MALTBYLEARNINGTRUST
Exceptional Experiences. Successful Lives.

MALTBY ACADEMY

YEAR 9 TERM 2 2024-2025

KNOWLEDGE ORGANISER

WWW.MALTBYACADEMY.COM

MALTBY ACADEMY

OUR **KEY DRIVERS**

RESILIENCE

Learn from failures, work through problems and never give up. Be better today than you were yesterday.

ASPIRATION

Aim high and set yourself challenging goals both academically and personally. What does the future hold for you?

COMMUNITY

Accept support and offer it. Give something back to the Academy and the community.

RESPONSIBILITY

Be responsible for your actions, celebrate successes and learn from your failures. Do not make excuses.

CONFIDENCE

Don't be afraid to get things wrong. Believe in yourself and your abilities and step outside your comfort zone.

Contents

Introduction

Foundational Knowledge and Retrieval Practice

If we try and build a house on sand it will fall down, as the foundations are not secure and over time will disappear. That's a bit like what happens if your teacher tries to get you to understand complex ideas, but you haven't yet grasped the basics on which to connect the new information, and therefore you cannot build on it and develop what scientists call **schema** in your mind.

To support you in having foundational knowledge in each subject, your teachers have identified some key basic knowledge that they will teach you first, but then you will be asked to consolidate this by reviewing it at home and completing a quiz about it for homework - this process is called **retrieval.**

Research tells us that the process of **keep reviewing key chunks of material by reading it**, **rehearsing it, trying to recall it** and **checking you got it right** will help you to remember it longer term, so that you feel more confident in your lessons when teachers do refer to it.

Introduction

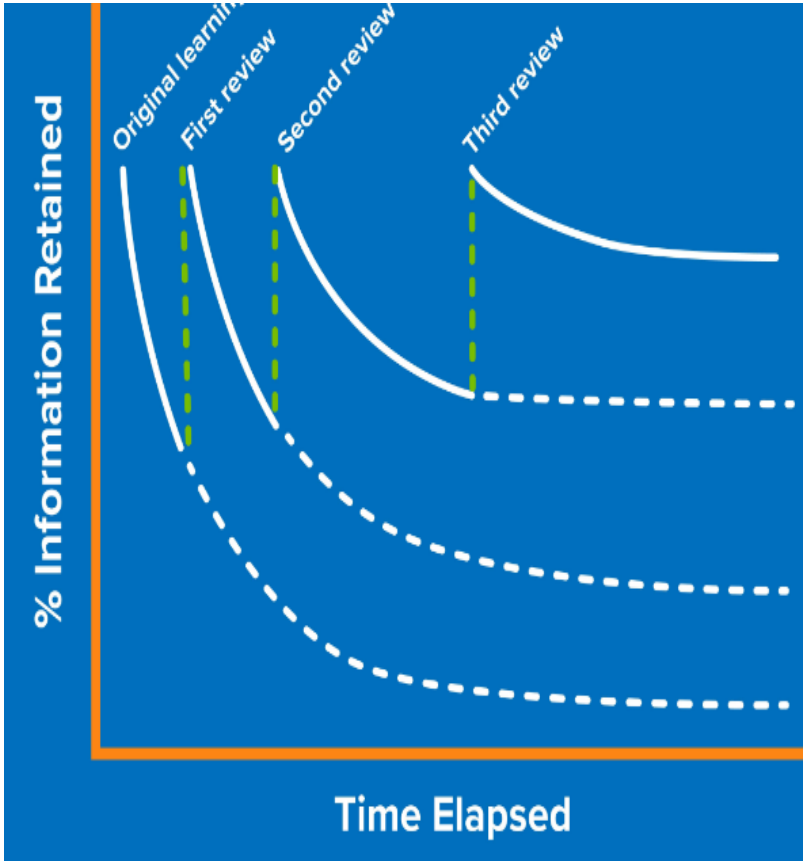
The Forgetting Curve

A psychologist called Hermann Ebbinghaus discovered that shortly after you have learned something, you quickly forget some of it. He represented this process with this' **forgetting curve'.**

He found however that if you reviewed that information at specific time points after having first learned it – the rate at which you forget can be reduced. He called this **'spaced practice'**

To help you to remember key information your teachers will do the following:

- Identify in lesson key terms or pieces of information that are important to learn.
- Tell you which bits of the subject knowledge organiser to review and recall at home.
- Set you a homework quiz to check what you can recall.
- In future quizzes include some questions already tested.
- Revisit key questions that most of the class struggled with.



English

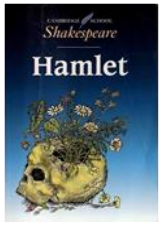
Using this knowledge organiser:
Every **Week A** you will be given **ten pieces of vocabulary**.

Across this week, you will need to find a coherent definition for each piece of vocabulary and practice the spelling. This will be tested as part of your English lessons, across that week.
In **Week B**, you will use these same words to complete a short piece of **writing**. You will use the information on this sheet to support you.
At the end of the term, you will complete a project that utilises all you have learnt across this half term.

Hamlet:

Troubled teenager Hamlet struggles to come to terms with the recent death of his father. Upon learning the horrific details of his death, Hamlet's mind and life begin to unravel.

With ample opportunities to learn about, and discuss, themes still relevant to the modern day, Shakespeare's play allows us to explore the importance of feminism, family, revenge, and violence.



Week A/B 1:
1. Unfold
2. Rivals
3. Bitter
4. Dreaded
5. Entreated
6. Apparition
7. Fortified
8. Illume
9. Harrow
10. Avouch

Week A/B 2:
1. Discretion
2. Befitted
3. Auspicious
4. Scarcely
5. Denote
6. Commendable
7. Impious
8. Vulgar
9. Requite
10. Tenable

Week A/B 3:
1. Compassion
2. Surmise
3. Feign
4. Bestow
5. Devotion
6. Judicious
7. Profanely
8. Indifferent
9. Foul
10. Censure

Week A/B 4:
1. Gulf
2. Majesty
3. Purge
4. Idle
5. Visage
6. Divulge
7. Untimely
8. Conjure
9. Hectic
10. Chaos

Week A/B 5:
1. Superfluous
2. Valour
3. Acquittance
4. Revert
5. Contrive
6. Virtue
7. Countenance
8. Revolution
9. Assurance
10. Ambiguous

Week A/B 6:
1. Indiscretion
2. Divine
3. Insinuation
4. Exception
5. Disclaim
6. Ignorance
7. Palpable
8. Scant
9. Union

Science: Skills

Independent variable: the one thing that is changed.
Dependent variable: the one thing that is measured.
Control variables: things that are kept the same.

Six Golden Rules of Line Graph Drawing

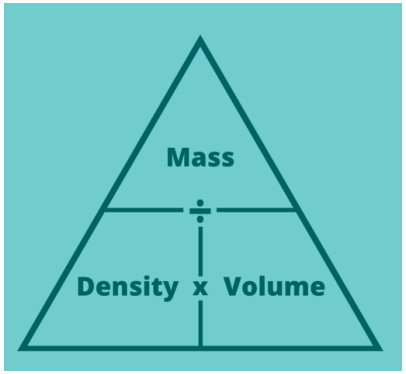
1. Draw with a pencil and ruler
2. Add a title that includes the units on the axis.
3. Label both axis with units.
4. Use even scales, e.g. going up in 5s each time.
5. Plot points with an 'X'
6. Draw a line of best fit close to or through as many points as you can. Ruler if the points appear straight, free-hand smooth curve if points appear curved.

Top Tips

- Never use the word 'amount.'
- If you are referring to a liquid, then use volume.
- If you are referring to a solid, then use mass.
- A thermometer measures temperature NOT heat.
- A balance measures mass NOT weight.
- Use a measuring cylinder to find volume, NOT a beaker.
- If a reaction produces a gas DO NOT call it steam.

