



LIONHEART
EDUCATIONAL
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THE CEDARS
ACADEMY
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Knowledge Organiser Booklet

Year 9
Summer Term

Ways to use your knowledge organiser

	Look, Cover, Write, Check	Self Quizzing	Mind Maps	Paired Retrieval	Definitions to Key Words
Step 1	<p>Look at and study a specific area of your knowledge organizer.</p> 	<p>Use your knowledge organizer to create a mini quiz. Write down questions using your knowledge organizer.</p> 	<p>Create a mind map with information from your knowledge organiser.</p> 	<p>Like self quizzing, use your knowledge organizer to create a quiz.</p> 	<p>Write down the key words and definitions.</p> 
Step 2	<p>Cover or flip the knowledge organizer over and write down everything you remember.</p> 	<p>Cover or flip the knowledge organizer over and answer the questions and remember to use full sentences and key words/vocabulary.</p> 	<p>Add pictures to represent different facts, knowledge. Try to categorise different areas in different colours.</p> 	<p>Ask a family member to ask you the questions and tell you which ones you get right and which ones you get wrong.</p> 	<p>Try not to use your knowledge organiser to help you.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Check your answers. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Try to make connections that link information together.</p> 	<p>Following the quiz, summarise which areas you got wrong and need to revise further.</p> 	<p>Use a different coloured pen to check you work and correct any mistakes you may have made.</p> 

'The combined works of Sassoon, Owen, Brooke and other poets of The Great War has come to be known as a sacred national text.' David Roberts
'My subject is war and the pity of war.' Wilfred Owen.

Wilfred Owen 1893 – 1918

Owen was influenced by the romantic poets of Keats, Byron, Shelly, Coleridge and Wordsworth.

Owen joined the British army in 1915. His first experience of the war was in hospitals treating the wounded soldiers - often without anaesthetic.

Wilfred Owen was invalided out of the army in 1916 suffering from shell shock and sent to Craiglockhart where he met Sassoon.

Owen returned to the front in 1918 and was killed in battle a week before Armistice. His parents received a telegram on Armistice day, as the bells were ringing in celebration at the end of the war.

Siegfried Sassoon 1886 – 1967

Sassoon joined the British Army as soon as it looked like World War 1 was imminent. In 1915 he was sent to France.

Siegfried Sassoon was an incredibly brave and effective soldier. He was nicknamed 'Mad Jack' for his courage. In 1916 he received the Military Cross for gallantry.

In 1917, following the death of one his friends, Sassoon refused to return to duty from leave. Rather than court martial a hero, parliament sent him to Craiglockhart.

Sassoon returned to the front line in 1918, but was shot in the head by a British soldier who thought he was a German. He returned to Britain to recover and left the army in 1919. He lived till he was 80.

Rupert Brooke 1887 – 1915

Brooke was described by Yeats as 'the most handsome man in England.'

Brooke joined the Royal Naval Division shortly before the outbreak of World War 1 and was sent to Belgium in 1914. In 1915, he set sail for the Dardanelles. On board ship he developed septicaemia from a mosquito bite. He was buried on a Greek island.

Brooke caught the optimism of the opening months of the war with his wartime poems, which expressed an idealism about war that contrasts strongly with poetry published later in the conflict.

Comparative Vocabulary

Additionally	Meanwhile
As well as	Nevertheless
At the same time	On the other hand
Compared to	On the contrary
Correspondingly	Yet
Furthermore	However
Just as	Nonetheless
Likewise	In contrast
Moreover	Unlike
Similarly	Even so
Despite that	Conversely
Although	Even though

Context of the Great War

World War 1 went from 28 July 1914 – 11th November 1918. It was a global conflict involving the main European powers and their empires.

When war broke out, Britain had a small army of around 250,000 professional soldiers. Lord Kitchener, Secretary of State for War told the government that Britain needed at least one million men. The government began a massive recruitment drive. In the first month over 500,000 men had signed up. By March 1916 over 2.5 million men had volunteered to join 'Kitchener's Army'.

The recruits famously thought the war would be a fun adventure and they would be home by Christmas. WW1 was predominantly fought in the trenches. Trenches were long, narrow ditches dug into the ground where soldiers lived all day and night. In the middle, was No Man's Land, so-called because it did not belong to either army. Trench warfare was harsh and the soldiers endured appalling conditions.

Devastating new technologies and weapons including mustard gas were used.



Mental health issues were not recognised and deserters were often shot by a twelve-man firing squad. Between 1914 and 1918 the British Army identified 80,000 men with what would now be defined as the symptoms of shell shock.

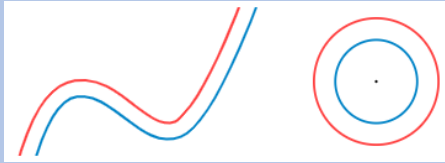
Famous War Poems

Homer, **The Iliad** 8th Century BC
 Anonymous **The Battle of Maldon**
 Anglo Saxon
 Tennyson **The Charge of the Light Brigade** 1854
 Hardy **Drummer Hodge** 1899
 Brooke **The Soldier** 1914
 McRae **In Flanders Fields** 1915
 Graves **Two Fusiliers** 1917
 Sassoon **The Hero** 1917
 Owen **Exposure** 1917
 Douglas **Aristocrats** 1943
 Hughes **Bayonet Charge** 1957
 Duffy **War Photographer** 2004
 Turner **The Hurt Locker** 2005



Year 9 War Poetry Vocabulary Lists

civilian	terrain	ceremonial	honourable
futile	brutal	patriotic	sacrifice
grim	accusation	victorious	triumph
introspective	coward	participated	aftermath
dispute	discharged	commemorate	scepticism
state	wounded	sacred	virtue
poignant	glorious	propaganda	trudge
dialect	fallen	pride	trauma
dugout	atrocities	enlist	noble

<p>Line</p>	<p>A straight entity that has no thickness and extends in both directions without end (infinitely).</p> 
<p>Line segment</p>	<p>A line with two ends</p>  <p>When it does have ends it is called a "Line Segment".</p>

<p>Parallel</p>	<p>Lines, curves, surfaces that are always the same distance apart and will never meet.</p> 
<p>Perpendicular</p>	<p>A line that is at right angles to another line.</p>
<p>Intercept</p>	<p>To cut a line, curve or surface with another.</p>

<p>Definition</p> <p>Latin: <i>in-</i> 'not' <i>æquus</i> 'even, level'</p> <p>Relationship between two expressions that are not equal.</p>		<p>Characteristics</p> <p>Expressions can be connected with the following signs:</p> <ul style="list-style-type: none"> » $>$ Greater than [exclusive] » \geq Greater than or equal to [inclusive] » $<$ Less than [exclusive] » \leq Less than or equal to [inclusive] » \neq Not equals to 	
<p>Examples</p> <p>$5 > -2$</p> <p>$x \leq 12$</p> <p>$-3 < y \leq 5$</p> <p>$x < -1, x \geq 8$</p> <p>$a \neq b$</p> <p>$2x - 7 < x + 6$</p>	<p>Inequality</p>		<p>Non-examples</p> <p>$x = 5$</p> <p>$4x = 2x + 5$</p> <p>$-5 > -1$</p>

Linear	To form a [straight] line.
Simultaneous	To happen at the same time.
Intercept	To meet at. 
Intersect	To cross over. 
Intersection	The point where two lines cross.

