

Year 8

Knowledge Organiser

September – December 2022

FIVE ACRES HIGH SCHOOL

AMBITION – CONFIDENCE – CREATIVITY – RESPECT – DETERMINATION





Why do we have knowledge organisers?

Knowledge organisers are a collation of the basic essential knowledge for success in each subject area that will underpin your learning for the term.

They are designed to provide the information you need to be committing to your long-term memory through recall exercises in Low Stakes Quizzing.

How do we use knowledge organisers?

You should be using these KOs to create your homework quizzes so that you are practising retrieving this knowledge from your brain and therefore solidify those cognitive pathways to allow you to remember it for longer and recall it quicker.

1. You can do this by testing yourself on the definitions of key terms (both recalling the key term and then swapping to recall the definition), practice labelling diagrams, retrieve reasons and justifications for the main learning points.
2. They can also be used for 'memory dumps' where you try to recall as much of the information about a topic as possible and then use the KO to fill in the gaps.
3. They can also be used in class to assist with the retrieval of the core knowledge needed for each subject.

You should have these with you at all times in school and out on your desk in all lessons.

If you lose your KO or it becomes too dishevelled, please purchase a new one from your Head of Year or the School Office.

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English	P2-3
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Y8 English– Fear of the Unknown

Context

- The term 'gothic' comes from the Germanic tribe 'the Goths', who played a part in the fall of the Roman Empire.
- Medieval Europe (3rd-14th century) is sometimes referred to as the 'Dark Ages'. Some believe that people lived in fear due to superstition and ignorance. Castles with gargoyles were built to ward off evil spirits, this architecture is known as 'gothic'.

•Figures from The Age of Enlightenment (18th-19th century) believed that scientific progress was the only way to advance society, and great discoveries were made in this time. They tried to rid Europe of superstition and ignorance through promoting reason and logic. New fears around scientific advance began in this time.

- Gothic writers are preoccupied with the supernatural because they believe that not everything has a scientific explanation.

Gothic Conventions

Settings:

-old ruins - mansions -labyrinths - castles

Landscapes:

-mountains -forests -remote places

Characters:

- vampires -ghosts - monsters - orphans

- young innocent women - Counts/Lords

Things that happen:

- curses - imprisonment - insanity

- hauntings - violence - secrets - revenge

Weather:

Mist: obscures objects and keeps things hidden

Storms: happen when there is an important event

Sunlight: Represents goodness and pleasure

American Gothic Conventions

- set on family estates
- Often about family
- Feature unreliable narrators
- Violence is common
- Religion is important

Key word	Definition
Genre	A style or category of art, music, or literature.
Gothic	a literary style that features gloom, the grotesque, and the supernatural, popular, especially in the late 18th century.
Rational	based on clear thought and reason.
Irrational	Not using reason or clear thinking
Uncanny	Strange or mysterious
Psychology	The scientific study of the way the human mind works .
Romanticism	A philosophical, artistic, musical, and literary movement, popular in Europe in the late 18th and early 19th centuries, that deals with the beauty of nature and human emotions.
Sublime	Something that excites our thoughts and emotions beyond the ordinary experience
Supernatural	Something caused by forces that cannot be explained by science.
Misogyny	A hatred of / prejudice against women
Motif	A recurring imager, idea or symbol that develops or explains a theme

Y8 English— Fear of the Unknown

Word Classes

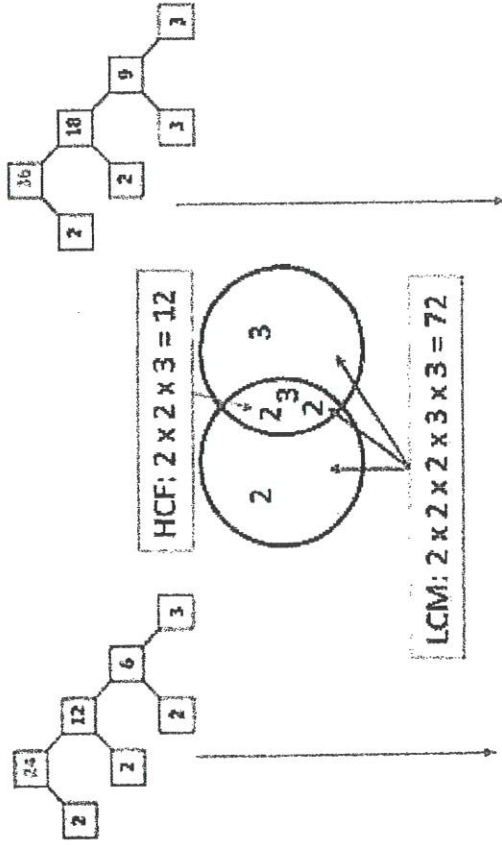
Word Class	Definition	Example
Noun	Person, place, object or idea; Concrete nouns can be experienced with your senses; Abstract nouns are ideas (love, fear etc.)	Dracula is a vampire Jonathan Harker was filled with fear
Verb	Action word or state of being (to be, to make, to have are all verbs too)	I lay almost out of control, trembling and gasping
Adjective	A word that describes a noun	It was a yellow fog; a filthy, evil-smelling fog
Adverb	A word that describes a verb or adjective; there are adverbs of time, place and frequency	She tightly gripped the ledge out of total fear
Pronoun	A word that replaces a noun	They returned to the moors to investigate the mysterious death of Sir Charles
Connective	Words that connect phrases	They returned to the moors but found that there had been another murder
Preposition	Words that show the relationship/position of things	Grows swooped over the derelict house

Literary Techniques

Literary Technique	Definition	Example
Metaphor	A figure of speech in which a word/phrase is applied to an object or action which it is not literally applicable	'I, the true murderer, felt the never-dying worm alive in my bosom which allowed no hope or consolation'
Simile	A comparison that uses 'as' or 'like'	'The saintly soul of Elizabeth shone like a shrine-dedicated lamp'
Personification	Giving human qualities to something that is inhuman	Time flew and before we knew it, it was time for me to go home
Alliteration	Repetition of a letter or sound in a sentence; when the letter is 's', this is called sibilance	'The first feathery flakes of a snow shower'
Anaphora	Repetition of a word/phrase at the beginning of successive clauses	'It was the best of times, it was the worst of times'
Pathetic Fallacy	A type of personification; often used when the weather describes the characters feelings	Lightening danced across the sky
Onomatopoeia	A word that sounds like what it means. They help you hear what is going on. 'Thud', 'crash', 'bang' and 'buzz' are all examples.	'And the silken, sad, uncertain rustling of each purple curtain Thrilled me—filled me with fantastic terrors never felt before'

HCF and LCM

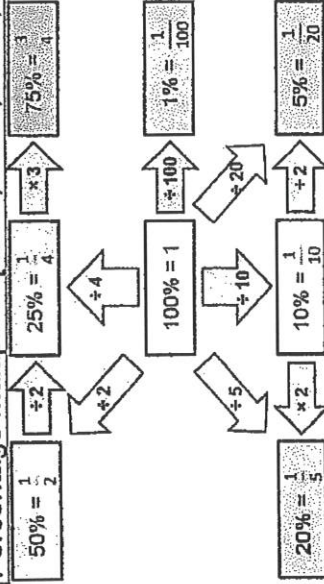
Find the HCF and LCM of 24 and 36



$$24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$$

$$36 = 2 \times 2 \times 3 \times 3 = 2^2 \times 3^2$$

Percentage Multipliers [M958, M437, M905, M476, M533]



$$y \text{ percent of } x = \frac{y}{100} \times x$$

$$y \text{ as a percentage of } x = \frac{y}{x} \times 100\%$$

→ Increase £58 by 26%.

→ The population of a town increases from 3 500 to 4 620. Find the percentage increase.

$$\frac{26}{100} \times £58 = £15.08$$

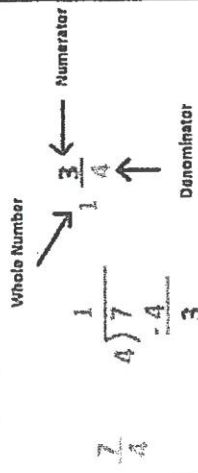
$$£58 + £15.08 = £73.08$$

$$\frac{1\,120}{3\,500} \times 100\% = 32\%$$

Note: fraction = $\frac{\text{increase}}{\text{original}}$

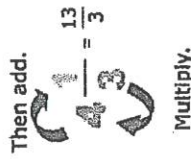
Fractions and Mixed Numbers [M410, M671, M335, M835, M601, M931, M157, M197, M110, M265]

Mixed numbers and improper fractions:



Multiply the whole number by the denominator and add the numerator.

Keep the same denominator.



Fraction is numerator $\div$ denominator

$$\frac{5}{8} = 5 \div 8 = 0.625$$

Use place values to change decimals to fractions. Simplify where possible.

$$0.45 = \frac{45}{100} = \frac{9}{20}$$

Learn the most frequently used ones:

$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{10}$	$\frac{1}{5}$	$\frac{3}{4}$
0.5	0.25	0.1	0.2	0.75
50%	25%	10%	20%	75%

Adding or subtracting fractions; use a common denominator...

$$\frac{1}{5} - \frac{1}{3} = \frac{3}{15} - \frac{5}{15} = -\frac{2}{15}$$

Multiplying fractions; multiply numerators and denominators...

$$\frac{4}{7} \times \frac{2}{3} = \frac{8}{21}$$

Dividing fractions; "flip" the second fraction, then multiply...

$$\frac{2}{7} \div \frac{5}{6} = \frac{2}{7} \times \frac{6}{5} = \frac{12}{35}$$

Reading Timetables [M627, M515, M963]

Time conversions

60 seconds = 1 minute 24 hours = 1 day

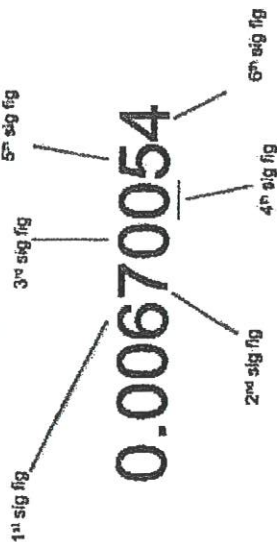
60 minutes = 1 hour 7 days = 1 week

Timetable

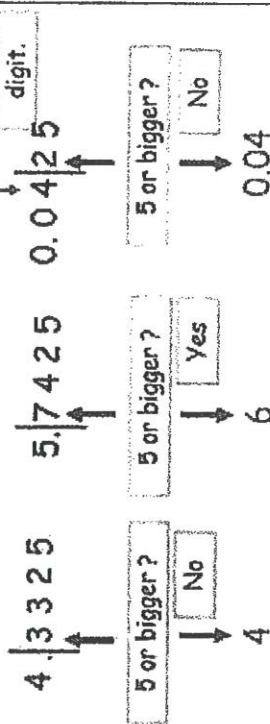
Station Departure Arrival

Lincoln Bus Station	1015	1115	1215
Saxilby High St	1030	1130	1230
Sturton by Stow A1500	1035	1135	1235
Bransby Horses	1045	1145	1245

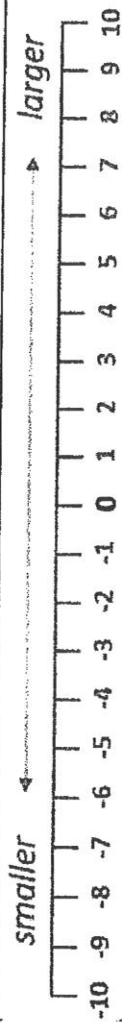
Rounding to significant figures



Rounding to 1.s.f

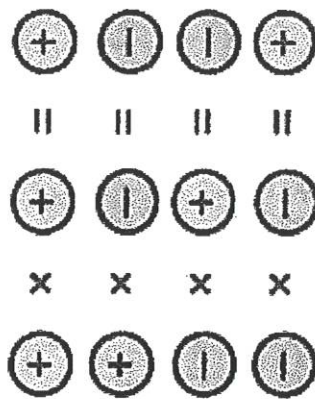


Negative Numbers [M527, M288]



E.g. Put -5, -7, 2, -3 and 7 in order.

-7, -5, -3, 2, 7

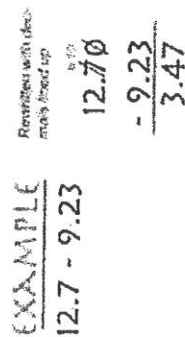
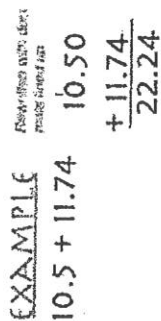


The same is true for when we divide with negatives.

