune of the music
Blues Scale – A set of notes used in Blues
Lyrics – the words of the song
Rhythm – The combination of long and short notes
Depressed – Sad feelings
Oppressed – dominated by other people
Slave Trade – the period of time where the buying and selling of slaves was typical.

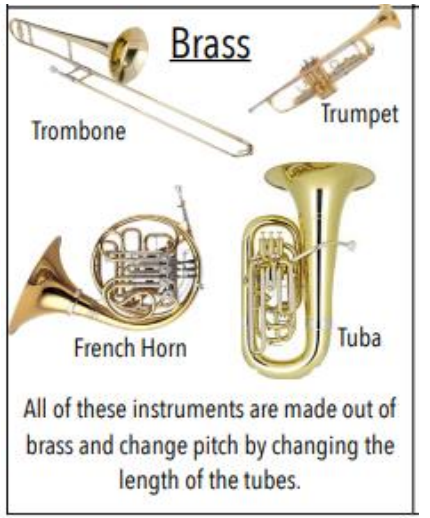
Note Pyramid			
Name	Symbol	Rest Symbol	Value of each
Semibreve	𝅝	𝄻	4
Minim	𝅗𝅥 𝅗𝅥	𝄼	2
Crotchet	♩ ♩ ♩ ♩	𝄽	1
Quaver	♫ ♫ ♫ ♫	𝄾	½
Semiquaver	𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯	𝄿	¼







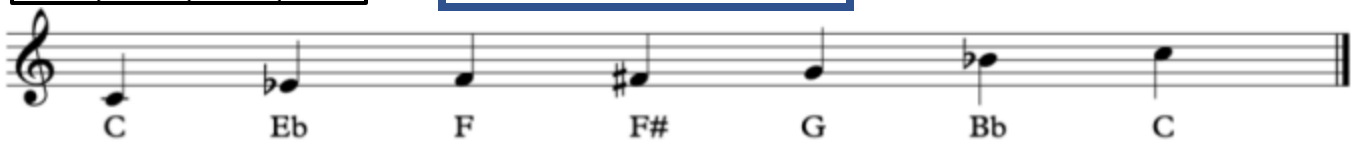


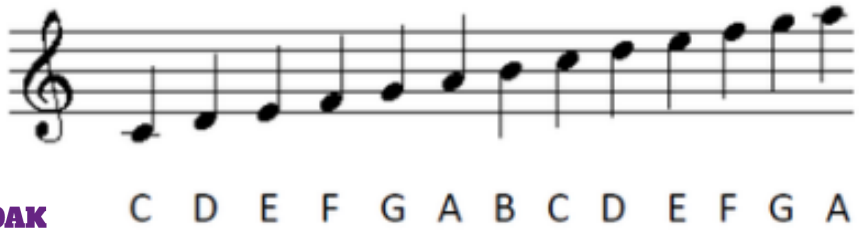


C	C	C	C
F	F	C	C
G	F	C	C

12-Bar Blues Chord Sequence

BLUES SCALE ON C

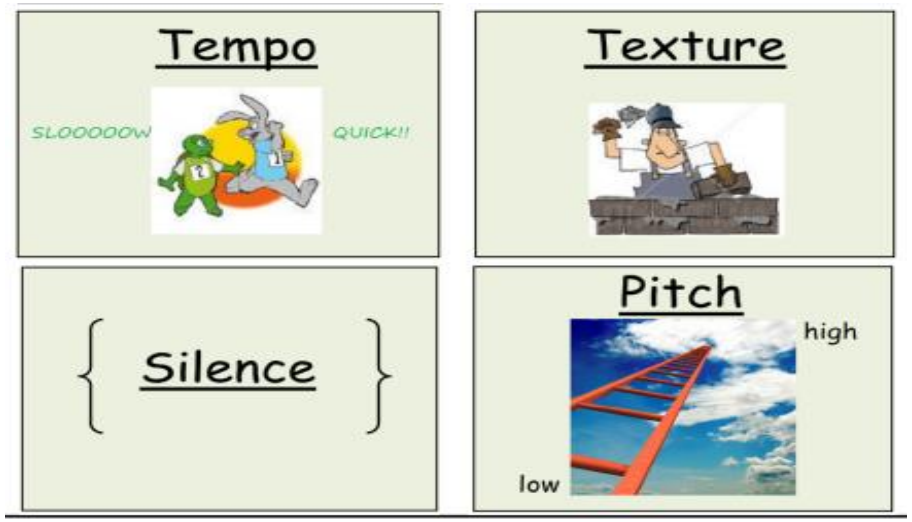




BROADOAK ACADEMY

Rhythm	The pattern of beats in a piece of music
Melody	The main tune
Chord	Three notes played together at the same time
Crotchet	Lasts 1 beat of a pulse
Minim	Lasts 2 beats of a pulse
Quaver	Lasts ½ beat of a pulse
Semibreve	Lasts 4 beats of the pulse
Pulse	A constant steady beat which keeps all the music together
Rest	Silence in music
Elements	The building blocks of music
Pitch	Whether the sound is high or low
Duration	The length of a sound
Tempo	The speed of the music
Timbre	The instruments used
Texture	How many layers of sound there are
Dynamics	The volume of the music
Structure	The order of the sections
Silence	No sound, the gaps in the music
Accompaniment	Sounds going on under the main tune
Introduction	Music heard at the start of a piece – before the main tune comes in

Sharp #	Played with the black note to the RIGHT (F# / G# / C#)
Flat b	Played with the black note to the LEFT (Bb / Eb / Ab)
Duet	A tune shared between parts equally
Fluency	No hesitations in a performance
Keyboard	An electric piano
Ukulele	A guitar-like instrument with four strings
Lyrics	Words
Conductor	Leader of the music – links between the singing and the instrumentalists
Audience	The people who watch and listen to a performance
Ensemble	A group of performers
Compose	Making up your own music
Perform	Playing music in front of an audience
Improvisation	Making up music on the spot
Bass line	A repeating pattern played at a low pitch
Verse	The section of a song that tells the story and has different words each time
Chorus	The catchy section of a song that is repeated lots
Round	One person starts singing then the next person starts 4 or 8 beats later
Balance	How well the different parts are mixed together
Contrast	Big changes between sections
Multitrack	Layering different parts one at a time by recording them



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