Inequality	A relationship between two expressions that are not equal.
Region	The section of the coordinate grid that is defined by the inequality.
Axis	A fixed reference line. <i>Plural 'axes'.</i>

Definition

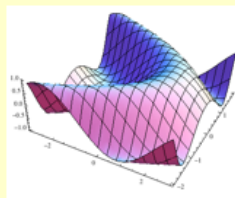
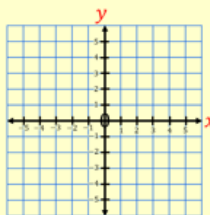
A diagram showing the relationship between (two) variables

Characteristics

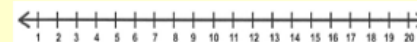
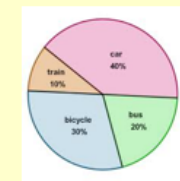
- » Two perpendicular number lines
- » Graphs are a subcategory of chart
- » Adjective: graphical
- » Can have 3 variables/lines in a 3D graph!

Graph

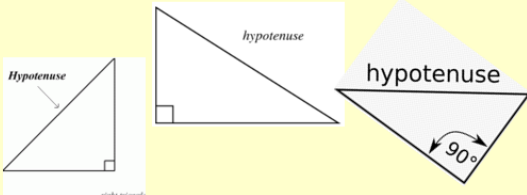
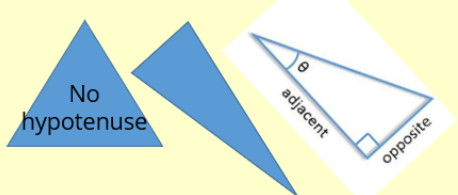
Examples



Non-examples



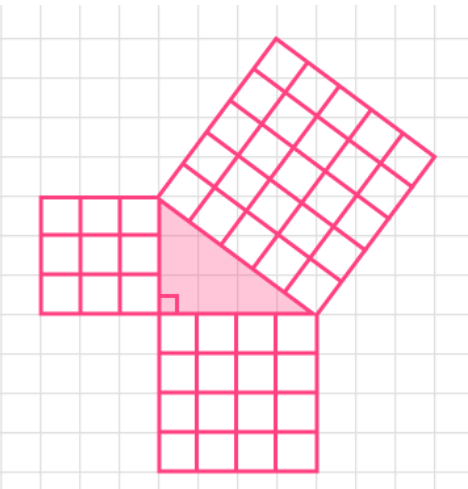
Theorem	A statement that has been proved or can be proved.
Mathematical proof	An argument for a mathematical statement, showing that the stated assumptions logically guarantee the conclusion.

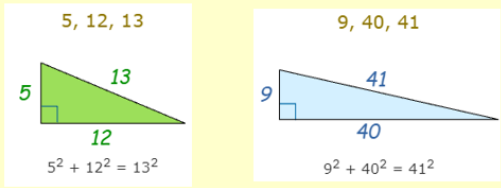
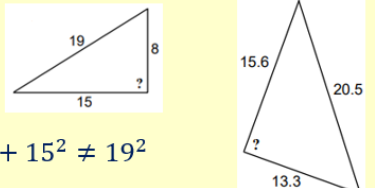
Definition	The longest side in a right-angled triangle, located opposite the right angle	Characteristics	» It can be calculated when the two shorter sides in the right-angled triangle are known using Pythagoras' theorem
Examples		Non-examples	

Hypotenuse

Pythaoras' Theorem

In any right-angled triangle, the square on the hypotenuse is equal to the sum of the squares on the two shorter sides

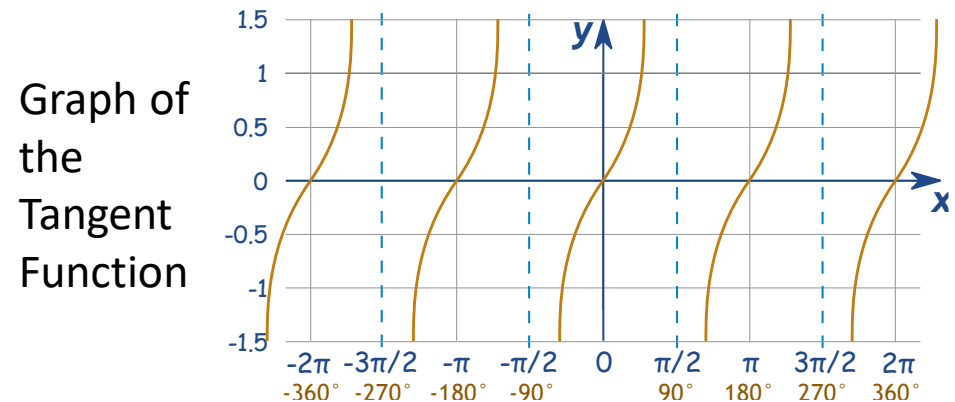
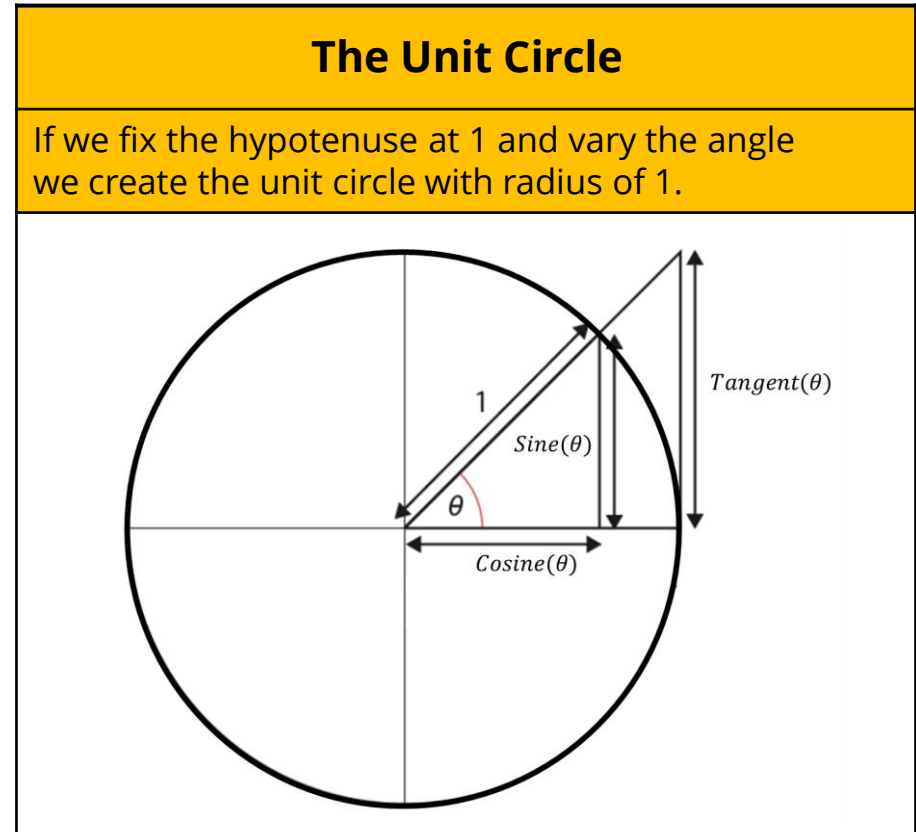
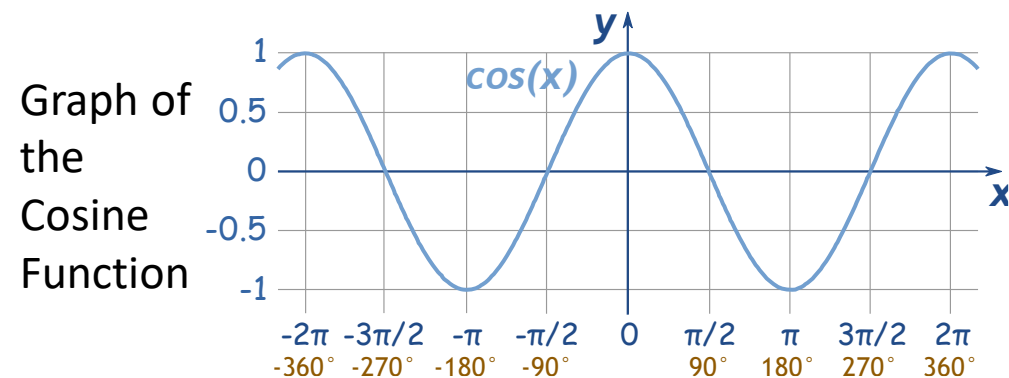
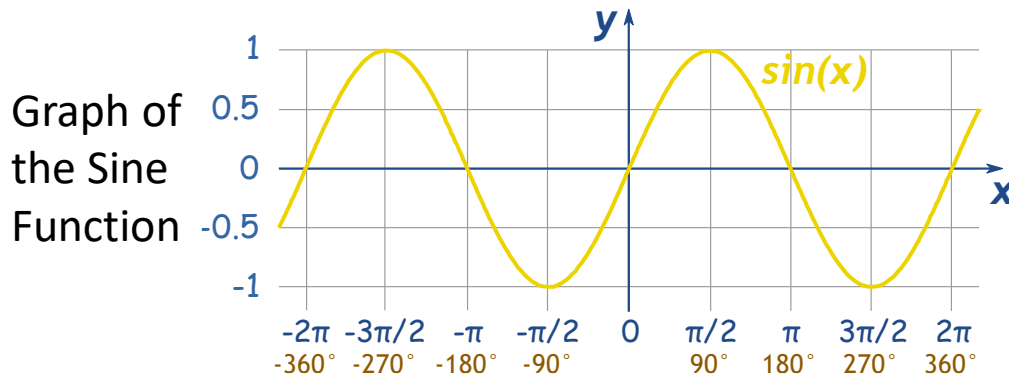
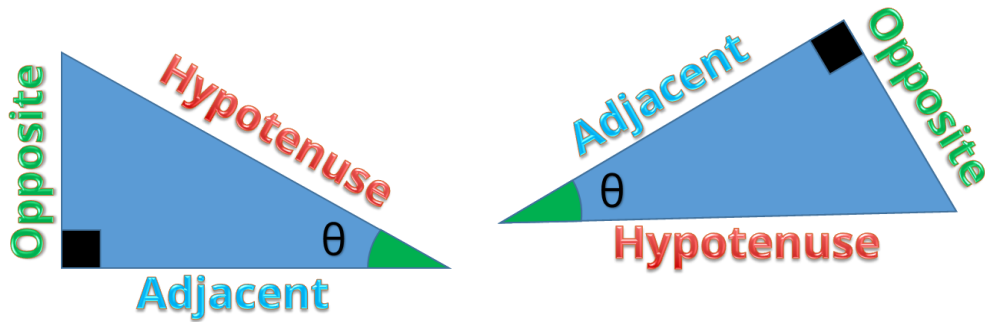