Operations with Decimals [M429, M152, M803, M262]

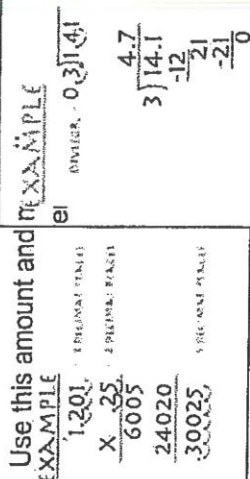
Addition and Subtraction:

- Line up decimals
- Fill in empty spots with zeros
- After calculation bring down decimal in answer



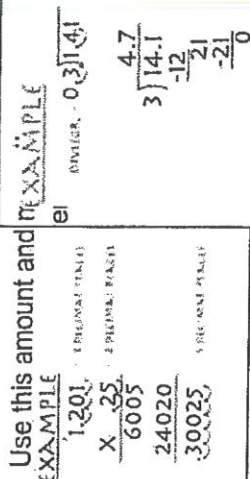
Multiplication:

- Multiply as if there were no decimals
- Count how many places after the decimal point are taken and add these values
- Use this amount and place the decimal point



Division by a decimal:

- Multiply both numbers by 10 till the divisor is a whole number
- Divide like normal



Laws of Indices [M135, M608, M150]

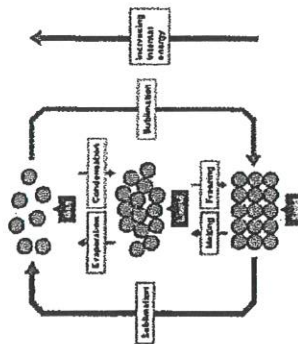
$$2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$$

Square Numbers	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225	Multiplying	$y^a \times y^b = y^{a+b}$
Cube Numbers	1, 8, 27, 64, 125	Dividing	$y^a \div y^b = y^{a-b}$
		Raising the power	$(y^a)^b = y^{ab}$
		Power of zero	$y^0 = 1$
		Square root	$\sqrt{y^a} = y^{a/2}$
		Cube root	$\sqrt[3]{y^a} = y^{a/3}$

Year 8 Chemistry Knowledge – Chemical Reactions

Box 1 - Physical Changes

Physical changes occur when substances change state, for example changing from a liquid to a solid, which is called freezing.



Physical changes are usually easy to reverse. State changes are reversed either by cooling a substance down or by heating the substance up.

Box 2 - Chemical Reactions

- Chemical changes occur during chemical reactions and during a chemical reaction new substances are made.
- Reactants are the substances you start with and products are the substances made.
- The most common signs of a chemical reaction are:
 - Fizzing (Showing a gas has been made)
 - Colour change
 - Temperature change (Getting hotter or colder)

reactants → products

Box 3 - Naming Simple Compounds

- A compound that has been made from a metal and a non-metal is named by writing the name of the metal first, and then the first syllable of the non-metal followed by the suffix "ide".

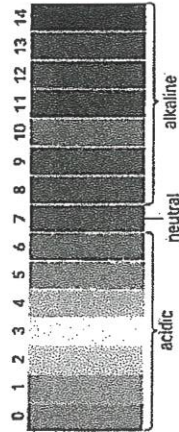
For example:

- Sodium and oxygen are combined to make sodium oxide.
- Iron and sulfur are combined to make iron sulfide.
- Calcium and chlorine are combined to make calcium chloride
- Copper and oxygen are combined to make copper oxide.

Key Terms	Definitions
Compound	A substance made of two or more different elements chemically joined together in fixed proportions.
Corrosive	A corrosive substance will damage or destroy another substance when they come into contact.
Caustic	Caustic is similar to corrosive, but only applied to alkaline substances.

Box 1 - The pH Scale

- The pH scale is a number scale between 0 and 14 that measures the acidity or alkalinity of substances.



- The pH of substances can be tested using a chemical called universal indicator, which changes colour depending on the pH.
- Acids have a pH of less than 7.
- Alkalis have a pH of greater than 7.
- pH 7 is neutral – pure water is neutral.

Box 2 - Neutralisation Reactions

- The three most common acids are: hydrochloric acid, sulfuric acid and nitric acid.
- The most common alkalis are potassium hydroxide, sodium hydroxide, magnesium hydroxide.
- A neutralisation reaction occurs when an acid and an alkali react together. When acids and alkalis react together in neutralisation reactions a salt and water are made, the general word equation is:



- A salt is a chemical made from the metal part of an alkali and part of the acid.
- If the acid is:

Name of acid	Second part of the salt name
Hydrochloric acid	- chloride
Sulfuric acid	- sulfate
Nitric acid	- nitrate

Year 8 Knowledge Organiser Physics Topic – Particle Theory

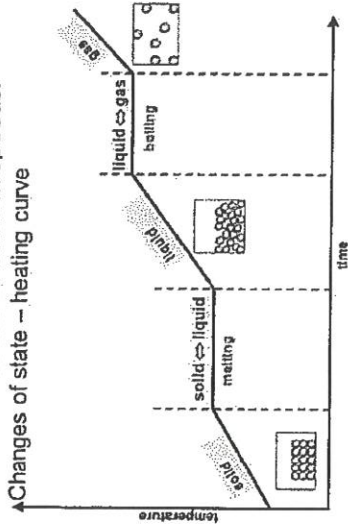
Box 1 - Using the particle model

Solid – particles are in fixed positions and have a regular arrangement, a fixed volume and the particles vibrate around a fixed point.

Liquid – particles can move around each other, they have a fixed volume and an irregular arrangement.

Gas – particles are far apart, they move in random directions at random speeds.

The heating of a substance increases the kinetic energy store of the particles and the movement of the particles which causes the state to change.
During a change of state the temperature remains constant.



Box 2 - Density

Density is the mass per unit volume of a material – the unit used is kg/m^3 .
Density can be calculated – see equation below.

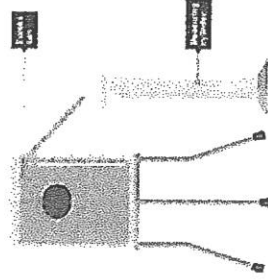
Measuring density

Use a mass balance to determine the mass of the object.
Finding the volume of a regular object –
Measure dimensions (length, width, height).
Calculate volume (Volume – length x width x height)

Finding the volume of an irregular object – Measure the volume of water displaced by a Eureka can.

Finding the volume of a liquid – Use a measuring cylinder.

Density and Floating – An object will float when it has a lower density than water.



Equation

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

Meanings of terms in equation

$$\begin{aligned} p &= \text{density } (\text{kg/m}^3) \\ M &= \text{mass } (\text{kg}) \\ V &= \text{volume } (\text{m}^3) \end{aligned}$$

Key Terms	Definitions
Kinetic Store	Energy stored in a moving object
Melting	The change of state from a solid to a liquid
Freezing	The change of state from a liquid to a solid.
Evaporation	The change of state from a liquid to a gas
Condensing	The change of state from a gas to a liquid.

Box 3 – Pressure between solids

Solids apply pressure onto the surface they are in contact with. The pressure depends on the force applied by the object and the area of the object in contact with the surface.
Pressure can be calculated (See equation).

Equation	Meanings of terms in equation
$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$	$F = \text{resultant force (N)}$ $P = \text{pressure (N/m}^2\text{)}$ $A = \text{area (m}^2\text{)}$

Box 4 - Pressure in fluids

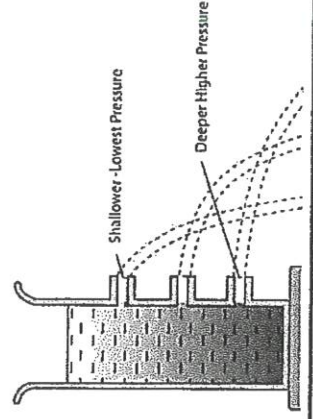
Gases – Gases exert pressure when gas particles collide with a surface.
Charles Law – For a fixed mass of gas at a constant temperature the volume is inversely proportional to the pressure. As the volume of gas increases, the pressure decreases.

Boyles Law - Increasing the temperature of a gas – As the temperature of a gas increases the pressure increases (if the volume of the gas is kept constant)

Liquids

Pressure in a liquid increases with depth.

Upthrust is a force calculated by the difference in pressure between the bottom surface and top surface of a submerged or partially submerged object.



Year 8 Biology Knowledge Organiser – Organisation Health and Disease Section 1

Box 1 - Microorganisms and the Spread of Disease

Diseases can be **communicable** or **non-communicable**.

Communicable diseases are caused by **pathogens**. Pathogens are micro-organisms that cause diseases and they include bacteria, viruses and fungi. Microorganisms are organisms that are too small to see with the naked eye.

Bacteria and fungi can be **cultured** (grown) in **Petri dishes** on **agar jelly**. **Aseptic technique** is used to prevent unwanted microorganisms growing on the agar jelly. In schools they are grown in an incubator at 25°C instead of 37°C to minimise the growth of harmful microorganisms.

Pathogens can be spread from person to person by the following methods:

- Droplet infection (e.g. flu)
- Direct contact with contaminated objects (e.g. cold sores)
- Drinking contaminated water (e.g. cholera)
- Eating contaminated food (e.g. salmonella food poisoning)
- Sexually transmitted (e.g. chlamydia)

Understanding how diseases spread can help to prevent them. This is called **epidemiology**. In the 19th Century there was an outbreak of cholera in London. John Snow looked at the pattern of the cases and worked out that the source of the outbreak was the water from the pump on Broad Street. For the first time it was understood that cholera was spread by dirty water and not 'bad air'.

Box 2 - Immune system

When bacteria and viruses enter our bodies they quickly reproduce. Bacteria produce **toxins** (poisons) that make us feel unwell. Viruses reproduce inside living cells and damage these cells.

Microbes are all around us. We don't continually get ill because we have defences to stop the pathogens getting into our bodies. The defences include:

1. Skin is a barrier to pathogens.
2. Nose hairs and mucus trap pathogens
3. The stomach contains hydrochloric acid, which kills pathogens.
4. Mucus and cilia lining the lung passages trap pathogens in the air we breathe in.

If we encounter a large number of pathogens we are more likely to become ill. The pathogens get past the non-specific defences and reproduce rapidly. We become unwell and an immune system response is triggered.



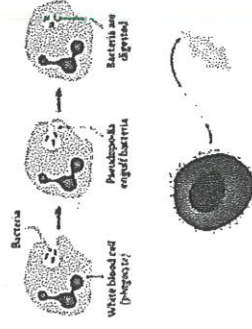
Key Terms	Definitions
Communicable disease	Infectious diseases that are caused by pathogens and spread from person to person.
Non-communicable disease	Diseases that are not infectious e.g. diabetes, coronary heart disease, lung cancer
Epidemiology	The study of how diseases spread.
Pathogen	A micro-organism that causes disease.
Antibody	A chemical substance made by white blood cells that attaches to and destroys pathogens.
Immune	The white blood cells can rapidly produce the correct antibodies to destroy the pathogens before you become unwell.
Vaccination	Dead or weakened pathogens that trigger the white blood cells to produce antibodies.
Aseptic technique	A practical method to prevent contamination by unwanted microorganisms.
Cilia	Microscopic hair-like structures that cover the cells in the trachea and bronchi
Antibiotic	A drug that treats diseases caused by bacteria.
Antibiotic resistant bacteria	A bacteria that has mutated genes so that an antibiotic no longer kills it.

Box 3 - Immune system (continued)

White blood cells are part of our immune system.

One type of white blood cell can change shape and **engulf** the pathogens.

A second type of white blood cell produces **antibodies**. These are chemical substances that are specific to the pathogen. They attach to the pathogen and destroy/kill it.

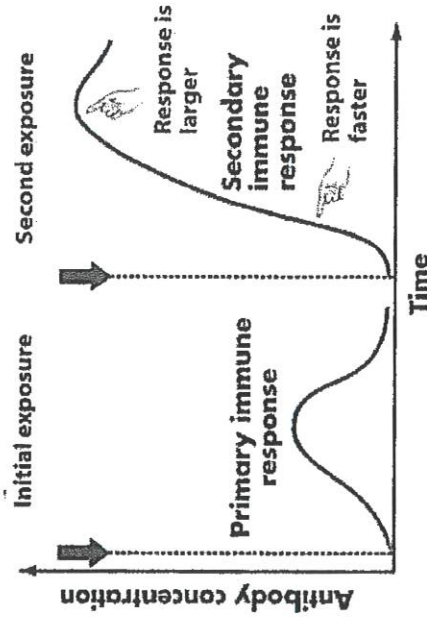


Once they have encountered a pathogen, the white blood cells remember how to make the correct antibody. This means you are **immune** to the disease because your white blood cells make the correct antibody quickly. You get some illnesses more than once because some pathogens (e.g. the cold virus) can change their appearance to the immune system and hence the white blood cells need to learn to make the correct antibody each time.