To convert	Unit	How many millimetres it is	To convert
	Millimetre (mm)	1 mm	
× 1000			÷ 1000
	Micrometre (μm)	0.001 mm	
× 1000			÷ 1000
	Nanometre (nm)	0.000001 mm	

Density (kg/m³) = mass (kg) / volume (m³)
ρ m v



Density = mass / volume
Mass= density x volume
Volume= mass /density

Density of an Irregular Object

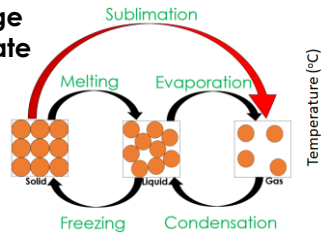
1. Find the mass of the irregular object using a balance.
2. Fill a eureka can with water just below the spout.
3. Place a measuring cylinder underneath the spout.
4. Place the irregular object into the eureka can without splashing.
5. Measure the volume of water that goes into the measuring cylinder.
6. Do mass divided by volume to find the density of the irregular object.

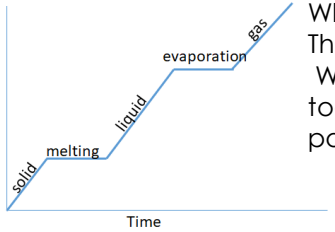
Science: Particle model of matter

States of matter: Almost all substances can be put into the category of "solid, liquid or gas". These are called the states of matter.

	Solid	Liquid	Gas
			
Arrangement of particles	Particles in rows, touching	Particles random but touching	Particles random not touching
Can particles move?	Particles do not move	Particles slide past each other	Particles are always moving
Energy of particles	Very small amount of energy	Small amount of energy	A lot of energy
Fill a container?	Does not fill a container	Fill a container	Fill a container

Change s of state





Boiling point and melting point: the boiling point is a **temperature** that something will turn from a liquid to a gas, or gas to liquid. The melting point is the temperature something will turn from a liquid to a solid, or solid to a liquid.

Density (kg/m³) = mass (kg) ÷ volume (m³)

Required practical - calculating density of different shapes

A **regular shape** is a shape that you can measure the sides of, e.g. a rectangular block.

- The find the **volume** you do **length x width x height**, in m^3
- To find the **mass** of the regular object you use a **balance**
- **Then you would do density = mass ÷ volume**

An **irregular shape** is a shape that you can't measure the sides of, e.g. a rock.

1) To find the **volume** of the shape, you fill a **displacement can** with water, lower in the shape attached to string, and then the displaced water into the **measuring cylinder** is the **volume**.

2) Again, to find the **mass** of the regular object you use a **balance**

3) **Then you would do density = mass ÷ volume**

Internal energy = the total kinetic energy and potential energy of all the particles that make up a system.

Temperature = the average kinetic energy of particles

The energy needed to change the temperature of 1kg by 1°C is called the **specific heat capacity.**

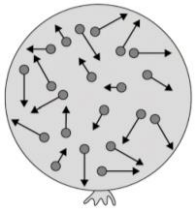
The energy needed to change the state of 1kg of a material is called the **specific latent heat.**

When heating a substance, this increases the kinetic energy of particles (the diagonal parts of the graph) Therefore, the internal energy increases.

When a substance changes state, the heat energy is used to weaken the forces holding the particles together, so the temperature does not change, so the kinetic energy does not change. However, the potential energy increases, so the internal energy increases.

Gas Pressure: Is caused by the collisions of particles with the walls of a container. As the temperature of a gas increases (if the volume stays constant), the particles gain kinetic energy, hit the walls of the container more, so the pressure increases. If the volume of a container decreases, the gas particles will hit the walls of a container less therefore pressure decreases.

A high temperature in a small volume could cause too high pressure and lead to an explosion.

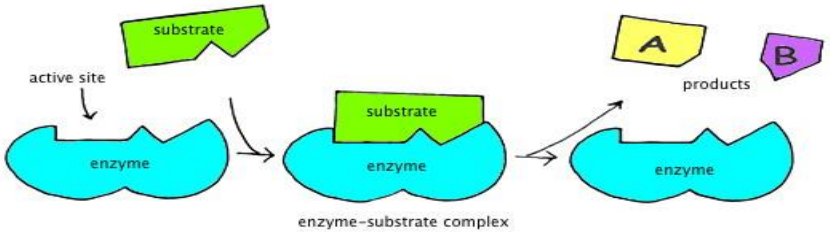


Science: Organisation 1

Cells: the basic unit of life, e.g. red blood cell.
Tissue: group of cells working together to perform a function, e.g. muscle.
Organ: a group of tissues working together to perform a function e.g. bladder.
Organ system: a group of organs working together to perform a function e.g. digestive system.

Protein: for growth and repair, e.g. meat.
Vitamins & minerals: needed for the functioning of a healthy body, e.g. fruit and vegetables.
Carbohydrates: for energy, e.g. bread and pasta.
Fat: for insulation and the slow transfer of energy.

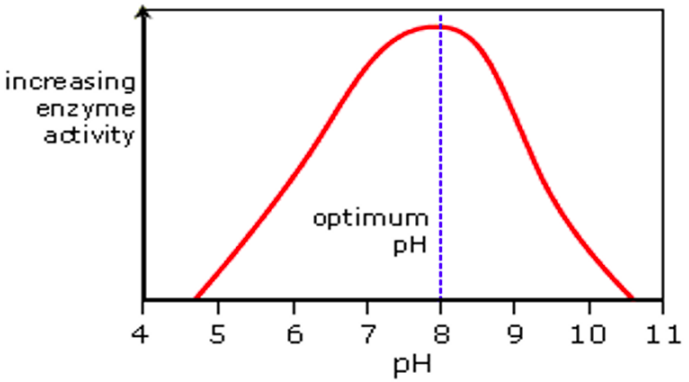
Enzymes: a biological catalyst that speeds up chemical reactions.



Enzymes allow the nutrients from food to be absorbed by making **large insoluble** molecules into **small soluble** ones. It **catalyses** (speeds) up chemical reactions. They are **proteins** that have a very specific shape, if the **active site** changes shape then they are said to be **denatured** and can no longer do their job. **High temperature** and **extreme pH** can cause enzymes to denature. If a word ends in **'ase'** then it is an enzyme.

- **Amylase** breaks down starch (found in carbohydrates).
- **Protease** breaks down proteins.
- **Lipase** breaks down fats.

- **Benedict's** is blue and turns red with sugars.
- **Biuret** is blue and turns purple with proteins.
- **Iodine** is brown and turns black with starch.



This enzyme's **optimum** (best) pH is pH 8. Enzyme activity increases until the optimum is reached, afterwards enzyme activity decreases until the enzyme is **denatured** at pH 10.5 as enzyme activity is 0.

CONFIDENCE | ASPIRATION | RESPONSIBILITY | COMMUNITY | RESILIENCE

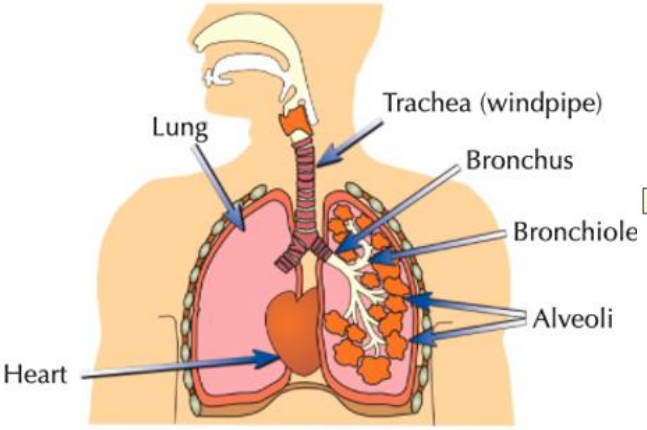
Science: Organisation 2

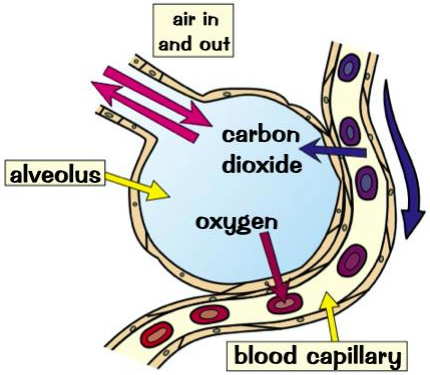
Red blood cell: carries oxygen to body cells, has no nucleus.
White blood cells: destroys pathogens by phagocytosis or by producing antibodies or by producing antitoxins.
Platelets: fragments of cells that clot wounds.
Plasma: the liquid part of blood, it also carries hormones, glucose and CO_2.