Definition	When three positive integers, a , b and c satisfy Pythaoras' theorem	Characteristics	<ul style="list-style-type: none"> » If the sides of triangles form a Pythagorean triple, the triangle must be right-angled » Not all right-angled triangles' side lengths form Pythagorean triples, as the lengths must be integers
Examples		Non-examples	

Pythagorean Triple

Pythagorean triple	When three positive integers, a , b and c satisfy Pythaoras' theorem
Co-prime	Two positive integers are co-prime if they have no common factor other than 1.
Primitive Pythagorean triples	Pythagorean triples where the numbers are co-prime to each other.

Adjacent	The side adjacent (next to) a given angle.
Opposite	The side opposite the given angle.





Section 1: Microscopy

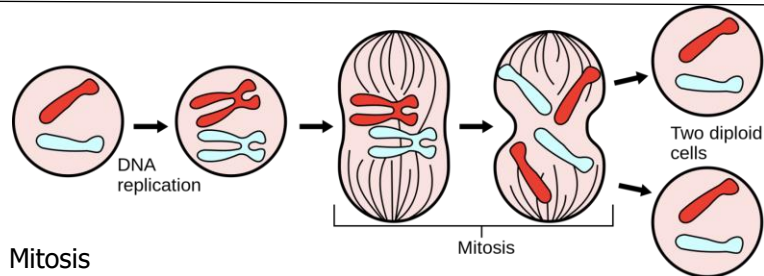
Magnification	The degree by which an object is enlarged . Magnification = $\frac{\text{size of image}}{\text{size of real object}}$
Resolution	The ability of a microscope to distinguish detail .
Light microscope	Basic microscope with a maximum magnification of 1500x. Low resolution.
Electron microscope	Microscope with a much higher magnification (up to 500 000x) and resolving power than a light microscope. This means that it can be used to study cells in much finer detail.

Section 2: Orders of Magnitude

Unit Prefix	Size in metres	Standard Form
Centimetre (cm)	0.01m	10^{-2}m
Millimetre (mm)	0.001m	10^{-3}m
Micrometre (μm)	0.000001m	10^{-6}m
Nanometre (nm)	0.000000001m	10^{-9}m

Section 3: Mitosis and the Cell Cycle

Number of sub-cellular structures (e.g. ribosomes and mitochondria) increase .
Number of chromosomes double .
One set of chromosomes is pulled to each end of the cell.
The nucleus divides .
Cytoplasm and cell membranes divide to form two identical cells

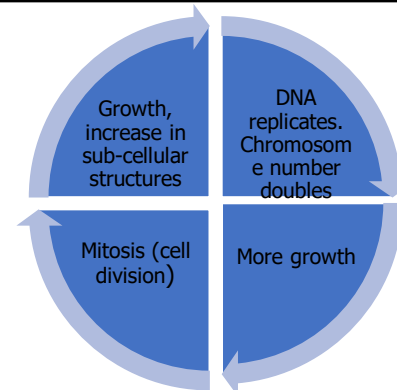


Section 4: Stem Cells

Stem Cell	Properties	Uses
Embryonic stem cell	Can divide into most types of cell.	Therapeutic cloning – embryonic stem cells produced with same genes as patient. No rejection.
Adult stem cell	Can divide into a limited number of cells e.g. bone marrow stem cells can form various blood cells.	
Meristem	Found in plants. Can differentiate (divide) into any type of plant cell.	Clone rare species to prevent extinction . Crops with special features can be clones

Pros and Cons of Using Stem Cells

Pros	Treatment of diseases such as diabetes, dementia and paralysis.
Cons	Ethical and religious objections. Can transfer viruses held within cells.