Year 8 Biology Knowledge Organiser – Organisation Health and Disease Section 2

Box 4 - Vaccination

Vaccinations contain **dead or inactive pathogens**. They are usually injected into the body and trigger the white blood cells to make the correct antibody for the pathogen. If you ever get infected by the real pathogen your white blood cells make the correct antibody quickly so the pathogens are destroyed and you don't become ill.



Having lots of people vaccinated in a population is important as it also protects people who cannot be vaccinated. This is called **herd immunity**.

The MMR controversy occurred because a scientific journal presented some poor science that the MMR vaccine caused autism. This claim was later proven by scientists to be wrong and the investigation had not been peer reviewed, but it was also published in a national newspaper. It caused a drop in the number of people being vaccinated and there have been outbreaks of measles because of this. There continue to be lots of unscientific claims about the safety of vaccinations on social media and on websites.

Box 5 - Antibiotics

Antibiotics are medicines used to treat diseases caused by bacteria by killing the bacteria. Antibiotics cannot be used to treat diseases caused by viruses. The antibiotic penicillin was discovered, by chance, by **Alexander Fleming** in the early 20th Century.

Box 6 - Antibiotic Resistance

There is an increasing problem with bacteria becoming **resistant** to antibiotics. This means that the antibiotic no longer kills the bacteria. Examples of antibiotic resistance bacteria are **MRSA** and **Clostridium difficile**.

To prevent antibiotic resistance humans need to minimise the use of antibiotics and ensure they are used correctly and carefully.

- Most infections get better on their own, without the need for antibiotics. Antibiotics should only be prescribed for bacterial infections that haven't got better on their own.
- Antibiotics should not be prescribed or taken for viral infections such as colds, flu, most coughs and sore throats.
- When antibiotics are prescribed, the course should be finished even if you feel better.

We also need to use careful hygiene practices to stop them spreading from person to person.

Scientists are researching new types of antibiotics. If our current antibiotics stop working before new antibiotics are found, then minor infections could once again become fatal and operations and chemotherapy might not be possible.



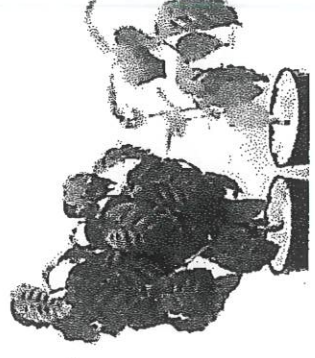
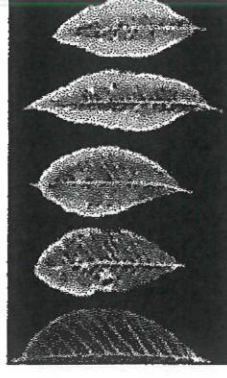
Box 7 - Plant diseases

Plants can also suffer from ill health.

Plant ill health can be caused by pathogens (bacteria, viruses and fungi) and also by mineral deficiencies.

Plants need minerals for healthy growth and these include nitrates and magnesium. Nitrates are needed for making proteins. Plants deficient in nitrates have stunted growth and yellow older leaves.

Magnesium is needed for making chlorophyll. If a plant is deficient in magnesium it has yellow leaves and doesn't grow well.



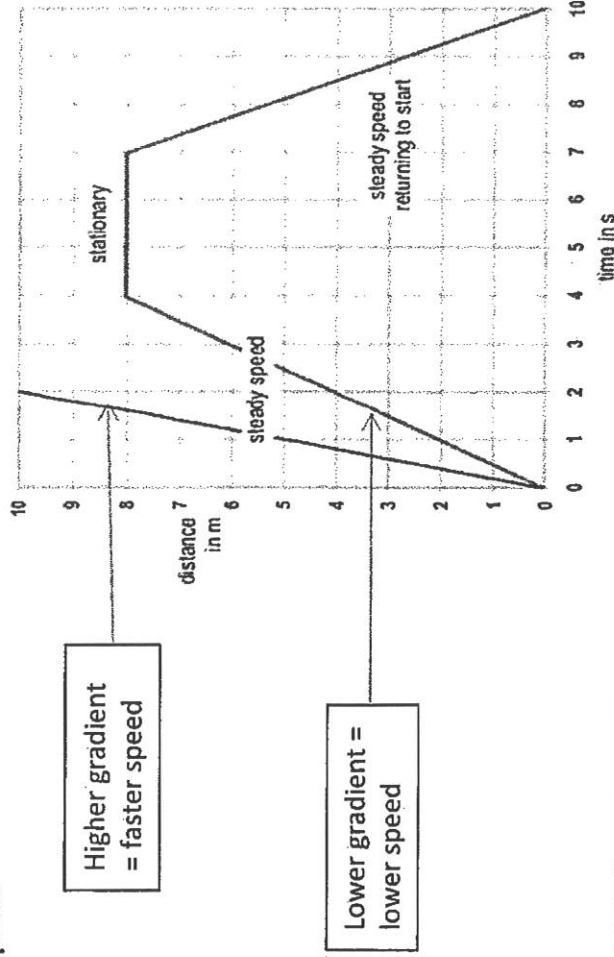
Year 8 Physics Knowledge Organiser – Forces 2 Motion

Box 1 - Speed

- The speed of an object tells you how long it takes an object to cover a distance.
The unit for speed is m/s (metres per second).
- If the speed of an object is increasing, then it is **accelerating**. If the speed is decreasing it is **decelerating**.

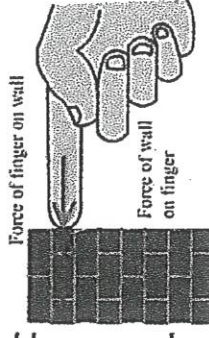
Box 2 - Distance Time Graphs

- A distance time graph has the time on the x axis and the distance on the y axis.
- If an object is stationary (not moving) the line **will be horizontal**.
- If the line is diagonal the object is moving at a constant speed.
- If the line has a larger gradient (steeper), it means the object is moving faster.
- If the line is going back towards the x axis the object is **returning to its starting point**.



Box 5 - Newton's Third Law of Motion

- Newton's third law states that when two objects interact they apply equal and opposite forces on each other.
- In the example to the right, if the person pushes on the wall with a force of 10 N. The wall will push back with a force of 10 N.



Equation

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

Meanings of terms in equation

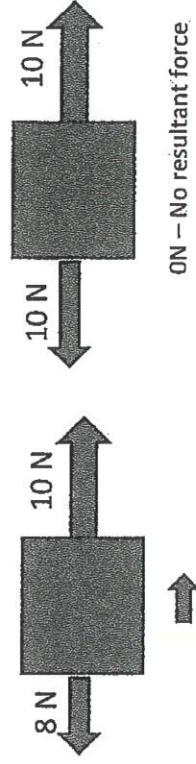
$$v = \text{speed (m/s)}$$

$$s = \text{distance (m)}$$

$$t = \text{time (s)}$$

Box 3 - Resultant force and Newton's First Law of Motion

- The **resultant force** acting on an object is the single force **resulting** from all the separate forces acting on it. In other words, the resultant force is the single overall force.



2 N – Resultant force

- If the forces are **balanced** the resultant force will be 0N.
- Newton's First Law states that if the resultant force on an object is 0N then the object will either be **stationary or moving at a constant speed**.

Box 4 - Newton's Second Law of Motion

- The maths equation for Newton's Second Law of Motion links force, mass and acceleration; it is shown in the box below
- It shows that if the force on an object is increased then the acceleration on the object will also increase.

Equation	Meanings of terms in equation and units
$\text{Force} = \text{mass} \times \text{acceleration}$	$F = \text{resultant force (N)}$ $m = \text{mass (kg)}$ $a = \text{acceleration (m/s}^2\text{)}$

An objects acceleration is directly proportional to the resultant force on it.

Year 8 Biology Knowledge Organiser – Bioenergetics

Respiration

Box 1 - Respiration

- Cellular respiration is a life process that takes place **all the time (continuously)** in every cell of all **living organisms** (animals, plants, fungi, bacteria).
- It is necessary to **transfer/release energy** from the sugar glucose so that the cell can perform all other functions and processes.
- Organisms need energy so that they can:
 1. Synthesise (build) larger molecules from smaller ones
 2. Move
 3. Transport certain materials.
 4. Keep warm (only birds and mammals)

Box 2 - Aerobic Respiration

- Aerobic respiration is a type of cellular respiration takes place when oxygen is present.
- Aerobic respiration occurs in the mitochondria in cells.
- Glucose is oxidised by oxygen and forms carbon dioxide and water as waste products.
- Glucose is a store of chemical energy.

The word equation for aerobic respiration is:



- The symbol equation for aerobic respiration is:



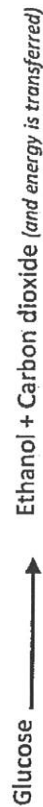
- Aerobic respiration transfers much more energy to the cell than anaerobic respiration for every molecule of glucose.

Box 3 - Anaerobic Respiration

- This type of cellular respiration takes place when there is insufficient oxygen present.
 - There is less energy transferred by anaerobic respiration than aerobic respiration.
- Word equation for Anaerobic Respiration in Animals:

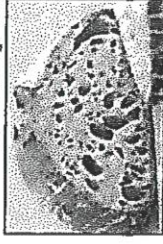


Word equation for Anaerobic Respiration in Yeast and Plant Cells (Fermentation)

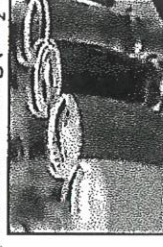


Box 4 - Anaerobic Respiration in Yeast and Plants

- Yeast are single-celled fungi that can respire with or without oxygen.
- This type of anaerobic respiration can also be called fermentation.
- We use fermentation of yeast to produce ethanol when used in brewing beer and carbon dioxide (CO_2) when used in bread making (CO_2 makes bread rise).



Bread risen by CO_2



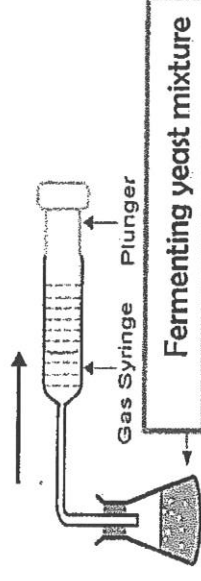
Alcohol made by fermentation

Box 5 - Anaerobic Respiration in Animals

- In animals, anaerobic respiration occurs in cell as a result of strenuous exercise.
- As exercise increases, the heart rate and breathing rate increase in order to transport oxygen to the muscle cells.
- If the supply of oxygen is not fast enough, respiration takes place without it – anaerobic respiration – and lactic acid is formed.
- The build up of lactic acid in muscles causes fatigue. The muscles cannot contract as efficiently and produce less force with each contraction.
- Oxygen is needed in order to remove the lactic acid. Once oxygen is available, the lactic acid is converted back to glucose in the liver.

Box 6 - Investigating Yeast Fermentation

- We can grow yeast in a liquid and use this to investigate what affects the rate of fermentation in yeast.
- We can measure how fast the fermentation reaction is in yeast by measuring how much carbon dioxide (CO_2) is produced per minute when we change the growth conditions.
- Conditions that can be changed include the temperature that the yeast culture is grown, the concentration of glucose in the liquid growth medium, the type of sugar in the liquid growth medium



Y8 History Knowledge Organiser: Autumn Term - The British Empire, New World Slavery and Abolition

VOCABULARY - Empire

Civilisation	An advanced stage of human development
Colonisation	The process of taking control and building an empire
Colony	A territory controlled by an empire
Colonists	People from Europe who went to live in the colonies
Domestic policy	New laws that affect what happens in a country
Elected	Chosen by voting
Empire	Several territories ruled by one powerful country
Foreign policy	Government decisions about war etc
Fulani	A powerful African kingdom
Governor	British official in charge of a colony
Hausa	An African people
Independent	No longer part of an empire
Inferior	Not as advanced / good as
Loyal	Always supportive
Maori	The native people of New Zealand
Migration	Moving to another place permanently
Native American	People who lived in America before Europeans
Persecution	Unfair treatment
Settler	Someone who moves to a colony to live there
Strategy	A long term plan

Empire - Constructing an Empire

Individuals and governments sought new territories for a variety of interconnected reasons:

Wealth - In 1600 the East India Company began to trade with the Mughal Empire in India for luxury goods such as spices and silks. India also provided markets for British products such as textiles and manufactured goods.

Religious Freedom - Religious groups settled in the Thirteen Colonies during the 1600s to escape religious persecution in England.