Arteries: thick, elastic muscular wall to cope with the high pressure of blood (can recoil).
Veins: largest lumen (hole down the middle) and has valves to prevent the backflow of blood.
Capillaries: one cell thick to allow substances to diffuse into and out of them.

Coronary arteries supply the heart (cardiac) muscle with oxygen. They can become blocked with **fatty deposits**, so not enough oxygen gets to the cardiac muscle, this is known as **coronary heart disease** (CHD), this causes it to die. When the heart stops beating someone has gone into **cardiac arrest** (heart attack). **Lifestyle factors** can increase the risk of CHD:

- Fatty diet
- Smoking
- Lack of exercise





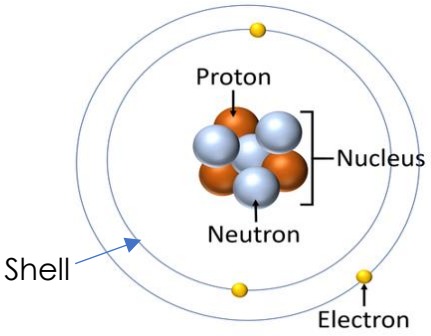
There are millions of **alveoli** (tiny air sacs) in the lungs. They are **one cell thick** so **oxygen** can diffuse out of them and into **red blood cells** and so carbon dioxide can diffuse out of the **plasma** and into them to be breathed out. They are surrounded by a network of **capillaries** that allows this diffusion to take place due to the **steep diffusion gradient** that is maintained.

Communicable disease: caused by pathogens and can be spread, e.g. HIV and the common cold.
Non-communicable disease: inherited and cannot be spread, e.g. cancer and diabetes.

Health: a state of physical and mental wellbeing.

Science: Atomic Structure & Periodic Table

Structure of an Atom

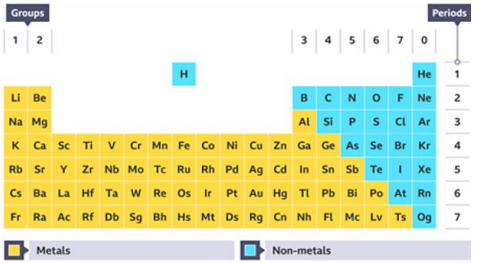


Elements: made of only one type of atom.
Compound: made of two or more types of atoms chemically bonded together.
Mixture: different elements/different compounds/elements and compounds not chemically bonded.

- If there are two elements in a compound add the ending '-ide.'
- Zinc and oxygen is zinc oxide.
- If there are two elements plus oxygen, add the ending '-ate'.
- Lithium, nitrogen and oxygen is lithium nitrate.

In 1869 Dimitri Mendeleev overcame some of the problems of the early Periodic Table by taking 50 elements and arranging them (mainly by atomic weight) with gaps in between. This was to ensure elements with similar properties stayed in the same group. Some of these gaps were undiscovered elements, however Mendeleev could product their properties based on where the gap was.

Periodic Table



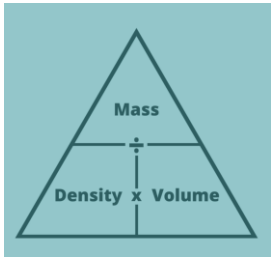
Groups go **DOWN** the Periodic Table.
Periods go **ACROSS** the Periodic Table.

In H_2O there is two hydrogen atoms and one oxygen atom. A number belongs to the element to the left of it and tells you how many atoms of that element there are.

Group 1: alkali metals are soft, react with water to produce hydrogen gas and an alkaline solution. They become more reactive down the group.
Group 7: halogens, fluorine and chlorine are gases, bromine is a liquid, iodine and astatine are solids. They are diatomic so are found as two atoms chemically bonded together.
Group 0: noble gases or group 8 are all gases, they are inert (unreactive). They are monoatomic so are found as single atoms.

Science: Particle Model

Density: the 'compactness' of a substance, how much volume it takes up in relation to its mass (kg/m3).



Mass = density x volume

Density = mass / volume

Volume = mass /density

Physical Change: the material changes state and will recover it's properties if the change is reversed, e.g. ice melting.

Chemical Reaction: a change in bonding leading to new properties, e.g. cooking food.

Conservation of mass: the mass of products made is equal to mass of products reacted. Mass cannot be created or destroyed.

Mass appears to decrease: one of the products is a gas, leaves the reaction and it's mass cannot be found.

Mass appears to increase: one of the reactants was a gas, it is now part of a solid product. Its mass could not be found when it was a gas.

Specific Heat Capacity: the energy needed to raise the temperature of 1kg of substance by 1°C (J/kg°C). The higher the number the more energy the substance holds.

$$\Delta E = m \times c \times \Delta\theta$$

ΔE: change in thermal energy (J).

m: mass (kg).

C: specific heat capacity (J/kg°C)

Δθ: change in temperature (°C).

Temperature: measure of the average kinetic energy of particles in a substance (°C).

Heat: a type of energy that transfers into the kinetic energy of particles (J).

Internal energy: total kinetic and potential energy of particles in a system.

Specific Latent Heat: the amount of energy required to change the state of 1kg of a substance with no changes in temperature.

$$E = m \times L$$

L: latent heat (J/kg)

History: Civil Rights

Write like an Historian

Key term: civil rights	
Variations:	Definition: the rights of citizens to political and social freedom and equality.
Use it in a sentence: Rosa Parks is a famous example of a person fighting for civil rights, refusing to give up her seat on a bus.	
Links to: Human rights Equal rights Liberty Justice Fair treatment	Digging deeper: What 'civil right' do you feel is most important to your life?

Key term: passive resistance	
Variations:	Definition: non-violent opposition to authority, especially a refusal to cooper ate with legal requirements.
Use it in a sentence: Martin Luther King encouraged his followers to use forms of passive resistance, such as marching and boycotting.	
Links to: Peace Moral high ground	Digging deeper: What are the positive and negatives sides to this form of protest?

Key term: active resistance	
Variations:	Definition: Achieving justice by using form of force or violence.
Use it in a sentence: Malcolm X encouraged his followers to use forms of active resistance, such as fighting back or using weapons.	
Links to: Violence Conflict challenge	Digging deeper: What are the positive and negatives sides to this form of protest?

History: Civil Rights

Write like an Historian

Key term: boycott	
Variations: Boycotts Boycotted boycotting	Definition: withdraw from commercial or social relations with (a country, organization, or person) as a punishment or protest.
Use it in a sentence: A bus boycott was used in Montgomery, Alabama in 1955 to fight against racist laws.	
Links to: Spurn Snub Cold-shoulder Shun avoid	Digging deeper: Why is boycotting something an effective form of protest?

Key term: segregation	
Variations: Segregated Segregates segregating	Definition: the action or state of setting someone or something apart from others.
Use it in a sentence: Black and white children had to attend different schools in the South of the USA until 1954, due to segregation policies that were followed.	
Links to: Keeping apart Separating Exclusion Shielding Division Quarantine	Digging deeper: Why did some people feel that segregation was something to be encouraged?

Key term: freedom	
Variations: Freed Free Freeing	Definition: the power or right to act, speak, or think as one wants.
Use it in a sentence: Many enslaved people claimed their freedom after the Abolition of Slavery in 1833.	
Links to: Liberty Liberation Release Emancipation prerogative	Digging deeper: What impact did the lack of freedom have on different groups you have studied?

History: Civil Rights

Write like an Historian

Key term: emancipation	
Variations: emancipated	Definition: the fact or process of being set free from legal, social, or political restrictions; liberation.
Use it in a sentence: Abraham Lincoln led the calls for emancipation from slavery in the United States.	
Links to: Freeing liberation	Digging deeper: Do you think enslaved people were truly 'emancipated' the moment the slave trade was abolished?

Key term: lynch	
Variations: Lynching Lynched	Definition: kill (someone) for an alleged offence with out a legal trial, especially by hanging.
Use it in a sentence: Her father had been lynched for a crime he didn't commit.	
Links to: Hang Execute Put to death	Digging deeper: Why did so many people get away with lynching African Americans in the United States?