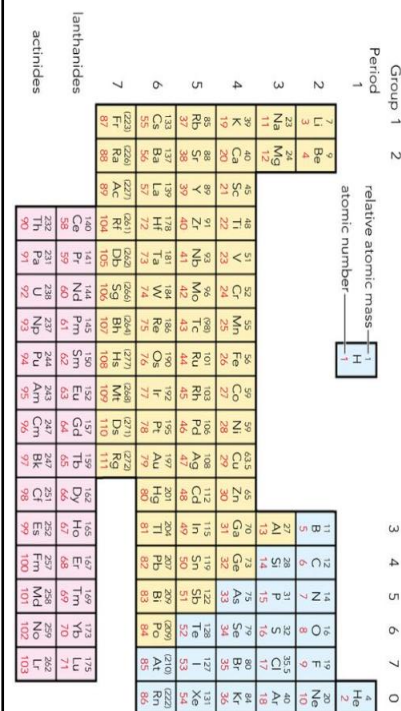
Section 1: Periodic Table

Group	Elements in the same vertical column are in the same group. Elements in the same group have the same number of electrons in their outer shell , and therefore similar properties .
Period	Elements in the same horizontal row . The atomic number increases by one moving across the period from left to right.
Metal	Elements that react to form positive ions (except Hydrogen). Left and centre of periodic table
Non-Metal	Elements that react to form negative ions. Right hand side of periodic table.
Mendeleev	Was able to make a relatively accurate periodic table by leaving gaps for undiscovered elements and re-arranging some elements (Mendeleev could only measure relative atomic mass, not atomic number). Hence he arranged the elements in order of mass number and predicted the properties of the elements in the gaps

Section 2: Groups of the Periodic Table

Sub-atomic particle	Properties	Trends	Reactions
Group 0 (Noble Gases)	Unreactive and do not form diatomic molecules .	Boiling point increases going down the group .	Very unreactive because they have full outer shells .
Group 1 (Alkali Metals)	Reactive because they can easily lose their one outermost electron. Always form ionic compounds Low density	Reactivity increases going down the group . Melting points and boiling point decrease going down the group .	With water: Metal + water → Metal hydroxide + hydrogen With oxygen: Metal + oxygen → Metal oxide With chlorine: Metal + chlorine → Metal chloride
Group 7 (Halogens)	Low melting points and boiling points. Poor conductors of heat and electricity. Form diatomic molecules	Reactivity decreases going down the group . Boiling point and melting point increase going down the group .	A more reactive halogen can displace a less reactive halogen from a solution of its salt. Chlorine + sodium bromide → sodium chloride + bromine

Elements in the modern periodic table are **arranged by atomic (proton) number**.



Group – Vertical column
Period – Horizontal Row
Metals are on the left, non-metals on the right.



Physics Topic P2 Energy transfer by heating

Section 1: Key terms

Thermal conductivity	A measure of how good something is at transferring heat by conduction .
(Thermal) Insulator	Thermal insulators reduce energy transfers (prevent heat loss to surroundings and hence have a low thermal conductivity)
Good thermal Conductor	Good at transferring heat energy by conduction.
Specific heat capacity	The specific heat capacity of a substance is the amount of energy needed to change the temperature of 1kg of the substance by 1°C . Its units are J/kg/°C
Joulemeter	Energy meter (measures energy supplied)

Section 2: Energy transfer by conduction

The higher the thermal conductivity of a material the **higher the rate of energy transfer by conduction** across the material.

Metals	Metals are the best conductors of heat energy, Copper is a better conductor than steel.
Non-metals	Non-metal material (like wool and fibreglass) are the best insulators .

Factors affecting insulation

Thickness of material	The thicker the material the better the insulation .
Thermal conductivity	The lower the thermal conductivity the better the insulator .

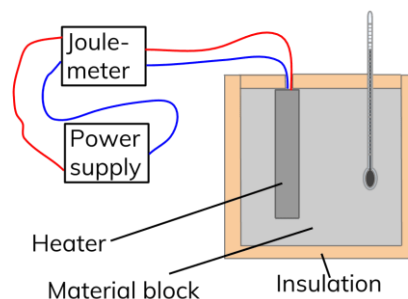
Section 3: Specific heat capacity

Putting the same amount of heat into some materials gives a bigger temperature rise than in other materials. The specific heat capacity of a substance is the **energy needed to raise the temperature** of a mass of **1kg** by a temperature of **1°C**.

Investigations show that when a substance is heated, its temperature rise depends upon three factors:

Amount of energy supplied to it	Temperature increases more as more energy is supplied.
Mass of the substance	The greater the mass the more slowly its temperature increases when its heated .
What the substance is	Metals tend to have lower specific heat capacities than non-metals . Water has a high specific heat capacity . Hence it takes less energy to raise the temperature of a block of aluminium metal by 1°C than it takes to raise the temperature of the same mass of water by 1°C.

Measuring specific heat capacity



A metal block of **known mass** is heated. A **joulemeter** is used to **measure the energy** supplied ΔE and a **thermometer** to **measure the temperature rise $\Delta \theta$** .

The measurements are then inserted into the equation and used to calculate the specific heat capacity:

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

Energy (J) Mass (kg) Specific heat Capacity (J °C⁻¹ kg⁻¹) Change in temperature (°C)

Storage Heaters

Storage heaters **use electricity at night** (off peak hours) to **heat special bricks** (which have a high specific heat capacity). The bricks **store** lots of **energy** and **take time** to heat up and cool down. Hence during the day (peak hours) they **release heat slowly** when **the heater element is off** and cool down over a **longer time**.



Section 4: Heating and insulating buildings

Homes are heated by electric or gas heaters, oil or gas central heating systems or solid fuels in stoves or fireplaces. A **poorly insulated house loses more energy** and so **costs more** to heat. It also means that **more carbon dioxide** is released into the environment.

How to prevent heat loss from a house

Loft insulation	Contains fibreglass which traps air, reducing convection . Air is a good insulator .	
Cavity wall insulation	Traps air pockets in gaps which is a good insulator	
Double glazed windows	Traps air in gaps between glass .	
Aluminium foil behind radiators	Reflects radiation .	
External walls with thicker bricks	Thicker bricks have a lower thermal conductivity .	

Section 5: Infrared radiation Key terms (Triple only)

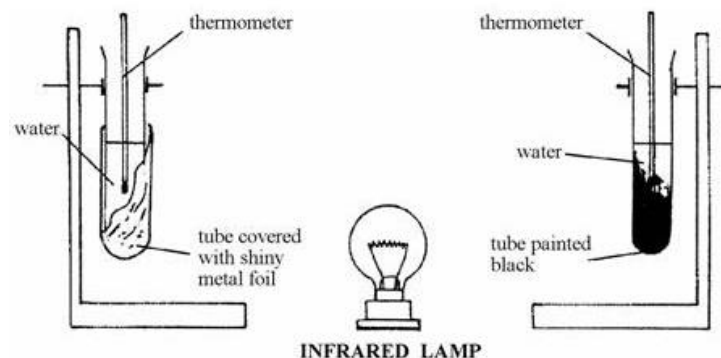
Electromagnetic radiation	Transverse waves that travel at 300,000,000 m/s . Includes radio, microwave, infrared, visible, ultraviolet, X-ray and gamma waves.
Infrared radiation	An electromagnetic wave . Emitted by warm objects . Also known as heat or thermal radiation.
Black body	A body that absorbs all the radiation that hits it.
Black body radiation	The radiation emitted by a perfect black body
Greenhouse gases	gases that contribute to the greenhouse effect by absorbing infrared radiation

Section 6: Infrared radiation (Triple only)

The Sun emits all types of electromagnetic radiation. Infrared radiation consists purely of electromagnetic waves of a certain range of frequencies. The **hotter** an object is, the **more infrared radiation** it **emits in a given time**.