The Civilising Mission - The British East Africa Company was founded in 1888 to set up the colonies of Kenya and Uganda. It's founders were motivated by a desire to bring "Christianity and Civilisation" to the people of East Africa.

Why did the British government support colonization?

Money - The British government issued royal charters, recognising the colonisers' right to rule an area and committing to protect the colonists. In return, the government expected payment. For example, the Pennsylvania royal charter required the colonists to give the King: One fifth of any gold and silver found and two beaver skins each year.

Strategy - The British government seized colonies in strategic locations to protect trade and communication. For example, Britain acquired colonies in southern Africa, Mauritius, and Sri Lanka to protect the sea route from Britain to India

Empire - Ruling the Empire

The British used different methods to rule different colonies depending on their location and their population.

Responsible Government - The British government attempted to rule by appointing Royal Governors. The American War of Independence showed that this would not work. In the 1800s, the white settler colonies - Australia, New Zealand, and Canada - were governed through a system of responsible government. An elected parliament controlled the domestic policy of the colony.

Direct Rule - In colonies such as Sri Lanka where there no white settlers, the British did not adopt responsible government. The British thought non-white people were racially inferior and not capable of governing themselves. Instead, these colonies were ruled directly from Britain.

Indirect Rule - In some colonies, local circumstances made it too expensive or too difficult for the British to rule directly. After 1857, for example, much of 'British' India was in fact ruled by Indian princes who were loyal to Britain.

Empire - Relationship between the colonisers and colonised

Nigeria - In 1861 King Dosunmo was forced to sign a treaty giving up control of Lagos to the British. Between 1900 and 1906, the Royal Niger Company battled the Fulani people for control of Nigeria. The Company won but despite victory, the British were not powerful enough to control Nigeria, instead granting power to loyal local leaders to rule on their behalf.

Pennsylvania - The Lenape people were one of a large variety of Native American groups who had lived in North America for thousands of years. In 1682, William Penn signed the Treaty of Shackamaxon with the Lenape, agreeing to share land and settle disputes fairly. However, after his death, Penn's sons destroyed the treaty and began to trick the Lenape out of land, for example in the 1737 'Walking Purchase'. Unsettled by this, the Lenape began to resist attempts to seize their land, bringing them into violent conflict with the Europeans. Over the next century, the Lenape were forced to migrate steadily westwards.

New Zealand - The 1840 Treaty of Waitangi gave the British control of New Zealand, although the Maori were allowed "undisturbed possession" of their lands. British migration and sheep farming created more demand for land leading to the New Zealand Wars. Some Maori refused to sell their land, war broke out and land was confiscated. Other Maori - kupapa - fought with the British and many converted to Christianity. By the 20th Century, Maori owned less than 10% of land in New Zealand. Parliament reserved 4 seats for Maori.

New World Slavery - Early European Slave Trading

Spanish and Portuguese colonisation in the New World created a demand for slave labour.

In the 16th Century, the Spanish and Portuguese built empires in South America and mined gold and silver. New European diseases and ruthless exploitation reduced the indigenous population from 60 million to 10 million.

Criticism of Spanish activity in the New World led to the King of Spain banning the enslavement of indigenous Americans. This created a demand for labour that was met by buying enslaved people on the west coast of Africa. However, slavery and race were not tightly linked in the Spanish Empire. Enslaved people could buy their own freedom. Around 50% of people of African descent in the Spanish Empire were free.

Y8 History Knowledge Organiser: Autumn Term - The British Empire, New World Slavery and Abolition

VOCABULARY - New World Slavery

African Descent: Born in Africa or related to Africans
 Alliance: Agreement to support each other
 Ashanti Empire: A large and powerful West African empire
 Authorities: Government
 Dahomey: A West African empire
 Demand: The amount of people who want something
 Enslaved: Made into a slave
 Exploitation: Taking advantage of other people
 Fertile: Suitable for growing food
 Field Overseer: An enslaved person in charge of work on a plantation
 Guerrilla Warfare: Using ambushes to fight against larger forces
 Hierarchy: A social system ranking people by their status
 Indentured Labourers: People who sold themselves as temporary slaves
 Indigenous: Native, from an area originally
 Imported: Brought in from another country
 Labour: Work
 Manufactured: Made in a factory
 Maroons: Runaway slave communities who lived in the mountains
 Militarised: Based on warfare / the army
 Motley Crew: The diverse group who made up the crew of ships
 A farm
 Plantation: A wealthy British individual who owned a plantation
 Profits: Money made from business
 Racialised: Divided up by race
 Slave Code: Laws controlling a slave society
 Slave Ship: The ship that carried slaves from Africa to the Caribbean
 Suppress: Stop (a rebellion)
 Workforce: The people who work on a plantation / in a factory / etc

VOCABULARY - Abolition

Abolition: Ending / Getting rid of
 To abolish: Getting rid of something
 American South: Part of USA where cotton was grown by slaves
 Compensation: Money to make up for something
 Compensated: Given money to make up for something
 Enslaved: Made into a slave
 Evolution: Scientific theory that humans developed from apes
 Governor: British official in charge of a colony
 Haiti: French slave colony in the Caribbean
 Infrastructure: Roads, railways, bridges, etc
 Jamaica: British colony in the Caribbean
 Pension: Money given by the government
 Plantation: A farm, often worked by enslaved people
 Publicised: Made public / brought to people's attention
 Profitable: Money making
 Slave Trade: Bringing enslaved people from Africa to New World
 Slavery: Forcing people to work without paying them
 Stereotype: A false view of someone / something
 Squadron: A group of ships
 Trespassing: Walking / living on someone else's land

Abolition - Consequences for Britain

Compensation - 46,000 slave owners were compensated. The pay out was the equivalent of £17 billion today.
 West Africa Squadron - British ships tried to intercept slave ships from other countries and free Africans. The squadron freed 160,000 Africans. However, this was only 6% of the Africans taken.
 Cotton - Even after abolition, the British economy continued to rely on the labour of slaves in other countries. 4 million British people depended on the textile industry, spinning cotton picked by slaves in the American South.

New World Slavery - Transatlantic Slave Trade

Demand for sugar in Britain created a booming transatlantic trade network that relied on enslaving Africans
 Sugar Consumption in England. In the 17th Century, sugar became an important part of the British diet as it was used to sweeten new foods imported from other parts of the empire, including coffee, tea and chocolate
 The trade in sugar made huge profits for British merchants in cities such as Liverpool and Bristol

Sugar was grown on fertile plantations on Caribbean islands such as Jamaica and Barbados
 At first, plantation owners relied on white indentured labourers from Britain to work on the plantations, although this supply of labour dried up by the mid-17th Century. By 1700, the workforce on British plantations in the Caribbean was made up almost entirely of enslaved Africans. Plantation owners grew very wealthy from selling sugar grown by free labour.

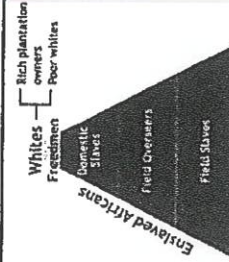
West African kingdoms such as the Ashanti Empire were too powerful for the British to force Africans into slavery
 Instead, British merchants exchanged manufactured goods such as metal products and guns for enslaved people. Exporting these manufactured goods allowed British merchants to become very wealthy.

New World Slavery - The Middle Passage

Slave ship captains viewed their cargo as less than human. The brutal conditions meant that of the 12 million people loaded on to slave ships, 2 million died on board. In 1791 James DeWolf, the American captain of the slave ship The Polly, murdered a sick enslaved woman to stop her infecting others.

New World Slavery - Slave Society

By 1833 there were 800,000 enslaved Africans working in Britain's Caribbean colonies, controlled by just 40,000 white plantation owners and managers. In order to control the enslaved people, colonies introduced slave codes. The original slave code was introduced in Barbados in 1661. The slave code outlined the brutal physical punishments enslaved African people faced for any acts of theft, rebellion, or violence. It made it clear that slave owners would not be punished for injuring - or even killing - enslaved African people. It also stated that, unlike white indentured labourers, enslaved Africans did not have the right to a trial by jury or the protection of the law.



New World Slavery - Maroons

In Jamaica, slaves resisted by running away to form bands of maroons in the forests and mountains. The maroons were led by runaway slaves from highly militarised African states such as the Ashanti. One group of maroons was led by Queen Nanny, an Ashanti woman, whose guerrilla warfare caused severe problems for the British. In 1739 the British were forced to sign a treaty with the maroons in which: The maroons were given a large area of land to set up farms and towns & the maroons agreed to support the British against foreign invasion or slave rebellion.

Abolition

In the 19th Century, slavery and the slave trade were abolished in the Empire.
 1807 - The Abolition of the Slave Trade Act - Made it illegal to trade slaves.
 1833 - The Slavery Abolition Act - Freed enslaved children immediately, Gave freedom to 800,000 enslaved people by 1838, Compensated slave owners with £20 million.

Abolition - Consequences for Jamaica

Abolition did not bring freedom and equality to Jamaica. 1865 Morant Bay Rebellion - Bogle led a protest against the arrest of a freed slave for trespassing in Morant Bay. Violent clashes between the police and protestors led to Governor Eyre sending in the army. Eyre's soldiers, aided by the maroons, killed 439 Jamaicans and burnt 1000 homes to the ground. 350 more Jamaicans, including Bogle, were arrested and hanged

Year 8 What is the greatest threat to the planet?

Key words

Natural Hazard -natural events that can cause loss of life, extreme damage to property and disrupt human activities.

Enhanced greenhouse effect - referred to as climate change or global warming, is the impact on the climate from the additional heat retained due to

the increased amounts of carbon dioxide and other greenhouse gases that humans have released into the earth's atmosphere

Super volcano a large volcano that has had an eruption with a Volcanic Explosivity Index (VEI) of 8, the largest recorded value on the index.

Tornado violently rotating column of air that is in contact with the surface of the earth and a thunderstorm in the atmosphere.

Magnitude refers to the strength of an earthquake.

Recycle -When waste materials are collected and separated out into their different component ingredients, these can then be remade into different products.

Plastic – a synthetic material that can be moulded into shape while soft, and then set into a rigid or slightly elastic form

Garbage – an American word for rubbish or waste

KPI 1 What is the difference between a human and a natural hazard?

Human Hazard - Disasters are man-made if the cause is an intentional or unintentional human act. They can cause great damage, loss of life and long-term damage to a nation's economy.

Natural Hazard A natural disaster would happen anyway without any human interaction but can still cause great levels of damage, loss of life and long-term damage to a nation's economy.

KPI 2 What factors can increase hazard risk?

Magnitude How severe the event is for example the magnitude of an earthquake.

Distance How close people or buildings are to the hazard.

Income How much money a country makes can greatly affect how prepared they are to deal with and recover from a disaster.

Population If there is a high population the risk to life will be far greater.

Frequency How often the disasters take place can affect the recovery from previous disasters

Predictability If we can predict where hazards will affect we can take measures to protect people and places. For example, predicting where a hurricane will hit.

KPI 3 What is the enhanced greenhouse effect and how is it caused?

The enhanced greenhouse effect is the impact on the climate from the additional heat retained due to the increased amounts of carbon dioxide and other greenhouse gases that humans have released into the earth's atmosphere since the industrial revolution

Main causes are:

- Fossil fuels
- Agriculture
- Deforestation

KPI 4 What are the impacts of climate change?

- sea level rise will affect 80 million people
- tropical storms will increase in magnitude (strength)
- species in affected areas (e.g. Arctic) may become extinct
- diseases such as malaria increase, an additional 280 million people may be affected

KPI 5 How will climate change impact the UK

- sea levels could rise, covering low lying areas, in particular east England
- droughts and floods become more likely as extreme weather increases
- increased demand for water in hotter summers puts pressure on water supplies
- Industry may be impacted, e.g. Scottish ski resorts may have to close due to lack

KPI 6 What is the impact of plastic pollution?

By 2050 it is estimated that 99% of all seabirds will have eaten plastic and there will be more plastic than fish in the oceans. Turtles eat the plastic which fills up their stomachs and causes malnutrition and eventual death.

KPI 7 What is a super volcano?

A super volcano is an unusually large volcano having the potential to produce an eruption with major effects on the global climate and ecosystem.

KPI 8 How do super volcanoes form?

1. Magma moves through a crack in the crust to increase the size of the magma chamber.
2. Pressure is put in the crust above.
3. Lava and ash escapes through cracks
4. The magma chamber empties and the crust collapses forming a caldera

KPI 9 What could be the impact of an eruption?

If Yellowstone National Park USA erupted the effects predicted include:

90% of people killed within 1000km

10C drop in global temperatures

Year 8 Term 2 Why is the Thames Barrier needed?