Key term: racism	
Variations: racist	Definition: prejudice, discrimination, or antagonism by an individual, community, or institution against a person or people on the basis of their membership of a particular racial or ethnic group,
Use it in a sentence: The government set up a programme to combat racism.	
Links to: Prejudice Discrimination Xenophobia *intolerance*	Digging deeper: Is the problem of racism in Britain growing or reducing?

History: Holocaust

Write like an Historian

genocide	
Variations: genocides	Definition: The deliberate killing or severe mistreatment of a large number of people.
Use it in a sentence: Other genocides have happened since the Holocaust, such as in Cambodia or former Yugoslavia where thousands of people were killed.	
Links to: annihilation extermination eradication ethnic cleansing pogrom	Digging deeper: What factors enable genocide to take place in modern western societies?

perpetrator	
Variations: perpetrators perpetrated	Definition: A person who carries out a harmful, illegal or immoral act.
Use it in a sentence: Adolf Hitler and the Nazis were the perpetrators of the Holocaust.	
Links to: criminal offender Culprit wrongdoer	Digging deeper: What represents justice for the perpetrators of genocide?

ghetto	
Variations: ghettos	Definition: Areas in towns or cities where Jews were separated by force from other people.
Use it in a sentence: During World War II entire Jewish communities were uprooted and moved to ghettos.	
Links to: slum poverty starvation	Digging deeper: What did 'ordinary' people think about the setting up of the ghettos?

History: Holocaust

Write like an Historian

Scapegoat	
Variations: scapegoats	Definition: Someone who is blamed for wrongdoings, mistakes or faults of others.
Use it in a sentence: Jews were often made scapegoats for the problems Germany faced after WW1.	
Links to: accused fall person blamed	Digging deeper: Can you think of other examples of scapegoats?

Refugee	
Variations: refugees	Definition: People who have been forced out of their country and cannot return safely.
Use it in a sentence: The war in the Ukraine has driven a large number of refugees to Britain.	
Links to: immigrant expatriate evacuee	Digging deeper: What factors lead to someone becoming a refugee?

Discrimination	
Variations: discriminates discriminated	Definition: Unfairly treating an individual or group differently from others.
Use it in a sentence: Discrimination took place in Germany against lots of groups such as Jews, Slavs, Roma and Sinti.	
Links to: racism	Digging deeper: How important was rationing in winning World War II?

History: Holocaust

Write like an Historian

Antisemitism	
Variations:	Definition: Hostility or prejudice against Jews.
Use it in a sentence: A strong belief amongst Nazis was antisemitism.	
Links to: racism prejudice	Digging deeper: Why have Jews specifically been so targeted throughout history?

Collaborators	
Variations: collaborate collaborated collaboration	Definition: People, organisations and governments that helped the Nazis persecute and / or murder Jews.
Use it in a sentence: Some collaborators were punished after WW2, due to the help they had given the Nazis.	
Links to: traitors turncoats	Digging deeper: For what reasons might people have collaborated with the Nazis?

Partisan	
Variations: partisans	Definition: A member of an armed group formed to fight against an occupying force.
Use it in a sentence: A group of Lithuanian rebels derailed hundreds of trains and killed 3,000 Nazis.	
Links to: Rebels insurgents mutineers objectors	Digging deeper: What did the Partisans do to avoid capture?

Geography – Weather/Climate

Category	Wind Speed (mph)	Damage at Landfall	Storm Surge (feet)
1	74-95	Minimal	4-5
2	96-110	Moderate	6-8
3	111-129	Extensive	9-12
4	130-156	Extreme	13-18
5	157 or higher	Catastrophic	19+

Saffir-Simpson Hurricane Scale

Primary effects – The first effects of a natural disaster, e.g. buildings destroyed, people killed/ injured.
Secondary effects – Happen because of the primary effects, e.g. No access to clean water can lead to spread of disease.

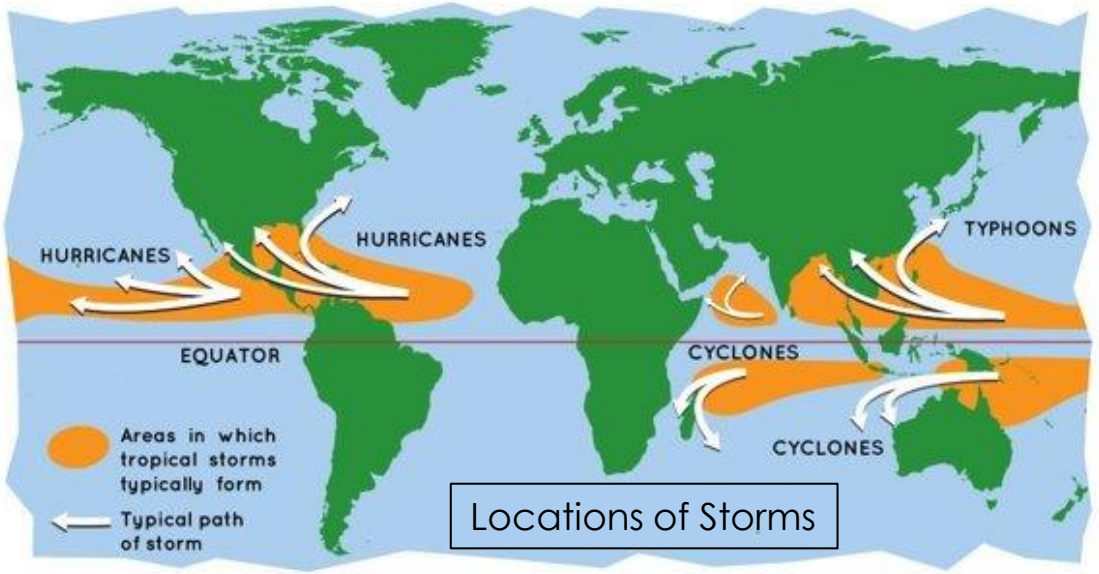
Short-term responses - The reaction of people as the disaster happens and in the immediate aftermath.
Long-term responses - Later reactions that occur in the weeks, months and years after the event.

Climate is the average weather conditions for a larger area such as a country or region over a 30-year period.

Weather describes the day-to-day conditions of the atmosphere.

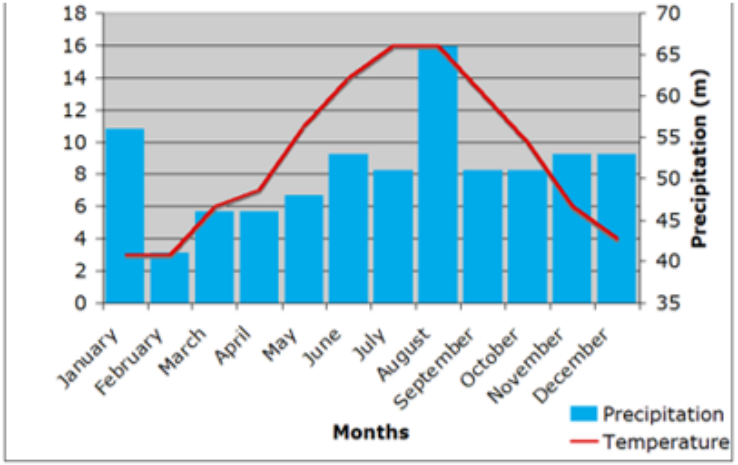
Extreme Weather Types

Tornadoes	Large amounts of snowfall and very low temperatres.	
Snowstorms	A rapidly rotating column of air. They occur in the USA and are much smaller than hurricanes.	
Droughts	High winds and heavy rainfall, sometimes causing thunder and lightning.	
Storms	When rivers burst their banks and cause water to spill out onto the land.	
Hurricanes	Long periods of time when there is no rainfall.	
Flooding	Very high winds (over 74mph) – the most extreme type of storm.	