What happens to infrared waves when they strike different surfaces.

Dark matt surfaces absorb infrared radiation much **better** than light glossy surfaces, **silvered surfaces reflect** nearly all heat radiation falling on them. **Dark matt surfaces** also **emit more infrared radiation**.



In the experiment above, the infrared lamp **radiates energy** to the test tubes. The **black painted tube absorbs** most of the energy (and **its temperature increases faster**) whereas the **shiny foil reflected** most of the energy that reached it.

Absorption and emission of infrared radiation

The **temperature** of an object **will increase** if it **absorbs more radiation than it emits**.

The **Earth's temperature depends** on a lot of factors like the **absorption of infrared radiation**. **Greenhouse gases** in the atmosphere (CO_2 , CH_4 & H_2O) **absorb infrared radiation preventing it escaping** into space. This **process** is known as the **greenhouse effect** and **makes the Earth warmer** than it would be if these gases were not present in the atmosphere.



Year 9 History: Knowledge Organiser – World War Two (1939-1945)

Key Dates

11 November 1918	Armistice declared. End of World War One.
June 1919 & Jan 1920	Treaty of Versailles signed and ratified.
October 1929	Wall Street Crash. Start of Great Depression.
January 1933	Adolf Hitler becomes Chancellor of Germany.
August 1934	Adolf Hitler becomes Führer of Germany.
1935	Hitler reintroduces conscription.
March 1936	Hitler marches into the Rhineland.
March 1938	Hitler annexes Austria (Anschluss).
September 1938	Munich Agreement. Chamberlain's 'Peace in our time' statement. Hitler takes over the Sudetenland.
March 1939	Hitler takes over the whole of Czechoslovakia.
August 1939	Hitler and Stalin sign the Nazi-Soviet Pact (sometimes called the Molotov-Ribbentrop Pact)
September 1939	Hitler and Stalin invade Poland. Britain declares war on Germany.
May-June 1940	Hitler invades France. France surrenders. Britain retreats at Dunkirk.
June 1941	Operation Barbarossa sees German troops invade the USSR (Russia).
December 1941	Japanese bomb Pearl Harbour in Hawaii. USA enters the war.
January 1943	Germany loses the Battle of Stalingrad in the USSR and El Alamein in North Africa. The tide turns.
6 June 1944	D-Day landings
7 May 1945	Germany surrenders. Victory in Europe (VE).
2 September 1945	Japan surrenders. Victory in Japan (VJ).

Key Words

Cause - An event which makes another event happen

Long-term cause - A cause which took place a long time ago / had been taking place over a long time.

Short-term cause - A cause which happened just before the event it triggered e.g. assassination of Franz Ferdinand.

Anschluss - Term meaning that Germany and Austria were united. This was forbidden under the Treaty of Versailles.

Conscription - Forcing men to join up to the armed forces.

Czechoslovakia - Country which existed from 1918-1993. It included Czechia/Czech Republic and Slovakia.

D-Day - Day when British and US troops invaded France to fight the Nazi forces and liberate Europe.

Dunkirk - Famous retreat for the British where soldiers had to flee France in whatever boats they could find.

Führer - literally means 'leader'. Nazis would call Hitler their leader.

Great Depression - Economic crash of the 1930s which resulted in unemployment, hunger and homelessness throughout the world.

Nazi-Soviet Pact - treaty between Hitler (Germany) and Stalin (USSR/Russia) which agreed they would both invade and split Poland down the middle at the Oder-Niese line.

Operation Barbarossa - Name of the Hitler's invasion plan of the USSR (Russia).

Terms - The rules which have to be followed in a peace treaty.

Treaty of Versailles - Peace treaty signed after World War One. The terms were very harsh to Germany.

Wall Street Crash - Event in the USA where the stockmarket crashed. This created the Great Depression.

Key People

Woodrow Wilson - President of the USA 1913-1921. Attempted to create peace during and after WW1.

George Clemenceau - Prime Minister of France 1917-1920. Wanted to destroy Germany through Treaty of Versailles.

David Lloyd George - Prime Minister of Britain 1916-1922. Wanted to balance punishing Germany and fighting off the threat of communism in Europe.

Adolf Hitler - Austrian leader of the Nazi Party from 1921 and of Germany from 1933-1945. Failed artist, soldier in WW1, responsible for the Holocaust.

Joseph Stalin - Leader of the USSR (Russia). Ally of Germany from 1939-1941 and then of Britain and the USA 1941-1945.

Neville Chamberlain - Prime Minister of Britain from 1937-1940. Famous for policy of Appeasement and mistakenly claiming he had 'Peace in our time' with Hitler.

Winston Churchill - Prime Minister of Britain from 1940 -1945. Famous for his 'we will fight them on the



Year 9 History: Knowledge Organiser – World War Two (1939-1945)

Causes of WW2

Treaty of Versailles

- Germany was forced to accept the Treaty. They called it the Diktat.
- Germany had to pay £6.6 billion in reparations to Britain and France; they were not allowed an air force, submarines or tanks; they were only allowed 100,000 soldiers.
- Germany lost a lot of land e.g. Alsace-Lorraine which went to France; Posen which went to Poland; and the Sudetenland which went to Czechoslovakia. Germany was not allowed to march troops into the Rhineland as this was meant to be demilitarised.
- The League of Nations was set up as part of the Treaty of Versailles. Ultimately it failed to prevent war because it had little power.

The Great Depression

- The Wall Street Crash in 1929 created the Great Depression. Millions worldwide were unemployed, homeless and hungry. This led to the growth of extremism.
- In Germany the Nazi Party became more popular, allowing Hitler to become Chancellor of Germany in January 1933 and later supreme leader (Führer) of Germany.

Appeasement

- During the Great Depression, Britain and France were focused on the suffering of their own people and the threat of strikes. This meant they cut back on defence spending.
- The policy of Appeasement meant that Britain and France tried to give Hitler some of what he wanted in the hope they could prevent war.
- They allowed him to march into the Rhineland in 1936, to unite with Austria in 1938, and gave him the Sudetenland in 1938. All of this just increased Hitler's belief that no-one would stop him.

Nazi Soviet Pact

- Stalin, the leader of the USSR (Russia) had tried to ally with Britain and France but they spurned him.
- Instead he signed an agreement with Hitler in 1939 which agreed they would not attack each other and would split Poland.

Key Words

Armistice – An agreement to stop fighting/ceasefire.

ATS – Auxiliary Territorial Service. Women's branch of the army. Not allowed to fight on frontline but fulfilled nearly all other roles.

Blitzkrieg – German war tactic to attack quickly and with maximum force to overrun the enemy

The Blitz – The bombing of Britain by Germany, particularly in London and other cities like Leicester, Birmingham and Coventry.

Demilitarised – No German soldiers were meant to be allowed this area.

Diktat – The German name for the Treaty of Versailles. It had been dictated (forced upon them).

Dominions – Countries in the British Empire who decided to join the war or not. There were self-governing dominions such as Australia and those who were controlled by London such as India.

League of Nations – Forerunner of the United Nations. Countries were meant to join and to discuss their problems rather than resort to war.