Key words

Source - The beginning of the River.
 Confluence - Where two rivers meet.
 Watershed - An area of high land between two drainage basins.
 Mouth - Where a river flows into a lake or the sea.
 Tributary - A small river or stream that flows into a larger river.
 Drainage Basin - The area drained by a river and its tributaries.
 Discharge - the amount of water in a river
 Lag time - the time taken between peak rainfall and peak discharge.

Meander- a bend in the river.

Erosion- is the process by which the surface of the Earth gets worn down
 Floodplain- an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding.
 Hard engineering- controlled disruption of natural processes by using man-made structures

Soft engineering- controlled disruption of natural processes by using man-made structures
 Impermeable- will not allow liquid to pass through

Hard engineering -Man-made structures built to control the flow of rivers and reduce flooding

Soft engineering - where the natural environment is used to help reduce erosion and flooding

KPI 1 Why are rivers important?

Water supply for people living in the UK which is used in cooking, transport, industry, hygiene, heating systems, as well as for drinking
 - Trading goods (buying and selling products)
 - Tourism. Holidaymakers are often attracted to landscapes with rivers - Help prevent flooding as rivers act as a route for water to flow towards the sea
 - Rivers are a habitat for many different plants and animals
 - Water can be used to create energy in the form of Hydro-Electric Power. This then heats and powers homes as well as being used in industry and transport

KPI 2 What is a drainage basin?

*A drainage basin is an area of land drained by a river and its tributaries
 *The edge of the drainage basin is known as the watershed.
 *The water flowing through the river will eventually leave the river basin through its mouth and enter the sea or a lake.

Discharge is the amount of water a river holds factors that affect how quickly water reaches a river include:

- Rock type
- Soil Type
- Land use
- Relief

KPI 4 How do rivers erode and transport material?

Hydraulic Action: When sheer force of water wears away rock
Abrasion: When rocks wear away the cliff-face/river banks
Attrition: When rocks wear each other away
Solution: When dissolved materials wear rock away or are transported
Traction: When rock is moved by rolling along sea/river bed
Salutation: When rock is moved by bouncing along sea/river bed
Suspension: When rock is carried within the river/sea and is off the sea/river bed
Deposition: The dropping of rock

KPI 5 What landforms are created by erosion and deposition

Waterfalls - Formed when a river flows over an area of hard rock followed by softer rock. The softer rock is eroded quicker (by hydraulic action and abrasion) creating an overhang in the river. As water goes over, the erosion continues which creates steep drop. The hard rock is eventually undercut and collapses. The collapsed rock swirls around the foot of the water fall eroding the rock (abrasion) creating a plunge pool. Overtime the waterfall retreats leaving a gorge.

Meanders -A bend in the river, created by deposition and erosion. The outside of the bend is eroded whilst deposition occurs on the inside bend. Overtime a meander will move and change shaped and can eventually form an ox-bow lake.

KPI 6 Why do rivers flood?

A flood occurs when a river bursts its banks and the water spills onto the **floodplain**.

Physical causes of flooding: Heavy or long periods of rain, snowmelt steep slopes, impermeable rock, saturated soil, compacted or dry soil

Human factors increasing flood risk: Urbanisation; because towns and cities have a more impermeable surface. Deforestation; because removing trees reduces the amount of water intercepted and increases run-off

KPI 7 What are the impacts of a flood?

An example of a flood event is the Boscastle flood on 16th August 2004
 Heavy rainfall - 89 mm of rain fell in an hour
 75 cars and 6 buildings were washed into the sea
 £10 million was spent on new flood defences

How do we protect against flooding?

Hard engineering – dams, channel straightening, embankments, flood relief channels

Soft engineering – Flood warnings, floodplain zoning, planting trees

KPI 8 What is the Thames Barrier?

Set of giant steel gates which are raised when there is a risk of high water levels on the Thames.

1	J'habite dans une ville qui s'appelle Coleford	I live in a town which calls itself (is called) Coleford
2	et qui se trouve dans le sud-ouest de l'Angleterre.	and which finds itself (is located) in the south-west of England
3	C'est une petite ville près de Gloucester	It's a small town near to Gloucester
4	et c'est assez moderne et très joli.	and it's quite modern and very pretty.
5	À mon avis il y a plein de choses à faire.	In my opinion there are plenty of things to do.
6	On peut aller au centre commercial	One (you) can go to the shopping centre
7	mais malheureusement il n'y a pas de stade	but unfortunately there isn't a stadium

8	ce qui est affreux car j'adore le foot.	which is awful because I love football.
9	Avant, dans ma ville, il y avait trop de circulation et de bruit	Before, in my town, there was too much traffic and noise
10	mais maintenant c'est plus calme.	but now it's more calm.
11	J'habite dans une petite maison avec mes parents.	I live in a small house with my parents.
12	Dans ma maison il y a une cuisine moderne au rez-de-chaussée	In my house there is a modern kitchen on the ground floor
13	et au premier étage il y a ma chambre et une salle de bains.	and on the first floor there is my bedroom and a bathroom.

14	J'adore ma chambre car j'ai un ordinateur sur le bureau	I love my room because I have a computer on the desk
15	Aussi, je peux jouer aux jeux-vidéo et faire mes devoirs.	Also, I can play video-games and do my homework.
16	J'ai toujours rêvé d'habiter en France	I have always dreamed of living in France
17	et si j'étais riche, j'achèterais une grande maison à Bordeaux!	and if I were rich, I would buy an big house in Bordeaux!
18	Le week-end, s'il fait mauvais, je me lève à dix heures	At the weekend, if it is bad weather, I get (myself) up at 10
19	et j'écoute de la musique dans ma chambre	and I listen to music in my bedroom.

20	Malheureusement, je dois ranger ma chambre, c'est nul.	Unfortunately, I have to tidy my room, it's rubbish.
21	Le soir, je prépare le dîner et je regarde la télé.	In the evenings, I prepare dinner and I watch TV.
22	Je me couche à vingt-deux heures.	I go (myself) to bed at 10p.m. (22:00)

Year 8 Spanish -- Mi hogar

1	Vivo en un pueblo que se llama Coleford	I live in a town which calls itself (is called) Coleford
2	y está situado en el suroeste de Inglaterra.	and is (located) in the south-west of England
3	Es un pueblo pequeño cerca de Bristol	It's a small town near to Bristol
4	y es bastante moderno y muy tranquilo.	and it's quite modern and very calm.
5	En mi opinión hay mucho que hacer.	In my opinion there is lots to do.
6	Se puede ir al centro comercial	One (you) can go to the shopping centre
7	En mi pueblo hay un cine	In my town there is a cinema
8	pero por desgracia no hay mercado.	but unfortunately there is not a market.
9	En el futuro me gustaría tener un museo en mi pueblo.	In the future I would like to have a museum in my town.

10	Antes, en mi pueblo había mucho tráfico	Before, in my town, there was a lot of traffic
11	pero ahora es más tranquilo.	but now it's more calm.
12	Vivo en una casa pequeña con mis padres.	I live in a small house with my parents.
13	En mi casa hay una cocina en la planta baja.	In my house there is a kitchen on the ground floor.
14	En mi dormitorio hay un ordenador encima del escritorio.	In my room there is a computer on top of the desk.
15	Me encanta mi dormitorio dado que puedo jugar a los videojuegos.	I love my room because I can play videogames.
16	Siempre he soñado con vivir en España	I have always dreamed of living in Spain
17	y si fuera rico, compraría una casa grande en Barcelona!	and if I were rich, I would buy a big house in Barcelona!

18	Durante la semana, me levanto a las siete y media.	During the week, I get (myself) up at half past seven.
19	y los fines de semana, si hace buen tiempo, escucho música.	and at the weekend, if it's nice weather, I listen to music.
20	En mi casa tengo que limpiar mi dormitorio	At home I have to clean my room
21	dos veces por semana.	two times per week.
1	Vivo en un pueblo que se llama Yate	I live in a town which calls itself (is called) Yate
2	y está situado en el suroeste de Inglaterra.	and is (located) in the south-west of England
3	Es un pueblo pequeño cerca de Bristol	It's a small town near to Bristol
4	y es bastante moderno y muy tranquilo.	and it's quite modern and very calm.

Year 8 Term 1 What is it like to be a Muslim today?

Key words

Ibadah –	acts of worship; any permissible action performed with the intention to obey God
Salah/t	Prescribed communication with, and worship of, Allah.
Wudu	ritual washing to be performed in preparation for prayer and worship.
Mosque (masjid)	a Muslim place of worship.
Mihrab	prayer niche in the qiblah wall (that facing Mecca) of a mosque
Rak'ah	series of movements performed during Salat prayer.
Zakah	charity, giving money to the poor.
Sawm	fasting during Ramadan
Hajj	pilgrimage to Mecca
Qibla	the direction to face during prayer (towards Mecca)
Ramadan	ninth month of Islamic year in lunar calendar. 11 days shorter than solar calendar so Ramadan moves every year.
Id –ul Fitr	Festival of fast-breaking – end of Ramadan.

KPI 6: To explain the importance on prayer for a Muslim.

- Prayer is most important way to worship God. Expected 5 times a day. Give thanks and submit to Allah.
- 'Prayer prohibits immorality and wrongdoing.' (Q 29). Preparation for prayer includes being respectful and showing reverence and concentration
- .Part of this is Wudu – ceremonial washing of body – hands, mouth, nose face, arms, head and feet. Prayer involves prostration in ra'kah – movements of prayer. Facing Mecca
- Jumu'ah are congregational prayers which happen on a Friday at midday.
- Du'a is personal prayer which takes place after prayers of duty.

KPI 7: To investigate the importance of fasting in the lives of a Muslim

- Sawm is fasting. It's the fourth of the Five Pillars of Islam.
- Muslims are required to fast during Ramadan, the ninth month of the Islamic calendar. During the 29/30 days of Ramadan all adult Muslims must give up food etc.
- When daylight is over, most Muslims will break or open the fast with dates or water, following the example of the Prophet Muhammad, before having a proper meal later.
- On 27th day, Muslims celebrate Laylat-ul-Qadr – Night of Power – revelation of Qur'an. Why do Muslims Fast? Commanded in Quran. Follows example of Prophet. Brings Muslims closer to each other. Worship Allah. Reminds Muslims of hungry and poor. Promotes self-control.
- Who should fast? All except those young, ill, travelling.
- Eid ul-Fitr. The month of Ramadan ends with the festival of Eid ul-Fitr. This is marked by dressing up and visiting the mosque for prayer, and have a celebratory meal.

KPI 9 : To investigate pillar 3 and 5

Zakah is the third pillar of Islam

- All Muslims are expected to perform Zakah as a regular duty by giving 2.5 %. Qur'an commands to give to those in need
- Zakah is a sign of cleansing and purity.
- The Prophet Muhammad practiced zakah as a practice when he became ruler in Medina. Those that can receive Zakah include the poor, needy and travellers

Hajj is the fifth pillar of Islam

- Hajj is the fifth pillar of Islam. Once a year, Muslims of every ethnic group, colour, social status, and culture gather together in Mecca and stand before the Ka'bah praising Allah together.
- Muslims are to go on Hajj at least one in a lifetime. The Hajj makes Muslims feel real importance of life here on earth, and the afterlife. In the Hajj all are truly equal.

KPI8- To describe the Muslim place of worship

- Public worship takes place in the mosque. The muezzin (mu'adhhdhin) calls the people to prayer, sometimes from a minaret.
- When they enter the mosque, Muslims remove their shoes and sit on the floor facing the Qiblah or prayer wall which orients them in the direction of Makkah (Mecca).
- The Imam leads the people in the rak'ahs. At Friday prayers, also called Jumu'ah, he preaches a sermon using words from the Qur'an.

Key terms:

Islam	The religion of the Muslims, a monotheistic religion regarded as revealed through Muhammad as the Prophet of Allah
Muslim	Followers of the religion of Islam
Allah	Arabic name for God
Ummah	The whole community of Muslims
Tawhid	Oneness of God
Prophet	A person regarded as an inspired teacher or messenger of God
Mecca	Birthplace of Muhammad; spiritual center of Islam
Quran	The Recitation or Reading
Muhammad	The last messenger of Allah and founder of Islam, called 'Seal of the Prophets' in the Quran
Five Pillars	The five observances which must be followed by all practising Muslims
Shahadah	Muslim declaration of faith

KPI4 - To explore what the five pillars of Islam are.

- The most important Muslim practices are the Five Pillars of Islam.
- The Five Pillars of Islam are the five obligations that every Muslim must satisfy in order to live a good and responsible life according to Islam.
- The Five Pillars consist of:
 - **Shahadah:** • **Salat:** • **Zakat:**
 - **Sawm:** • **Haji:**
- Why are they important? Carrying out these obligations provides the framework of a Muslim's life, and weaves their everyday activities and their beliefs into a single cloth of **religious devotion**.