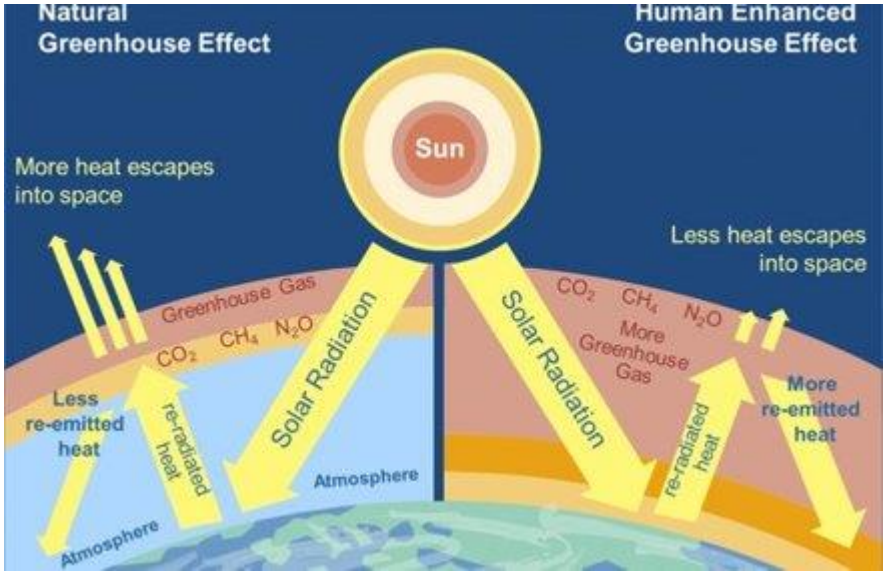


Locations of Storms

Geography – Weather/Climate

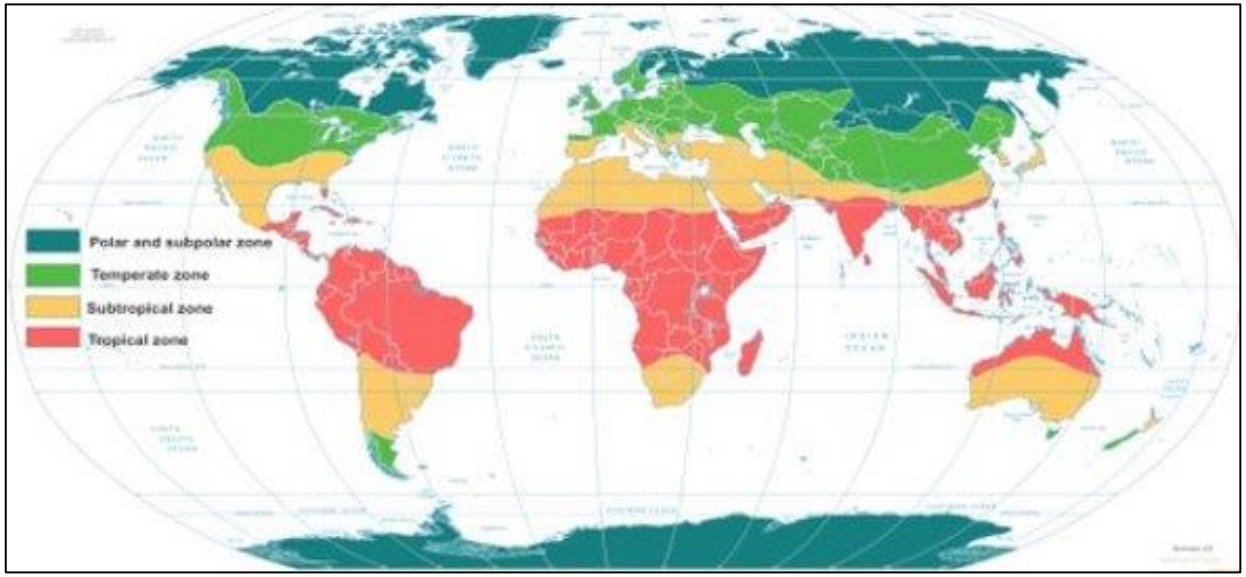


Climate Graph for Rotherham

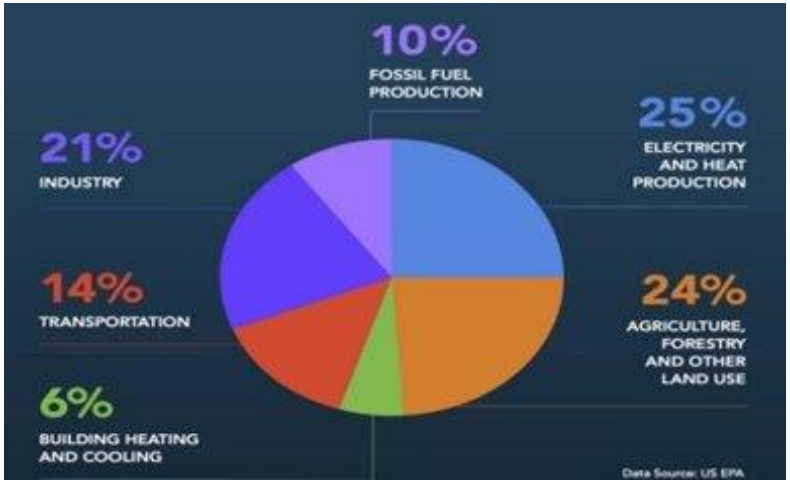


Climate Change Diagram

Global Climate Zones



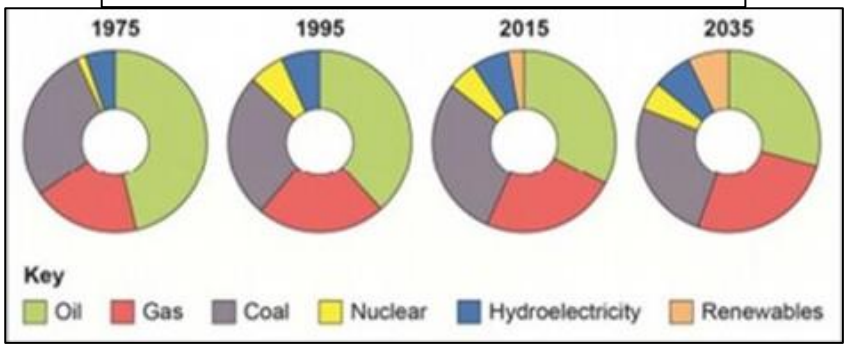
Causes of Climate Change



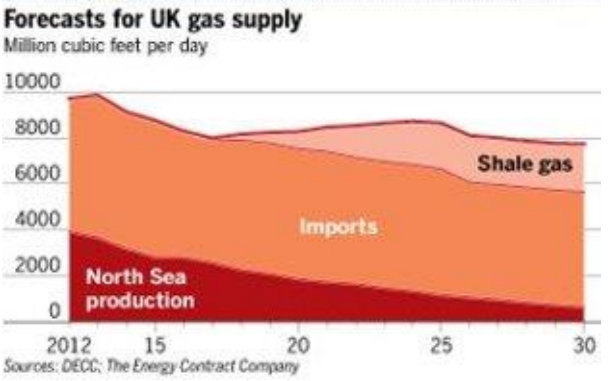
Geography – Resources

Renewables

UK Energy Mix – Non-Renewable



Fracking Sites in UK



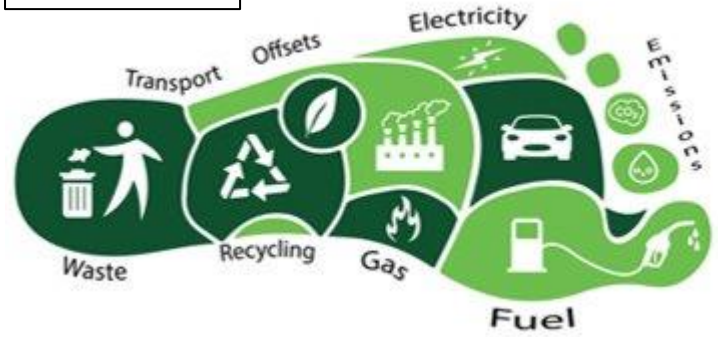
Fracking: this involves drilling into rock, blasting water into cracks in the rock at high pressure to loosen gas pockets and extracting this gas to use as energy.