Maginot Line – Line of defences built up by France to attempt to prevent a German invasion

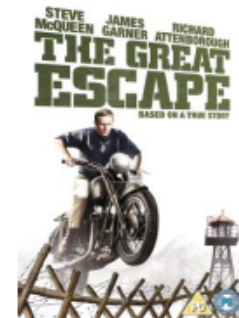
RAF – Royal Air Force – the air force in Britain made up of British but also a number of Polish airmen.

RIAF – Royal Indian Air Force.

Rhineland – An area of Germany which bordered France.

Stab in the Back Myth – Myth spread by the Nazis that Germany could have won WW1.

WAAF – Women's Auxiliary Airforce. Included female pilots who would deliver aircraft as well as fulfilling administrative roles.



These films have been selected as they are Certificate 12 or under. Please be aware that they may still have distressing scenes and it is advised parents watch all films before showing them to their children to assess their appropriateness.

Year 9 History: Knowledge Organiser – World War Two (1939-1945)

The Phoney War

- Despite Britain's declaration of war on Germany in September 1939 there was very little fighting from then until May 1940.
- 9th May 1940 the Phoney War ended with the invasion of France.

French Defeat

- Germany used the tactic of Blitzkrieg to attack fast and hard when the French were least expecting it.
- The French had set up the Maginot Line of defences along their German border but these were useless against the German attack through the Netherlands and Belgium.
- The Germans used their Panzer units to quickly overwhelm allied forces.
- By 16th May 1940 the key French city of Sedan had fallen to the Germans. The British ordered a retreat after they failed at Arras.
- From 26th May to 4th June 1940 the British forces retreated from Dunkirk – over 338,000 soldiers fled to Britain, leaving France on its own.
- On 25th June France surrendered and became ruled by the Vichy Government.

The Battle of Britain

- From 10th July to 31st October 1940 Hitler's air force tried to invade Britain. They were fought off by the RAF.

The Blitz

- London and other major cities were bombed by Hitler's forces during WW2.
- Many children were evacuated from cities like London to the countryside to protect them.

Home Front

- Britain's Home Front included women taking on men's roles like fire-fighters, Air Raid Patrol (ARP) wardens, as well as non-combat military roles.
- Rationing was also a feature of life on the Home Front due to German blockades of food supplies. The Women's Land Army was set up to deal with this crisis. Items like clothes and shoes were also rationed.

Key Words

Evacuation – Sending of children from the cities to the countryside to protect them from bombings by German aircraft.

Panzer – German tank, heavily armoured.

Vichy France – The area of France run by the French government which had surrendered to the Germans.

The Role of India

- Over 2.5 million Indian men (Muslims, Hindus and Sikhs as well as other religions) volunteered to serve Britain in WW2.
- Many fought against the Japanese in Burma but also in North and East Africa, Italy and Greece.
- The Royal Indian Air Force fought against Japanese pilots and the Royal Indian Navy fought in the North Atlantic and Mediterranean against Germany and Italy. There were 40,000 Indian servicemen in the British Merchant Navy.

The West Indies

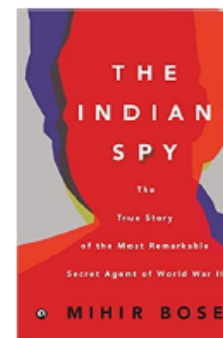
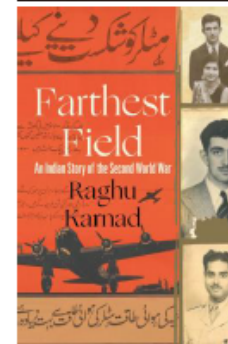
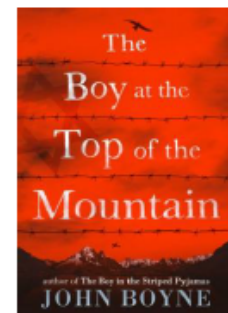
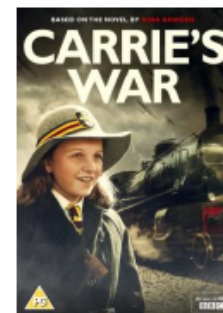
- Thousands of men from British colonies in the Caribbean such as Jamaica volunteered to fight.
- However, many Black men were not allowed to fight in the British army.
- Approximately 5,500 West Indian RAF personnel came to fight for Britain 1944-1945. West Indian women also served in the WAAF.

Other countries

- 629,000 soldiers came from Canada; 413,000 from Australia; 136,000 from South Africa; 128,500 from New Zealand.

VE & VJ Day

- Germany surrendered 7th May 1945 soon after Hitler's suicide. Japan on 2nd September 1945 after the USA dropped the atomic bomb.



These books have been selected to give a range of choices. The top two are fiction for children; the other four are history books for adults so will deal with adult themes.

The good news is that more books have been written on WW2 than anything else – so go wild in your local library or bookshop!



Key Dates

70 CE (AD)	The Romans attack Jerusalem. Many Jewish people are forced to flee to other countries.
1190	The whole Jewish community in York (around 150 men, women and children) are herded into Clifford's Tower and burned alive.
1290	King Edward I forces Jewish people out of England
1346-1353	The Black Death hits Europe. Many Jewish people are falsely blamed for spreading it and are murdered.
1596-1598	Shakespeare writes <i>The Merchant of Venice</i> which demonises a Jewish character, Shylock.
1837-1839	Charles Dickens writes <i>Oliver Twist</i> . He includes a Jewish character, Fagin, who is a thief and a murderer and who forces boys to steal from people.
1880s	Alexander II, Tsar of Russia, encourages people to murder Jewish people and burn their houses to force them out of the country.
1914-1918	First World War. Adolf Hitler is a Lance Corporal in the Bavarian Army.
1919	Treaty of Versailles signed by Germany's government. Adolf Hitler joins the German Workers' Party (DAP).
1921	Adolf Hitler takes over the DAP, re-names it the Nazi Party and submits his 25 Points.

Key Words



Holocaust – The word comes from the Greek meaning a 'burnt offering'. Jewish people in the years before the Roman attack on Jerusalem in 70CE used to burn offerings to God. This term is considered highly offensive by many Jewish people as it implies that God was pleased with the murder of the Jews by the Nazis.

Shoah – The word comes from Hebrew and means 'catastrophe' or a terrible tragedy'. This is the term that many Jewish people prefer to use as it more closely expresses the impact the murder of 6 million Jewish people by the Nazis had.

Unfortunately, many academic texts, documentaries and popular culture references still use the term Holocaust so we include it in our unit for ease of reference and to acknowledge that other groups of people were also murdered at this time.

Anti-Semitism – Hatred of Jewish people, Jewish culture, and Jewish religion.

National Socialist German Workers Party (Nazi Party) – Full name for the political party led by Adolf Hitler from 1921-1945.

Treaty of Versailles – Treaty signed by the German government in 1919 which punished Germany for World War One.

Armistice – The ceasefire signed by Germany on 11th November 1918 which ended World War One.

Stab in the Back myth – Belief spread by Hitler and the Nazis that Germany could have won the war but it was betrayed when the German government signed the Armistice and the Treaty of Versailles. Hitler blamed Jews and communists for this.

Communists – A group of people who believe that wealth should be shared out equally by the government. Some high-profile communists in Russia were Jewish so Hitler lumped them all together.