KPI 1- To investigate Muslim belief

- The word 'Islam' in Arabic means **submission** to the will of God. Followers of Islam are called **Muslims**. Muslims believe there is one true God Allah (the Arabic word for God the Qur'an, and the Sunnah).
- Allah is the creator and has revealed himself through history to many peoples through prophets. God's final and greatest revelation comes in the form of the Qur'an to Prophet Muhammad.
- 1.6 billion Muslims worldwide – 2nd largest religion. 4.5% of UK is Muslim.

KPI 2- Qur'an

- Most important source of authority for Muslims.
- Complete and perfect book of guidance for all humans. Revealed by God to Prophet Muhammad through Angel Jibril. Written in Arabic and final compilation by Caliph Uthman shortly after Prophet's death (632AD).
- Unchanged and literal word of God. Qur'an is known as Umm-ul-Kitab 'Mother of Books'. Qur'an is a sacred and holy text which is free from distortion unlike other holy books. Qur'an has always existed and was written in Arabic on tablet of stone in heaven. Qur'an is guide for life, teaches everything, learn by heart in Arabic

KPI3- To explain why the prophet Muhammad (pbuh) is important to Islam

- Muhammad was born in Mecca in Saudi Arabia in 570. He was a deeply spiritual man, and often spent time in meditation on Mount Hira.
- **Night of power**
- The traditional story of the Qur'an tells how one night in 610 he was meditating in a cave on the mountain when he was visited by the angel Jibreel who ordered him to recite. Once Jibreel mentioned the name of Allah, Muhammad began to recite words which he came to believe were the words of God.
- During the rest of his life Muhammad continued to receive these **revelations**. The words were remembered and recorded, and form the text of the Holy Qur'an, the Muslim scripture.
- Muhammad's popularity was seen as threatening by the people in power in Mecca, and Muhammad took his followers on a journey from Mecca to Medina in 622. This journey is called the **Hijrah** (migration) which the Islamic calendar begins.

KPI 5: To understand the importance of shahadah in the worship of Allah

- "There is no God but Allah, and Muhammad is his messenger. "This is the basic statement of the Islamic faith: anyone who cannot recite this wholeheartedly is not a Muslim.
- When a Muslim recites this they proclaim: That Allah is the only God, and that Muhammad is his prophet, that they personally accept this as true, that they will obey all the commitments of Islam in their life.
- Shahadah is repeated in Salah daily and also in call to prayer. Furthermore, these are first words whispered into new born baby's ear. Testament to monotheism (belief in one God). 1st pillar said to become a Muslim or revert; all born Muslims and so return to faith.

Year 8 – DT Knowledge Organiser

Plastic groups

Origin of plastic – Crude Oil (finite resource)

Thermoplastics (also known as thermoforming plastics)

Thermoplastics don't resist heat well - they're easily formed into different shapes by heating, melting and remoulding. This means they're easy to recycle - they're ground down, melted and reused.

Acrylic (PMMA) - Hard, stiff and shiny. Resists weather well. Can be used to make motorcycle helmet visors, baths, signs etc.

High-density polyethylene (HDPE) - Stiff and strong but lightweight.

Used for things like washing up bowls, baskets, folding chairs and gas and water pipes.

High Impact Polystyrene (HIPS) - Rigid and fairly cheap. Used for vacuum forming and fabricating boxes like CD cases or smoke detector casings.

Polyvinyl Chloride (PVC) - Quite brittle, cheap and durable. Used for blister packs, window frames, vinyl record and some clothing.

Thermosetting Plastics

Thermosetting plastics resist heat and fire (they're used for electrical fittings and pan handles). Thermosetting plastics undergo a chemical change when heated and moulded to make a product - they permanently become hard and rigid. This means they're non-recyclable - they can't be melted and reshaped again.

Epoxy resin (ER) - Rigid, durable, corrosion resistant and a good electrical insulator. Used for circuit boards and wind turbine rotor blades.

Urea-Formaldehyde (UF) - Hard, brittle and a good electrical insulator.

Used for things like plug sockets and cupboard handles.

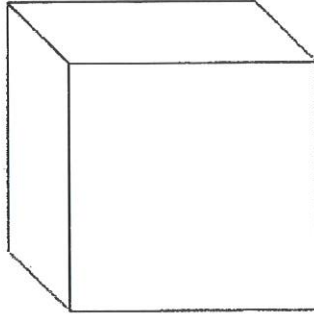
Melamine-Formaldehyde (MF) - Strong and scratch resistant. Used to laminate chipboard and for plates and bowls.

Polyester Resin (PR) - Hard, stiff, cheap and a good electrical insulator.

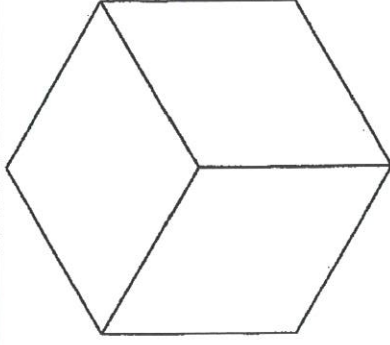
Added to glass fibres to form glass reinforced plastic, e.g. for kayaks.

Waterproof, so used in shower stalls and garden furniture.

Drawing
In
Oblique



Drawing
In
Isometric



Rule one: draw the front face first.

Rule two: all angled lines are drawn at 45 degrees.

Rule one: draw a vertical line first.

Rule two: all angled lines drawn at 30 degrees.

Designer focus:

William Morris - (1834 - 1896)

William Morris was a British textile designer, poet, artist, novelist, architectural conservationist, printer, translator and socialist activist associated with the British Arts and Crafts Movements. He was a major contributor to the revival of traditional British textile arts and methods of production.

A designer who is best known for his wallpaper, furniture and furnishings.

His designers were often based on patterns found in nature.



Year 8 – DT Knowledge Organiser

Key terminology

Iterative design - design methodology based on cyclical process of analysing, prototyping and testing to refine a product. Each iteration and result starts the process again.

Knitted fabric - a fabric made from yarns held together by interlocking loops.

Lean manufacturing - Reducing and eliminating waste in a manufacturing process.

Life cycle analysis - a technique used to assess the environmental impact of a product at all stages of its manufacture, use and disposal.

Manufactured board - a material made by compressing a mixture of glue and processed pieces of wood into panels.

Manufacturing specification - a series of written statements, or working drawings and sequence diagrams, that tells the manufacturer exactly how to make the product.

Market pull - products developed to meet the needs of society or a specific section of the market.

Market research - asking the target market questions to find out what their likes/dislikes (and so on) to help the designer understand what the target group wants from a product.

Marking out - making a mark in a material to show where it is to be cut, drilled etc.

Mass production - the production method used to produce a large number of identical products on an assembly line.

Mechanical device - mechanism which produces and/or changes movement.

Microcontroller - a type of integrated circuit that can be programmed. Works as a mini computer.

Modelling - making a practice version of a design or part of a design.

Modern material - a material that has been developed for a specific application. They are often developed through the invention of a new process or the improvement of an existing one.

Natural fibre - a type of fibre that is harvested from natural sources, e.g. plants and animals.

Nesting - the tessellation of shapes or nets on a material to minimise the amount of waste during manufacture.

Non-ferrous metal - a metal or alloy that doesn't contain iron.

Non-finite resource - a resource that can be replaced by natural processes as fast as it's consumed by humans, e.g. softwood trees in a plantation. Also called a renewable resource.

Non-woven fabric - a fabric made from layers of fibres (not yarns) held together by bonding or felting.

One-off production - production method used to produce a single, unique product at a time.

Orthographic projection - a 2D scale drawing of a 3D object showing the front, plan and end views.

Physical properties - properties that refer to the actual matter that forms the material (eg insulation, conductivity, fusibility).

Planned obsolescence - deliberately designing the lifecycle of a product to be short, forcing the user to update their products quickly.

Primary source - research collected first-hand by a designer to develop a product or idea.

Primary source (of materials) - where materials originate (polymers from oil etc) and the raw material that needs to be converted into a workable form.

Printed circuit board (PCB) - a board with copper tracks that connect components in a circuit.

Sustainability

Sustainability means not causing permanent damage to the environment and not using up finite materials (ones that will run out eventually). How sustainable a product is depends on: What materials are used to make it, for example:

Do they come from non-finite resources or finite ones?

- ★ Are they recyclable or biodegradable (this means they'll break down over time) - or will the used product permanently take up space in a landfill?

The process used to make the product, for example:

- ★ Does the process need lots of energy?
- ★ Does it create lots of waste or pollution?

Sustainability also depends on the design itself - how long-lasting and efficient the product is.

You can use the 6 R's when designing to help reduce the impact that new products have on the environment and make the whole process more sustainable.

Repair - it's better to fix things instead of throwing them away. E.g. repairing a mobile phone can sometimes cost the same as buying a new one, but it's better for the environment.

Re-use - customers can extend a product's life by passing it on or using it again. Some people reuse products for other purposes, e.g. using an old car tyre to make a swing.

Recycle - recycling uses less energy than obtaining new materials. Products made from more than one material should ideally be easy to separate into recyclable stuff.

Rethink - you should think about your design carefully - you might be able to make the product a different way. e.g. a radio that you wind up instead of running off batteries.

Reduce - making long-lasting, durable products like rechargeable batteries reduces the number of products customers need to buy.

Refuse - you can refuse to buy a product if you think it's wasteful - e.g. if it has lots of unnecessary packaging, has traveled long distances or is inefficient or costly to run.

Year 8 - Food Technology

Prevention of Bacteria Growth and Cross Contamination

4 C's	Chill – foods to be kept in the fridge: dairy, protein, high risk foods / Cook – cook foods properly / Cross Contamination / Clean
Food Temperature Control:	Temperature control is especially important when you buy, store, prepare and cook food. Food correctly stored will minimise the risk of food spoilage and food poisoning. Food poisoning can be caused by high-risk foods when they are stored in warm conditions for too long. Controlling the temperature of food will help keep your food safe until it is ready to be eaten. Bacteria growth danger zone 5-63 degrees C. Most bacteria dead at 75 degrees C. All dead at 100 degrees C. Fridge temperature 0-5 degrees C
Sources of Cross Contamination:	Human: Hair, nose, cuts, wounds, ears, throat, clothing, jewellery, dirty hands (bacteria) after touching raw meat/going to the bathroom. Other: Pets, Dirt, Birds, Vermin (mice/rats), Insects, bacteria from raw meat and seafood.
Bacteria needs:	Heat, Moisture, Time and Food to grow/survive.
Chopping Boards	Chopping boards: Red = raw meat, Blue = raw fish, Brown/Green = fruit and vegetables, Yellow = Cooked meat/fish, White = Dairy

Eatwell Guide Key Messages

Eatwell Guide / Use the Eatwell Guide to help you get a balance of healthier and more sustainable food.	Carbohydrates: Starchy foods such as, rice, pasta, potatoes, bread, porridge, couscous – Choose wholegrain or higher fibre versions with less added fat, salt, and sugar. Fruits and Vegetables: Fresh, frozen, dried, canned – Eat at least 5 portions of a variety of fruit and vegetables every day. Fruits and vegetables contain vitamins and minerals Protein: Chicken/poultry, fish – fresh and canned (tuna), meat, eggs, chickpeas, lentils, beans. Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat. The body uses protein to build and repair muscles. Protein contains amino acids. Dairy and Alternatives: Milk, yoghurt, cream, cheese, alternative milks: almond, rice, coconut, hazelnut, soya. Choose lower fat and lower sugar options. These foods contain calcium which is needed in the body for strong bone growth. Fats: Choose unsaturated oils not saturated oils and use in small amounts – sunflower, olive, rapeseed. Saturated oils come from animal meat and animal products such as butter. Too much of this type of oil can clog the body's arteries and lead to weight gain, high blood pressure and heart disease. Fats are higher in calories than protein and carbohydrates. Sugary foods/crisps/ketchup – eat less free sugars often and in small amounts. 6-8 cups of water: lower fat milk, sugar-free drinks including tea and coffee all count.
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Macronutrients and Micronutrients