Geography – Resources

Reduce - Use less plastic when you can, e.g. take your own shopping bags, don't buy single use plastics, e.g. plastic water bottles.
Reuse - Try to reuse products that don't require new plastic packaging.
Recycle - Use waste materials again to create new products.

Food Miles - The distance food travels from where it has been produced to where it is consumed.

Ecological Footprint



Causes of Damage	Impacts caused on Environment	Possible Solutions	Countries/Examples
-Non-renewable energy -Population Increase -Farming -Technology	-Loss of land -Loss of wildlife/habitats -Economic impacts -CO2 = climate change – floods, extreme weather, droughts, coral bleaching, etc	Renewable energy eg. Solar, wind, etc -Eating less meat -Energy habits reduce	HICs – UK, USA NEEs = India, China

Spanish – Clothes

Demonstrative adjectives	
Este/esta	This
Estos/estas	These
Ese/esa	That
Esos/esas	Those
Aquel/aquella	That (over there)
Aquellos/aquellas	Those (over there)
These adjectives change in gender (masculine or feminine) and number (singular or plural) according to the noun they are describing.	
Esta falda	This skirt
Ese jersey	That jumper
Aquella camiseta	That t-shirt (over there)
Estos vestidos	These dressed

Verb		Item of clothing	
Llevo	I wear	unos pantalones	trousers
Llevas	You wear	unos vaqueros	jeans
Lleva	He/she/it wears	una camisa	a shirt
Llevamos	We wear	una camiseta	a t shirt
Lleváis	You lot wear (plural)	una chaqueta	a jacket
Llevan	They wear	una corbata	a tie
Llevé	I wore	un vestido	a dress
Voy a llevar	I'm going to wear	una falda	a skirt
Llevaré	I will wear	un jersey	a jumper
Llevaría	I would wear	una gorra	a hat
Me gustaría llevar	I would like to wear	unos calcetines	socks
		unos zapatos	shoes
		unas zapatillas de dep orte	trainers

Spanish – Styles and Shops

algunos/as	*some*
ciertos/as	*certain*
muchos/as	*many*
otros/as	*other*
pocos/as	*few*
todos/as	*all*
varios/as	*several*

estampado	*patterned*
largo	*long*
amplio	*baggy/loose*
corto	*short*
estrecho	*tight*
elegante	*smart*
hortera	*tacky*
liso	*plain*

de rayas	*striped*
de cuadros de	*squared*
lunares	*spotted*
de flores	*floral*
de leopardo	*leopard print*

la carnicería	*butcher's*
la chocolatería	*chocolate shop*
la joyería	jewellery shop
la panadería	*baker's*
la papelería	*stationery shop*
la perfumería	*perfume shop*
la pescadería	*fishmonger's*
la tienda de disfraces	*fancy dress shop*
la tienda de ropa	*clothes shop*
la zapatería	*shoe shop*

Spanish – An Ideal Shopping Day

Cardinal numbers		Ordinal numbers	
One	Uno	First	Primero
Two	Dos	Second	Segundo
Tres	Three	Third	Tercero
Cuatro	Four	Fourth	Cuarto
Cinco	Five	Fifth	Quinto

The conditional tense

The conditional is usually translated as "would". To form the conditional, add the following endings to the infinitive forms of *–ar*, *-er* and *–ir* verbs.

I	-ía
You	-ías
He/she/it	-ías
We	-íamos
You (plural)	-íais
They	-ían

Comprarías – you would buy
Llevaríamos – we would wear
Venderían – they would sell

Note that the irregular verbs in the future tense are also irregular in the conditional.

Tendría – I would have
Podrías – you could
Haría – he/she would do

Direct Object Pronouns			
Me	Me	Nos	Us
Te	You (s)	Os	You (pl)
Lo/la	It, him, her	Los/los	Them
Look at the position of the pronouns in the examples below. The pronoun is placed directly before a conjugated verb:			
Compré una falda.	I bought a skirt	La compré	I bought it.
Tengo tres vestidos.	I have 3 dresses.	Los tengo.	I have them.
Or at the end of an infinitive:			
Quiero cambiar estos zapatos.	I want to exchange these shoes.	Quiero cambiarlos.	I want to exchange them.

Computing

What is the World Wide Web?

The **internet** is a global network of computers.
The **World Wide Web** is the part of the **internet** that can be accessed through **websites**.
Websites consist of **webpages** which allow you to see information.
Websites are accessed using a **web browser**. A **browser** is a **program** designed to display the information held on a **website**. Every **website** has an address at which it can be found, a bit like a house address.

Considering your audience

Define your audience clearly

- For example, young or old!
  - **What is the purpose of your website?**
- To entertain or to inform?
  - **How will this affect your design?**

Responsive Design

Websites are viewed on different size screens
Webpages must automatically adjust to fit
Set widths as **percentages** rather than pixels

Using HTML to create websites

All **web** pages on the **internet** are created using a language called **Hypertext Markup Language** (**HTML**). **HTML** describes:

- what information appears on a webpage
- how it appears on the page (formatting)
- any links to other pages or sites

HTML can be written in specialist software, or in a simple text editor like Notepad++. As long as the document is saved with the file extension **'.html'** it can be opened and viewed as a **webpage** from a **browser**.
This example **HTML** code displays a message on a webpage:

```
<html>
        <body>
                <h1>Hello world</h1>
                <p>This is my first webpage</p>
        </body>
</html>
```

The code uses **tags** to describe the appearance of the information:

<html> - states that the document is a HTML document
<body> - states what will appear in the body of the page
<h1> - formats the text to appear as a prominent heading
<p> - formats the text to start a new paragraph
<b> - formats the text to be bold.
<i> - formats the text to be italic.
<u> - formats the text to be underlined

Design Technology-Hardwoods

Like other hardwoods, mahogany is a strong wood with a close grain

This type of wood comes from deciduous trees. These trees are seasonal and lose their leaves during the winter. This means that they don't grow as fast as other trees and, as a result, they take longer to harvest.

Slow growth results in the wood having a closer grain. This makes it **stronger and harder**. It also gives better aesthetic qualities due to the interesting colours and grain patterns. The slow-growing nature of hardwoods makes them more expensive. They are **less sustainable**.

Hardwood are mainly used in high quality indoor and outdoor furniture. They are also used in decorative interior and exterior joinery within construction such as doors, window frames, and gates.

Examples of hardwoods include:-

- **Oak**
- **Mahogany**
- **Teak**

Design Technology-Softwoods

Softwoods like pine grow quickly and have a wider grain.

This type of wood comes from coniferous, evergreen trees that grow all year round. This means that they **grow quicker** than other types of trees and they can be harvested more regularly and replaced in a sustainable way. Due to this there is always **steady supply**, and they are usually **cheaper**.

Faster growth results in a grain structure that is wider and less dense that hardwoods. This makes softwoods easy to work with but **less durable**. Softwoods - tend to mainly be light in colour.

The easy availability of softwoods means that they tend to be used to make less expensive furniture and constructions, such as sheds and timber frames.

Examples of softwoods include:-

- **Pine**
- **Spruce**
- **Cedar**

Design Technology-Manufactured Boards

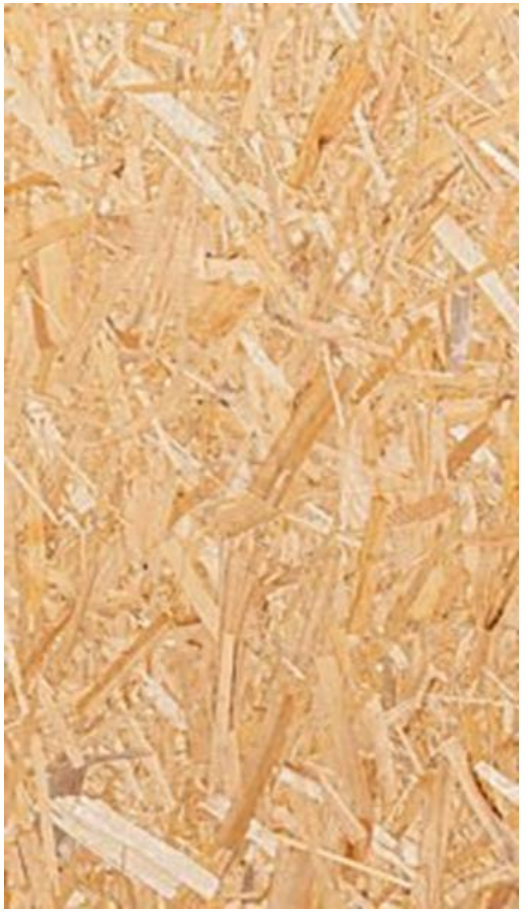
Manufactured wooden board is a cheap, strong product that can be sustainable.
Manufactured boards are a **mechanically engineered** form of wood. They offer a number of different advantages over traditional hard and softwoods as they use a combination of different sources of woods to create a new material.
Boards can be made in several different ways such as:-

- Wood particles and glue pressed together
- A build-up of thin wooden veneer layers
- Sandwiches of strips of wood

They can be made from recycled woods and by-products, creating a **cheap, strong product** that can look expensive. It also can be made available in large formats that are more sustainable. Manufactured boards have a range of uses and are often used to create inexpensive flat-pack furniture.