Key People

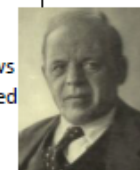
Adolf Hitler – Soldier in World War One. Leader of the Nazi Party from 1921-1945. Chancellor of Germany from 1933 and Führer of Germany from 1934-1945.



Heinrich Himmler – Leader of the SS (Hitler's private bodyguard and later his toughest and most loyal troops). The SS guarded concentration camps and carried out the mass murder of Jewish people.



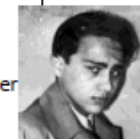
Hayim Nahman Bialik – Jewish poet who called for Jews to resist their persecution. Lived in Germany so saw anti-Semitism first hand. Died in 1934. Now Israel's national poet.



Ernst von Rath – Nazi diplomat assassinated in Paris 9th November 1938. His death was used as an excuse for Kristallnacht.



Herschel Grynszpan – 17 year old Polish Jewish teenager who shot Ernst von Rath.



Dr Karl Brandt – Hitler's personal doctor and the creator of the T4 programme which murdered 300,000 disabled and mentally ill patients.



Year 9 History Knowledge Organiser – The Holocaust / Shoah 1933-1945

Key Dates

1929	Wall Street Crash plunges Germany and the rest of the world into the Great Depression.
1933	The Nazi Party win the elections and Hitler becomes Chancellor of Germany. Persecution of Jews and other groups begins.
1934	Hitler becomes Führer of Germany. He now has complete power to make laws and imprison opponents.
1935	The Nuremberg Laws exclude Jewish people from citizenship in Germany.
1936	Berlin Olympics includes one Jewish person, Helene Mayer, on the German team.
1938	Kristallnacht – synagogues are burnt, and over 30,000 Jewish men and boys arrested and sent to concentration camps.
1939	Hitler invades Poland. The T4 programme starts – murdering 300,000 mentally ill and physically disabled people.
1940	Hitler invades France and Holland. Warsaw ghetto founded with more than 460,000 Jewish people imprisoned there.
1941	The Final Solution is created, authorising the systematic murder of 6 million Jewish people. The Nazis also continue the systematic murder of disabled, homosexual, Slav, Gypsy, Roma, Traveller communities throughout Europe.
1945	Hitler commits suicide. WW2 ends.
1945-1946	Nuremberg Trials.

Key Words

Twenty Five Points – Hitler's manifesto for the Nazi Party. It included anti-Semitic ideas such as 'no Jew can be a citizen of Germany'.

Mein Kampf – Hitler's autobiography written in 1924 which laid out his theories about the purity of race and how to murder Jewish and other people he thought were 'undesirable'.

Untermensch – Term used by the Nazis to describe anyone they believed was inferior to them.

Aryan – The 'pure' German race, according to the Nazis. They would have blonde or light brown hair and usually have blue or green eyes.

Slavs – Ethnic group who live in Eastern Europe including in Poland, Czechoslovakia and Russia. Hitler believed they were inferior.

T4 Aktion Programme – Systematic murder of people who were mentally ill, had severe learning difficulties, or who were physically disabled. It ran from 1939-1941 in Germany but continued throughout the war in other countries. People were murdered in their own hospitals by their doctors and nurses.

Final Solution – Known as the 'Final Solution to the Jewish Question' – a decision reached in 1941 (although confirmed in 1942 in the Wannsee Conference) that Jewish people (and other 'untersmensh') should be destroyed in concentration camps.

Zyklon B – The gas used to exterminate people in the gas chambers in death camps such as Auschwitz-Birkenau.

Concentration Camp – a prison camp used to imprison people who opposed Hitler and exploit them as workers to keep the war effort going.

Death /Extermination Camp – a prison camp, like a concentration camp, but established with the aim of murdering people.

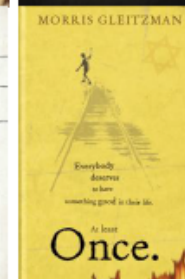
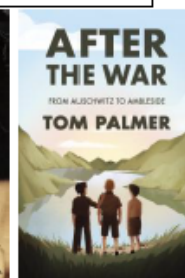
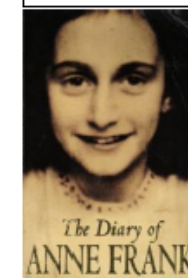
Auschwitz-Birkenau – most notorious camp in Poland, near Krakow. Approximately 1.1 million people were murdered here.

Key People

Annalies (Anne) Frank – German Jewish teenager who left a diary describing her experience of having to hide from the Nazis in an attic in Amsterdam, the Netherlands. She died in Auschwitz in 1945.



Sophie Scholl – German student and leader of the White Rose Gang which spread anti-Nazi leaflets in Munich. She was executed in 1943 by shooting.



These books have been selected as suitable for children aged 11-14 years. However, there will be parts of these books which can distress and lead to big and difficult questions. It is recommended that parents read and discuss these with their children.

Year 9 History Knowledge Organiser – The Holocaust / Shoah 1933-1945

Key Words

Einsatzgruppen – Groups of soldiers (often middle-aged and some former police officers) chosen to exterminate Jewish and other ‘undesirable’ people as the Nazis marched further into Eastern Europe.

Euthanasia – ‘Mercy killing’ – the Nazis believed that killing people who were ‘undesirable’ or members of the ‘*untersmensch*’ was a mercy.

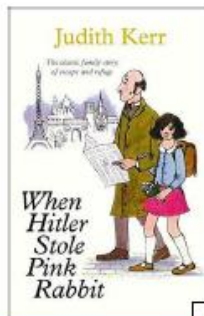
Fascism – The belief of the Nazis (and of the Italian government under Mussolini and the Spanish government under Franco during WW2) that war was good, men should be strong and brutal, and women should have children and stay at home. It also believed in the elimination of ‘inferior’ groups.

Gestapo – The Nazi secret police who would round up opponents and groups of people considered ‘*untersmensch*’.

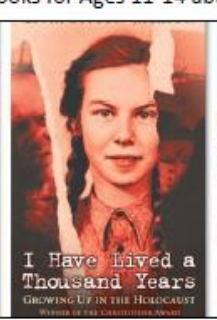
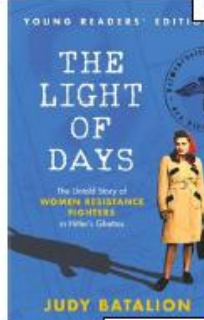
Ghetto – Area in a city, such as Warsaw in Poland, used to concentrate Jewish people into one area and starve them or work them to death. Warsaw Ghetto was founded in 1940 and cleared in 1943 with its inhabitants being sent to extermination camps.

Resettlement – moving people to another location. This is what the Nazis claimed they were doing so that Jewish people did not panic. In actual fact they were being sent to extermination camps.

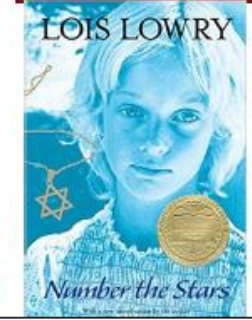
LGBTQ+ - Stands for Lesbian, Gay, Bisexual, Trans, Queer plus other groups. The Nazis wanted to eliminate anyone who was not heterosexual and willing to act in a way which fitted the Nazi’s view of how men or women should behave. We don’t have exact figures but it is estimated that around 50,000 people were exterminated by the Nazis. The majority of these were gay men.