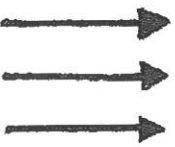
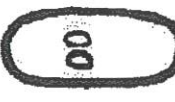
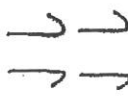
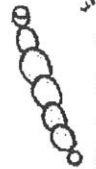
Macronutrients are: Carbohydrates, Protein and Fats	Food is eaten and digested in the body to allow the absorption of energy and nutrients. Macronutrients are: proteins, carbohydrates and fats and are measured in grams. Carbohydrates are the primary source of energy. 1gram = 4 calories Protein is the secondary source of energy. They are also needed for the growth of the skeleton, strong bones, teeth and hair. 1gram = 4 calories. Fats are the third source of energy. They are also needed in small quantities to keep the body warm and protect the organs. 1 gram = 9 calories. There are two types of fats: saturated and unsaturated. Saturated fats mainly come from animal products, for example, bacon fat, chicken skin and crispy crackling. Unsaturated fats mainly come from plant foods, for example, sunflower oil, olive oil, nuts and seeds.
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Micronutrients are: Vitamins and Minerals	Micronutrients are: vitamins and minerals. Vitamins: Vitamins ADEK are water soluble. Vitamins B and C are fat soluble. Vitamin A: helps us with our night vision, healthy skin and eyes, helps us with resistance to infection. Found in carrots, cheese, eggs, milk products. Vitamin B1 (Thiamin) is needed for a healthy nervous system and to release energy from carbohydrates. Found in wholegrains, nuts, pork, fortified cereal, fruit and vegetables. Vitamin B2 (Riboflavin) is needed to release energy from protein, carbohydrate and fat. It also helps transport iron around the body. Found in milk, eggs, rice, fortified cereals, green vegetables. Vitamin B3 (Niacin) needed for the release of energy from foods, normal function of the skin and the nervous system. Found in meat, eggs, dairy, yeast, wheat and maize flour. Vitamin C: needed to make collagen for healthy structure of skin and cartilage. Also helps the body absorb iron and helps wounds heal. Found in citrus fruits and berries, green vegetables, peppers, tomatoes, new potatoes. Vitamin D is needed for the body to absorb calcium to keep our bones healthy. We take most of our vitamin D from the sun but can also be from mushrooms, oily fish, meat and eggs. Minerals Calcium: Required for bone structure, blood clotting, normal muscle function, healthy teeth. Found in dairy products, fortified nut milks, eggs. Iron: Iron is essential for the formation of haemoglobin in red blood cells. Red blood cells carry oxygen and transport it around the body. Iron is also required for normal metabolism and removing waste substances from the body.
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Glossary of Key Terms:	Food spoilage – when food deteriorates to the point that its quality is reduced or it can no longer be safe to eat. High Risk Foods – Ready to eat moist foods - pasta, rice, seafood, poultry, protein, dairy, sauces/gravy. Cross Contamination – the process by which bacteria or other microorganisms are unintentionally transferred from one substance or object to another, with harmful effects. Hob – top of the oven used to boil, simmer and fry. Grilling – to cook with heat that does not directly touch the food. Rubbing In – to combine fat with flour to make a breadcrumb-like consistency. Creaming – to combine sugar and soft fat (butter). Coating - to cover (for example, breadcrumbs around fish for fish fingers). Boiling – to bring water to 100 degrees C. Simmering – to heat liquids to just below the boiling point. Dietary fibre - a type of carbohydrate which is not digested to provide energy. Free sugars - include all sugars added to foods plus sugars naturally present in honey, syrups, and unsweetened fruit juice. Starch is found in a variety of foods. It is made up of many sugar molecules. Amino Acids - Protein is made up of building blocks called amino acids. Different foods contain different amounts and different combinations of amino acids. Haemoglobin - a red protein responsible for transporting oxygen in the blood. Metabolism - chemical reactions within the body that help maintain the living state of cells.
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ART Year 8 KO

<u>Formal Elements</u>	<u>Poly-Tile Printing</u>	<u>Keywords</u>	<u>Aboriginal Art</u>
Line A mark that connects two or more points. These can be straight, curved, short or long. Tone The lightness or darkness or something. For darker tones use a higher grade B pencil. Colour Colour is what you see when light reflects off something. Texture How something looks or feel e.g. fluffy, rough, smooth etc. Pattern A symbol, shape or colour that repeats. Man-made patterns are designed by humans, natural patterns are formed by nature. Shape/Form Shape is 2D e.g. rectangles. Form is 3D e.g. cubes, spheres etc.	Poly (Polystyrene) Tile Versatile plastic sheets Type of print Relief Printing (printing from a raised image) Technique Carving/cutting into a surface. Carved/cut areas remain untouched by ink, only recessed area transfers colour.	Clay A stiff, sticky fine-grained earth that can be moulded when wet. Kiln a furnace or oven used to fire pottery Ceramic made of clay and permanently hardened by heat. Glaze a substance used to add colour, decorate or waterproof a piece of ceramic work. Slip Watered down clay which is used as a type of glue to stick one piece of clay to another. Carving A shape or pattern cut into a specific material. Layering Laying one material on top of another (building up)	Aborigines Indigenous peoples, ethnic groups who are the original or earliest known inhabitants of an area (Australia) Time First Aboriginal Rock Painting dates back to 1620 but only developed in 1971 as Dot paintings. Country (origin) Australia Technique/Style The 'Dot' is used to hide secret messages. Intentions Originally, artists used circles and dots to disguise sacred meanings and messages especially from the Western countries, e.g. America, Great Britain etc. Key Artist Sarina King Artist Influence Aboriginal dotting technique and changing climate of Australia e.g. lightning, thunderstorms, deserts, wild fires etc.

Colour Theory Primary Colours Colours that can't be mixed/ made from other colours e.g. red, yellow and blue. Secondary Colours Colours that can be made by mixing two primary colours. Red + Blue = Purple Yellow + Blue = Green Yellow + Red = Orange Tertiary Colours Colours that can be made by mixing a primary and secondary colour together e.g. Blue + Green = Turquoise. Complementary Colours Colours that are opposite each other on the colour wheel. Blue & Orange Red & Green Purple & Yellow Analogue/ Harmonious Colours Colours that are next to each other on the colour wheel e.g. Red, red-orange and orange. Tints/ Shades Tint - Adding white to a colour to make it lighter. Shades - Adding black to a colour to make it darker.	More Keywords: Bisque Ware Fired clay that is ready to be glazed. Rolling Guides Wood slats used when rolling clay to give it an even thickness. Ceramics Any artwork produced using clay. Wax Resist Applied to the bottom of the fired clay to ensure the glaze does not stick.	Aboriginal Symbols  Honey Ants  Spears  Woomera  Shield  Emu  Bush Tucker  Waterholes & Running Water  Boomerang  Kangaroo Tracks  Tracks/ Waterholes  Meeting Place  Campsite Waterhole  Hunting Boomerang  Coolamon  Person  Woman  Man  Digging Sticks  Witchetty Grub  Goanna
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Drama Y8 Inequality as a stimulus

5 Key acting skills

Voice: This is how you use your voice in performance. You can change your voice using your; Tone, pitch, pace, emotion, volume, projection, dialogue, dialect, accent, intonation, whistling, SFX, interjection.

Facial Expression: They are used to show the audience how a character is feeling through; Eye contact, eye brows, straight, emotions, gritting teeth, tense, relaxed, wrinkled, creased, staring, twitching.

Posture: This can also be called body language. This is how a character/actor holds their body. For example; Bad posture would mean someone is hunched over.

Gestures: Gestures are movements that have a meaning. For example; if you wave at someone you would be saying hello to them. Gestures can be performed by; Hands, arms, speed, clicking, rubbing, waving, mannerisms.

Movement: This is any movement that does not have a meaning. For example; Walking. Speed, pace, acceleration, gait,

Using inequality as a Stimuli

This term we will be focusing on how we can use Inequality as a Stimulus. Throughout history there have been many types of inequality. The key types of inequality we are going to be focusing on are:

Racism - The mistreatment of a group or an individual based on their back ground, ethnic or racial group. It can lead to groups being marginalised and treated differently. Racism can be a one off event or can be systemic. Systemic meaning that it is part of the way we live. E.g Black people losing out on a job due to the colour of their skin.

Sexism - The stereotyping and prejudice of people based on their gender/sex. Typically this happens more towards females, however this can affect both sexes and all genders. This can be a one off event, such as telling a girl they cannot play rugby or a boy that they cannot do ballet. However similar to racism that can be something which is systemic. Such as, women typically earning less money than men even when they do the same job.

Homophobia - This is the mistreatment and dislike of anyone who is part of the LGBTQ+ community. This is not just prejudice against gay people. This could be seen through negative comments towards people, or could be something more extreme such as physical abuse.

These types of inequality have been around for hundreds of years and continue to be an issue in today's society. Despite slavery being abolished in 1834, black people still face being treated as second class citizens. Same sex marriage was only legalised in the UK in 2013, despite the fact that non-heterosexual relationships have been a thing for thousands of years and have been seen throughout history.

Using a Stimuli

A stimulus is anything that provokes an emotion, feeling or thought in somebody.

In drama we can use a stimuli to help us create performance.

Some examples of this could be; A picture, a piece of music or a story.

There are many examples of a Stimulus being used in professional performance. One example is the play, 'Blood Brothers'. Writer Willy Russell used his own life as his stimulus. He based the play in Liverpool, where he is from, and used stories and pictures from his past to create the script.

Another playwright who used a stimuli is William Shakespeare. He took inspiration from stories of Mark Antony and Cleopatra when creating the play Antony and Cleopatra. His story is not 100% accurate and that's because he used a stimuli and took inspiration, rather than just copying.

Drama Y8 Inequality as a stimulus

More Drama Terms

Prologue - an opening of a play that establishes context and gives background details.

Foreshadowing - a warning or indication of a future event.

Dramatic irony - originating from Greek tragedies, a technique whereby the audience is aware of a piece of information that is still unknown to the characters.

Direct address - when a character breaks the metaphorical fourth wall and speaks directly to the audience

Iambic Pentameter - a line of verse/poetry with 10 syllables whereby one short (unstressed) syllable is followed by a longer (stressed) syllable

Stage directions: These are lines of text in a script which are used to inform the actors of what they need to be doing in a scene.

Physical Theatre: Using your body to create objects and portray emotions.

How to create tension in performance.

Eye contact – Maintaining eye contact with the person you are in direct conflict with will increase the tension dramatically. It connects you to each other in a non physical way but still very personal.

Pauses – Arguably the most important of the three. Moments of silence are essential when building tension as not only do they show that each character is carefully weighing up their next move but it allows the audience to take some time to absorb the situation and keep them guessing what is going to happen next.

Volume and pace – speaking at a natural volume and pace lulls the audience into a false sense of security. By slowing decreasing both, the audience naturally begin to feel tension building. This can then be increased to a quicker pace and louder volume until the scene reaches a climax.

Key Drama Techniques

Freeze Frame: When a scene 'freezes' for a moment to allow the audience to really explore the moment. It is like pressing pause on live action.

Tableaux: This is similar to a freeze frame, however it is a collection of still images created by the performers rather than just one.

Role Play: Using all of your acting skills to become somebody else. You need to fully, 'Step into' the character's shoes and become someone that you are not.

Angel vs Devil: One character is struggling to make a decision. They have two people stood on either side of them representing the 'angel' and the 'devil'. The job of the 'angel' is to persuade them to do the right thing. The job of the 'devil' is to persuade them to do the wrong thing. This is a non-naturalistic technique meaning that we would never see this in real life.

Key Drama Terms

Parallel scenes: Two scenes that have similarities but different outcomes.

Split staging: Two scenes happening at the same time on opposite sides of the stage.

Thought tracking: When in a freeze frame, a character will vocally express their inner thoughts to help the audience get a better understanding of their character.

Mime: Communicating emotion or meaning using only physical movements, no words or sound.

Narration: When a character or character's talk directly to the audience about the story. They could either be telling the story, or explaining to the audience what is happening.

Direct Address: This is where a character will talk directly to the audience. They are NOT explaining the story. They are talking to the audience as if they are another character.

Year 8 – Band Skills

Instrumentation

When creating music as part of a band, we use a range of instruments. There is no limitation to what instruments and how many can be used, but the most common instruments are highlighted below.

Key Terminology

Guitar – A 6-string instrument that can be **acoustic** or **electric** depending on the type.

Bass – A lower sounding 4-string version of a guitar.

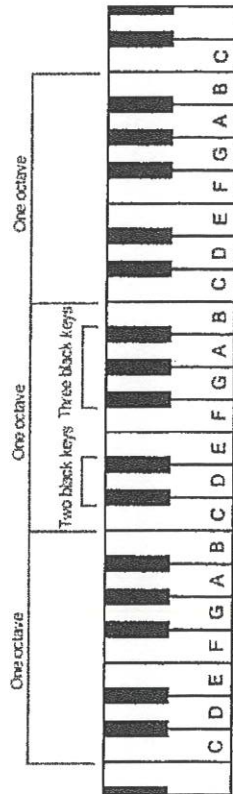
Frets – Metal strips on a guitar that divide the different notes.