Examples of manufactured boards include:-

- **Chipboard**
- **Plywood**
- **Block board**
- **MDF (medium density fibre-board)**



Art, Craft & Design

AO1	AO2	AO3	AO4
Develop ideas through investigations, demonstrating critical understanding of sources.	Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.	Record ideas, observations and insights relevant to intentions as work progresses.	Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.
25% of your project mark	25% of your project mark	25% of your project mark	25% of your project mark
Theme exploration. Mindmaps / Collected images. Facts & statistics. Interviews. Artist research & analysis. Art movements & time periods. Trips, museums & galleries.	Experimenting with different materials. Improvements. Testing ideas. Contact sheets with selections. Repeating ideas in materials. Developed ideas.	Observational drawings. Photography. Annotations. Ideas. Planning for tests or photoshoots. Thumbnail sketches.	Final outcomes. Final design plan explaining links to prior learning. Meaningful connections within the work.

Choices of colour and the relationship between different colours have a huge influence on how a piece or art or design looks and feels and can hugely change the emotions it provokes.

Art, Craft & Design

Tone is the darkness or lightness of an object.

Lighter tones are used to indicate the light source, or where the light reflects off of, and/or shines on an object.

Darker tones are used to indicate the lack of light.

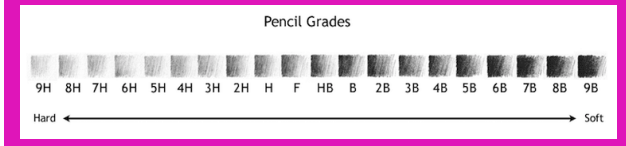
Highlight – Where light directly hits the object it is the lightest part.

Midtone - A medium tone, one that is neither very dark nor very light.

Shadow - Is the dark side on an object not facing the light.

Continuous line drawing – Drawing without taking your pen or pencil off the page.

Shading pencils – get darker the higher the number B.
To create lighter tones – lessen the pressure applied on your pencil.
To create darker tones add pressure to your pencil.



In school we use HB, 2B, 4B and 6B pencils

To create darker areas, start with a mid-tone and build it up in smooth layers.

What are primary colours?

RED BLUE YELLOW

Colours that can't be made by mixing other colours. These are used to create all the other colours.

What are secondary colours?

ORANGE PURPLE GREEN

Secondary colours are made by mixing together two primary colours, how would you know which primary colours make each secondary colour?

What are complementary colours?

Complementary colours sit across from each other on the colour wheel.

These are often referred to as opposite colours and even contrasting colours. Don't be confused by the three different names, they all mean the same thing.
One primary colour and once secondary colour.
Together they include all three primary colours.


YELLOW
PURPLE


ORANGE
BLUE


RED
GREEN

Analysis of artwork : this framework can help us ask questions when looking at the work of other artists and designers, to read the work like we would a book to decipher any meaning or messages within the work..

Art, Craft & Design

Content

- What can you see in the artwork? Consider objects, colours, shapes, textures, people, places.
- Can you see anything that is unusual or looks out of place?
- Are any of the items symbolic – do they have hidden meanings or trying to send a message?
- Is the artwork about something or someone?
- Is it realistic, surreal, abstract, a mixture? Why?

Form

- What is the artwork made from?
- What styles or skills can you see within it?
- Is there a colour scheme? Why / Why not?
- What is the composition (layout / arrangement) of the work
- Where is the main subject? What does this show?
- Does the work have any textures, shapes or patterns?

Mood

- What is the atmosphere or general feeling in the artwork?
- What does it make you think about?
- Does it make you feel an emotion – happy, sad, inspired, angry, thoughtful?
- Does it have a lasting impact on your or is it quite forgettable? Why?

Process

- How was the artwork made?
- What was the process, what tools or materials have the artist used?
- What did the artist look at to make this artwork?
- What was happening at the time the artwork was made, in the artists life, in society, in the world? Do you think this shows in the artwork?

This is important in Art & Design as we use other artists and designers work and processes to learn skills, take inspiration, develop our own understanding of messages and responses to worlds events.

Just like reading a book or text, we can read an artwork to understand the narrative or meaning within it.

The more artwork we 'read', the more we are building up ideas to draw on in our head, as well as increasing our understanding of other peoples' viewpoints, social, moral, spiritual and cultural beliefs.

This allows us to reference and include more creative ideas within our own work!

Performing Arts

Questions for further thought

- How can we portray stereotypical characters?
- How can we represent the opposite gender?
- How can music impact a performance?
- To what extent do stereotypes exist in society?

Stage Positions

Upstage Right	**Upstage Centre**	**Upstage Left**
Centre Right	**Centre**	**Centre Left**
Downstage Right	**Downstage Centre**	**Downstage Left**

Audience

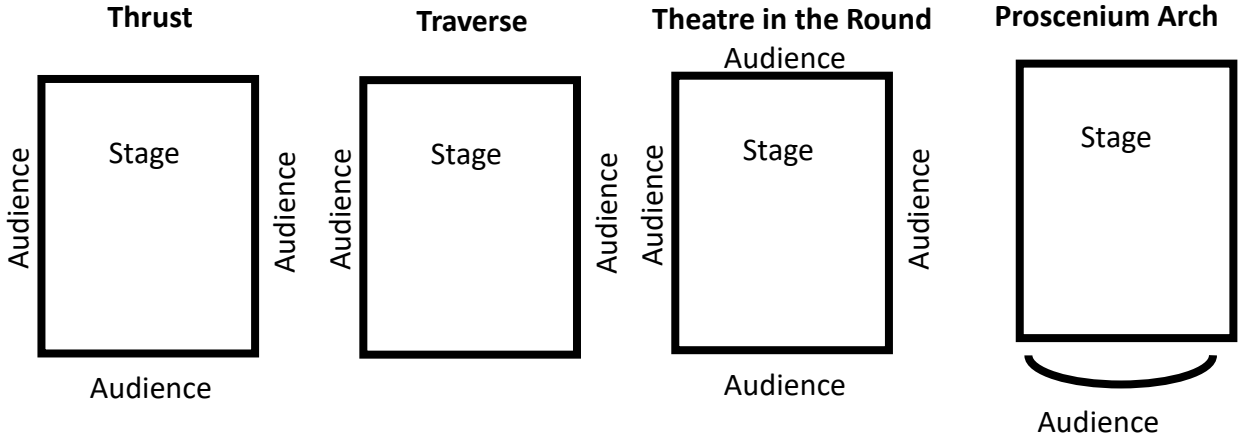
Skills and techniques

Characterisation - creating a character through body language and facial expressions
Mime – physicality without speech
Exaggeration – representing something in a more dramatic way

Text related terminology

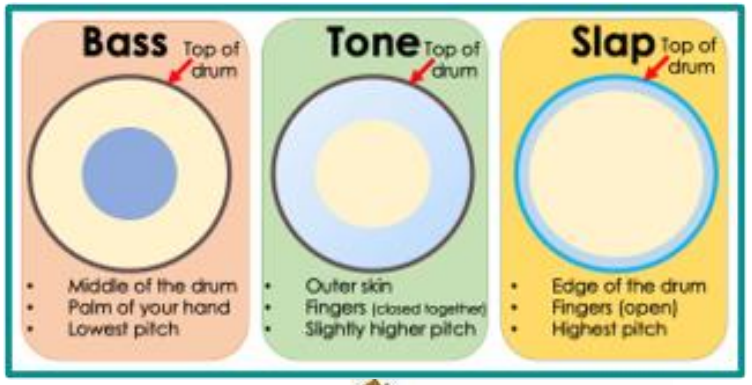
Stereotypes – a widely held and fixed idea about a type of person
Artistic Intention – what the director wants the audience to think, feel and understand
Devised theatre – theatre that is created
Scripted theatre – theatre taken from a script
Gender role reversal – playing a role of the opposite sex, often stereotypically

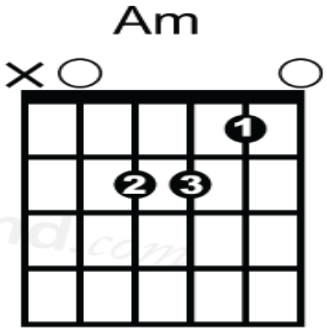
Types of Staging

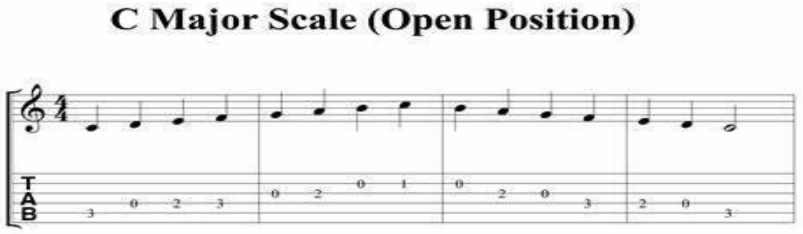


Music

Djembe techniques







Band Work

Key Words

Timing – When hits or notes are played at the correct point with other musicians

Notes – Single sounds played at a certain pitch

Chord – A group of notes played together

Beat – A pattern of hits on a drum or drumkit, played repeatedly

Lyrics – The word in a song separate from the tune/main melody

Melody – The organisation of notes to form a tune, often sang by a singer

TAB – How melodies are notated for stringed instruments

Rehearsal – the act of practicing with a clear goal in mind

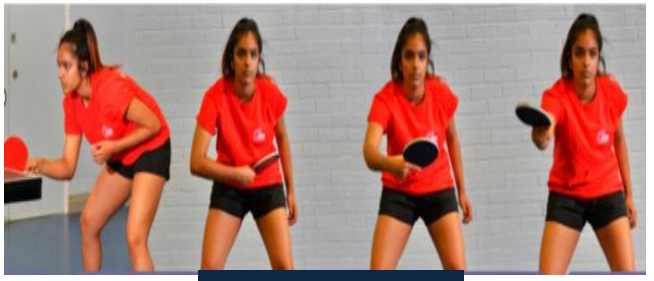
Count-in – The count of beats done by a band member before the song starts (usually a four-beat count)

PE-Table Tennis

Key Vocabulary	
Ready position	The position a person should stand in when preparing to hit the ball
Let	When the point is replayed
Receive	The person who receives the ball from the serve
Bat	The name given to the wooden bat that hits the ball
Serve	The way to start the game
Point	The name given when the player wins the rally
Net	The dividing net that separates the court
Rally	The ball being hit backwards and forwards between two players
Spin	Placing spin on the ball to make it harder to hit the ball
Grip	Holding the bat in the correct position

Rules	
Rule 1	Games are played to 11 points
Rule 2	Alternative serves every two points
Rule 3	Toss the ball up when serving
Rule 4	The serve can land anywhere in singles
Rule 5	In doubles the serve must go right side of the table to the other right side of table
Rules 6	A serve that touches the net and drops over the net is called a 'let'
Rules 7	Alternative hitting when playing doubles
Rules 8	The server must show the ball to the opposition

Skills	
Back hand drive	A shot where the player drives the ball
Forehand drive	A shot where the player drives the ball
Forehand push	A shot where the player pushes the ball
Backhand push	A shot where the player pushes the ball
Serve	The way a player starts the rally



Backhand shot

Forehand shot

Ready Position

Serve

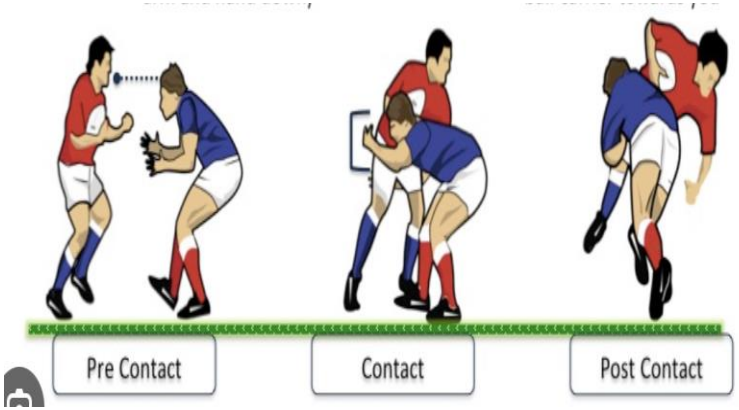
Ready Position The ready position is a key starting point when fielding. It provides you with the best opportunity to catch and/or stop the ball and allows you to move into position quickly.

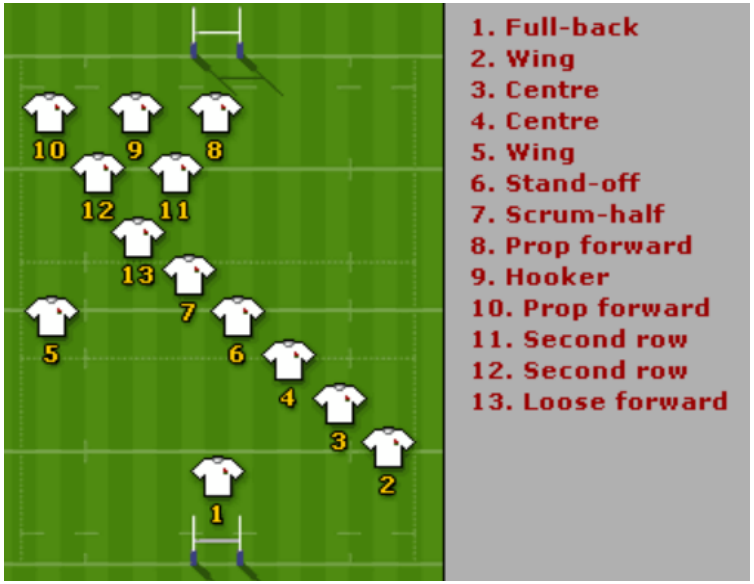
Fitness Components Required				
Speed	**Co-ordination**	**Stamina**	**Power**	**Flexibility**

PE-Rugby League

Key Vocabulary	
Try	A try is scored when a player touches the ball down over the line
Tackle	A safe tackle is below the shoulders
High Tackle	A tackle about the shoulders
Play the ball	Once you are tackled the player stands up and rolls the ball backwards with their foot
Knock on	When a player knocks the ball forward
Scrum	When a penalty, knock on or forward pass is given the game is restarted by a scrum
Conversion	Rugby conversion rules are a set piece of play which follow a try.

Skills	
Grip	The way you hold the ball when carrying the ball or passing
Carrying the ball	Running whilst holding the ball
Pass	Passing the ball behind you to a team mate
Tackling	Tackling a player with the ball by a front, side or behind tackle.
Kick	Kicking the ball





Rules

Rule 1	The winning team is the team who scores the most points
Rule 2	There are 13 players in a rugby league team
Rule 3	The ball must be passed backwards
Rule 4	The team with the ball have 6 chances (tackles)to score
Rule 5	To stop the other team you must perform a safe tackle
Rule 6	A player is offside when they are in front of his team member who has possession of the ball.

Scoring

Try = 4 pts
Conversation =2pts
Penalty = 2 pts
Drop kicks = 1pts

Fitness Components Required

Power **Agility** **Speed** **Muscular Endurance** **Stamina**

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