Chord – A group of three or more notes. Usually named after a letter of the alphabet (e.g., a C-chord, G-chord, D-chord).

Structure – The order of how a song is played. Usually made-up sections called a **verse**, **chorus**, **intro**, **bridge**, etc.

Drum Kit – A percussion instrument made up of drums and cymbals.

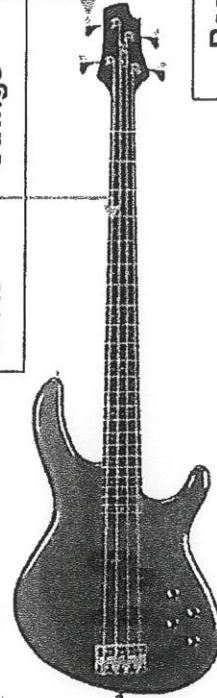
Piano/Keyboard



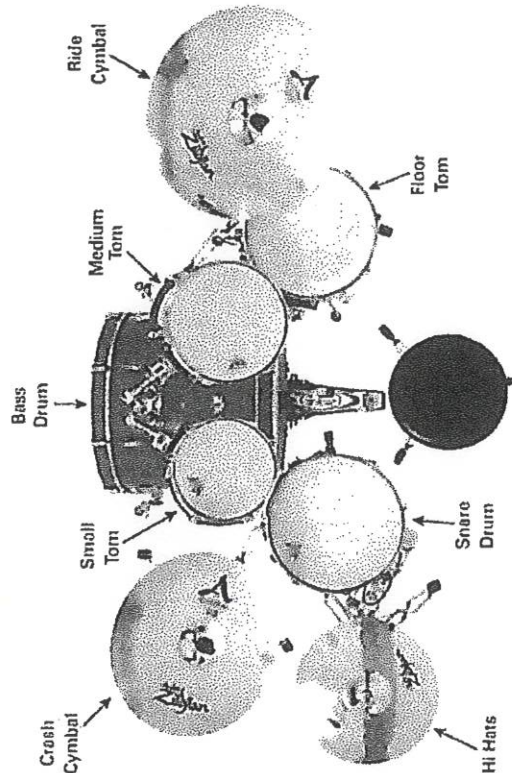
Electric Guitar



Strings



Bass Guitar



Drum Kit

Consent is:

1. Freely given. It's not okay to pressure, trick, or threaten someone into saying yes.
2. Reversible. It's okay to say yes and then change your mind – at any time!
3. Informed. You can only consent to something if you have all the facts.
4. Enthusiastic. You should do stuff you WANT to do, not things people expect you to do, if someone doesn't seem enthusiastic stop and check in.
5. Specific. Saying yes to one thing (like going to the bedroom to make out) doesn't mean you're saying yes to other things (like having sex).

Consent cannot be given when:

1. When a person is drunk or high, to the point that they are unable to speak or look after themselves.
2. Asleep or Passed Out – if they are not conscious they are unable to agree to any sexual activity. If someone passes out whilst engaging in sexual activity – STOP!
3. They are Underage – Legally a person under the age of 16 cannot give consent to any sexual activity.
4. Mental disability or learning difficulties which mean they are unable to fully understand what they are consenting to.

Sexting:

- Sending sexually explicit messages or pictures via mobile phones, instant messaging or email.
- When you're under 18 it's against the law to send nudes or sexual videos of you to anyone else. It's also against the law for anyone to save or share a nude or sexual video of you. Even if it's a selfie or they're under 18 too.
- Will I get in trouble? - You can get in trouble if you threaten to share a nude, even if you don't actually do it. Only the police can decide if they're going to charge you with an offence after sexting. But it's important to remember that the law is there to protect you, not get you into trouble.
- If you're both under 18 and you're in a healthy relationship, then it's unlikely the police would want to prosecute either of you.

Contraception

Birth control	How to use	Prescription Needed	Protects against STIs
Oral Contraceptive	Take one pill every day as directed	Yes	No
Injection	Get injections every three months	Yes, injection given in health care provider's office	No
Female condom	Insert every time before sex	No	Yes
Male condom	Partner must wear every time during sex	No	Yes

Where to get more help and support:

- Parents and trusted family members
- Teachers and School Staff including School Nurse and Safeguarding Team
- Your Doctor or Community Nurse
- NHS Online
- Young Stonewall: <https://www.youngstonewall.org.uk/>
- The Proud Trust – Local Support groups: <https://www.theproudst.org/>
- Friends and Family of Lesbians and Gays: <https://www.flag.org.uk/>
- www.healthforteens.co.uk
- www.brock.co.uk
- NSPCC: Helpline: 0800 800 5000 (24 hours, every day) [nspcc.org.uk](https://www.nspcc.org.uk)
- Childline: Helpline: 0800 1111(24 hours, every day) <https://www.childline.org.uk>

Sexual Orientation and Gender Identity

- **Asexual:** A person who generally does not experience sexual attraction to any group of people.
- **Androgyny:** A gender expression that has elements of both masculinity and femininity
- **Biological Sex:** The physical anatomy and gendered hormones one is born with.
- **Bisexual:** A person who experiences sexual, physical and/or spiritual attraction to people of their own gender as well as another gender.
- **Cisgender:** A description for a person whose gender identity, gender expression and biological sex all align.
- **LGBTQ+:** Lesbian, Gay, Bisexual, Trans, Queer/Questioning, Other
- **Sexuality:** A person's sexual preference or orientation. Who they are attracted to.
- **Drag Queen:** A man who dresses up in an exaggerated feminine form usually in a show or theatrical setting.
- **Gender Dysphoria:** where a person experiences distress due to a mismatch of their biological sex and their gender identity.
- **Heterosexual:** A person who is attracted to someone with the other gender.
- **Homosexual:** A person who is attracted to someone with the same gender.
- **Transvestite/Cross dressing:** A person who dresses as the opposite gender expression. It is not necessarily to do with sexual identity.
- **Intersex:** A person with a set of sexual anatomy that doesn't fit within the labels of female or male (e.g. XXY phenotype, uterus, and penis)
- **Pansexual:** A person who experiences sexual, romantic, physical, and/or spiritual attraction for members of all gender identities/expressions.
- **Transgender:** A person whose gender identity is the binary opposite of their biological sex, who may undergo medical treatments to change their biological sex.
- **Gender Identity:** A way to describe how you feel about your gender. You might identify your gender as a boy or a girl or something different. This is different from your sex, which is related to your physical body and biology.

Important legal changes that have affected LGBTQ+ people in the UK:

- 2000: Government lifts the ban on lesbians and gay men serving in the Armed Forces.
- 2001: Age of consent for gay/bi men is lowered to 16.
- 2002: Equal rights are granted to same-sex couples applying for adoption.
- 2003: Repeal of Section 28 - Section 28 was a law that made it illegal to talk positively about homosexuality in schools.
- 2003: A new law comes into force protecting LGBT people from discrimination at work. Unt 2003 employers could discriminate against LGBT people by not hiring them or not promoting them, just because of their sexual orientation or gender identity.
- 2004: Civil Partnership Act is passed.
- 2004: Gender Recognition Act is passed - This Act allowed trans people to change their legal gender. This means that they can get a new birth certificate that reflects who they really are which helps for future legal processes like marriage.
- 2007: It becomes illegal to discriminate against people because of their sexual orientation or gender identity when providing them with goods or services.
- 2008: The Criminal Justice and Immigration Act makes 'incitement to homophobic hatred' a crime.
- 2009: A new law gives better legal recognition to same-sex parents.
- 2013: The Marriage (Same-Sex Couples) Act is passed.

KPI 1 – Key terms

- **Nicotine:** A toxic colorless or yellowish oily liquid which is the chief active constituent of tobacco. It acts as a stimulant in small doses, but in larger amounts blocks the action of autonomic nerve and skeletal muscle cells.
- **Vaping:** The action or practice of inhaling and exhaling the vapor produced by an electronic cigarette or similar device.
- **Smoking:** The action or habit of inhaling and exhaling the smoke of tobacco or a drug. Usually through Cigarettes or Cigars.
- **E-Cigarette:** E-cigarettes are electronic devices that heat a liquid and produce an aerosol or mix of small particles in the air. Which is then inhaled.
- **Alcohol:** The alcohol in all alcoholic drinks is the same – called ethanol. It is a colourless, odourless and inflammable fluid.

KPI: Alcohol

How does alcohol effects you?

Based on a standard (175ml) 13% volume glass of white wine or 4% strength pint of lager,

- 1 glass of white wine or a pint of lager (just over 2 units): You're talkative and feel relaxed; Your self-confidence increases; Driving ability is already impaired, which is why it's best to drink no alcohol if you're driving.
- 2 glasses of white wine or 2 pints of lager (just over 4 units): Your blood flow increases; You feel less inhibited, and your attention span is shorter; You start dehydrating, one of the causes of a hangover.
- 3 glasses of white wine or 3 pints of lager (just under 7 units): Your reaction time is slower; Your liver has to work harder; while your judgement may decrease.
- 4 glasses of white wine or 4 pints of lager (just over 9 units): You're easily confused; You're noticeably emotional; and you may become less capable

Alcohol and the Law

It is against the law

- To sell alcohol to someone under 18 anywhere.
- For an adult to buy or attempt to buy alcohol on behalf of someone under 18.
- For someone under 18 to buy alcohol, attempt to buy alcohol or to be sold alcohol.
- For someone under 18 to drink alcohol in licensed premises.
- For an adult to buy alcohol for someone under 18 for consumption on licensed premises,
- To give children alcohol if they are under five.
- It is not illegal:
- For someone over 18 to buy a child over 16 beer, wine or cider if they are eating a table meal together in licensed premises at the discretion of the manager.
- For a child aged five to 17 to drink alcohol at home or on other private premises

Signs of Alcohol Addiction:

It can be tricky to spot the signs of alcoholism as alcoholics can be secretive about it and can become angry if confronted. Some signs and symptoms can include:

- A lack of interest in previously normal activities
- Appearing intoxicated more regularly
- Needing to drink more in order to achieve the same effects
- Appearing tired, unwell or irritable
- An inability to say no to alcohol
- Anxiety, depression or other mental health problems
- Becoming secretive or dishonest

Topic 1 – Drugs and Alcohol

KPI: Smoking

Smoking and the Law

• You must be over 18 to buy cigarettes in the UK. If you're under 16 the police have the right to confiscate your cigarettes. It's illegal:

- For shops to sell you cigarettes if you are underage
- For an adult to buy you cigarettes if you are under 18
- To smoke in all public enclosed or substantially enclosed area and workplaces
- To smoke in a car with a child.

Vaping and the Law

- You must be 18 or over to purchase e-cigarettes or e-liquids in the UK. It also became illegal for an adult to buy e-cigarettes for someone under the age of 18.
- Although there is no legal restriction on where you can vape in the UK there are local laws and bylaws in force that prohibit the practice. The choice of whether to allow vaping is that of the property owner.
- Vaping generally is not allowed on the underground, planes, buses or trains and train stations in the United Kingdom.
- Vaping while you drive may not seem like such a big deal, but it could land you with up to nine penalty points and a fine of £2,500.

How do E-cigarettes work?

E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine, flavorings, and other chemicals that help to make the aerosol. The liquid used in e-cigarettes often contains nicotine and flavorings. This liquid is sometimes called "e-juice," "e-liquid," "vape juice," or "vape liquid." Users inhale e-cigarette aerosol into their lungs. Bystanders can also breathe in this aerosol when the user exhales it into the air. E-cigarette aerosol is NOT harmless "water vapor." The e-cigarette aerosol that users breathe from the device and exhale can contain harmful and potentially harmful substances, including:

- Nicotine
- Ultrafine particles that can be inhaled deep into the lungs
- Flavoring such as diacetyl, a chemical linked to a serious lung disease
- Volatile organic compounds
- Cancer-causing chemicals
- Heavy metals such as nickel, tin, and lead

It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.

Effects of Nicotine

Nicotine is both a sedative and a stimulant. When a body is exposed to nicotine, the individual experiences a "kick." This is partly caused by nicotine stimulating the adrenal glands, which results in the release of adrenaline. This surge of adrenaline stimulates the body. There is an immediate release of glucose, as well as an increase in heart rate, breathing activity, and blood pressure. Indirectly, nicotine causes the release of dopamine in the pleasure and motivation areas of the brain.

if you need any support:

A friend; A teacher; Tutor; Parent; Mrs Loveridge; Mrs Jones; Mr Ogdan; Mr Hayward

Reputable Organisations: ChildLine: www.childline.org.uk, contact number – 08001111; Visit

www.nhs.uk; Visit: www.talktofrank.com, Live Chat: 2pm-6pm, Phone: 0300 123 6600 Text: 8211