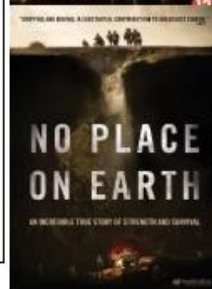
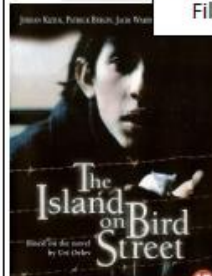
Books for Ages 11-14 about the Holocaust



Maus is a controversial graphic novel which tells the story of the Holocaust by a man trying to collect his father’s memories. Some people have praised it for its ability to present the humanity while rendering the people as animals. Some people have found it impossible to get past this.



Films with 12, PG or U Certificate. This does not mean they are without distressing themes



AFRICA IS NOT A COUNTRY.

Key Vocabulary

Triangle of Trade	The journey of exchange made of goods and slaves between Europe, the Americas and Africa.
Colonisation	The action or process of taking over control over local people of an area.
Cash crops	A crop produced for its commercial value rather than for use by the grower.
Migrate	To move from one region or habitat to another according to seasons.

Natural Resources

Africa is rich in natural resources:

- It exports 16% of the world's uranium, used to produce nuclear energy.
- In 2011, Africa produced more than half of the world's diamonds and nearly 75% of the world's platinum.
- Africa has 10% of the world's oil and gas reserves.
- Africa is rich in forests, a source of major hardwoods.
- Nigeria and Libya are 2 of the leading oil producing countries in the world.

The History of Africa.

The Slave Trade

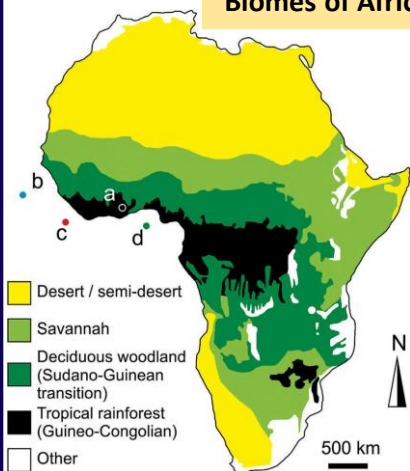
- Between the 1600's and the 1800's, 12-15 million Africans were sold into slavery.
- Europeans bought people in West Africa in exchange for goods, developing a triangle of trade.
- Slavery was abolished from 1833.

The Legacy of Colonisation.

- African countries began to gain their independence from Europe in the 1960's.
- Many countries have found the road to a strong and stable nation difficult.
- The wealth of natural resources continues to be over-exploited by European business.
- The best agricultural land is still used to grow cash crops rather than growing crops to feed the growing population of Africa.

"Africa is not poor, it is poorly managed" Ellen Johnson-Sirleaf, former president of Liberia.

Biomes of Africa



Savanna Biome

These are found to the north and south of tropical rainforests. Savanna regions have distinct wet and dry seasons. This biome has lots of wildlife within it however, animals may migrate great distances for food and water.

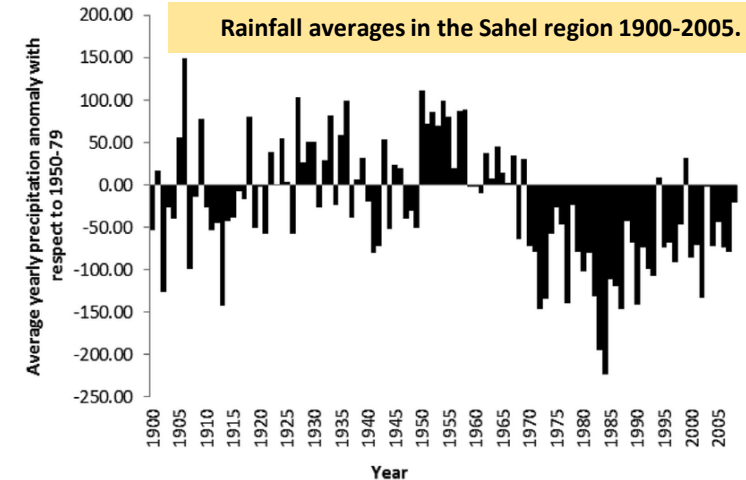


Is there a future for the

Desertification in the Sahel

- Droughts have occurred when the normally short rainy season is delayed or does not occur.
- Rains are very irregular in the Sahel along with rapid population increase, vegetation clearance and livestock overgrazing are causing the desert to spread southwards (desertification).

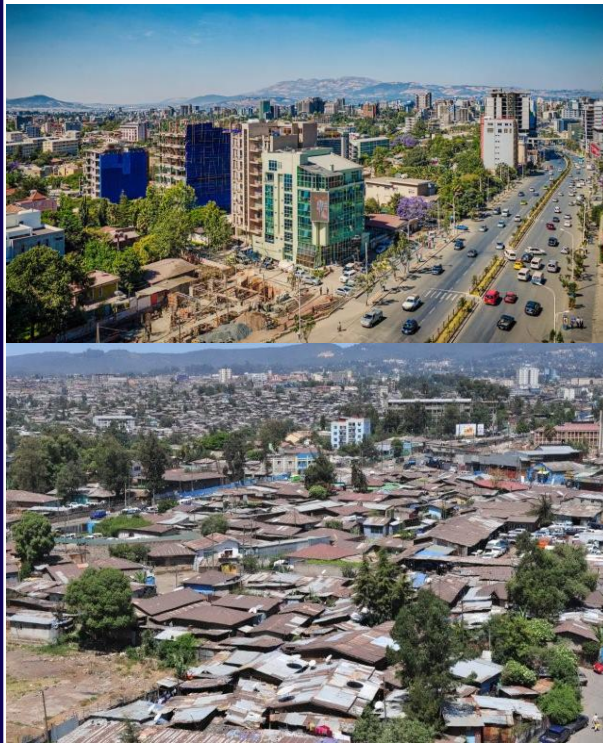
Rainfall averages in the Sahel region 1900-2005.



AFRICA IS NOT A COUNTRY.

Key Vocabulary

Landlocked	A country or region that is entirely surrounded by land.
Exports	A good or service sent to another country.



Urbanisation in Ethiopia.

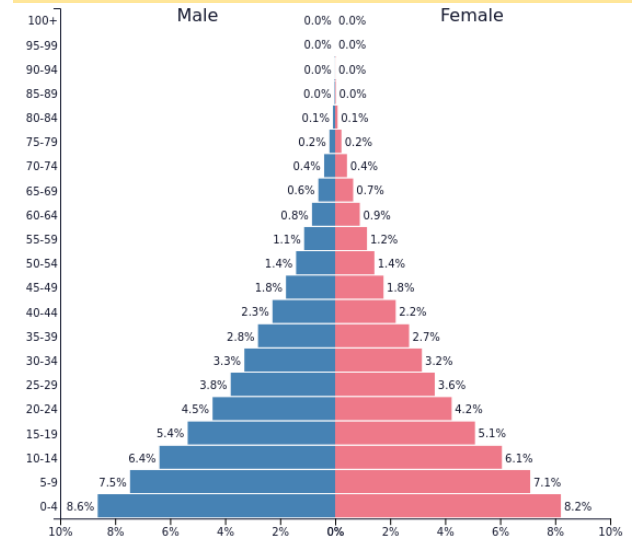
Ethiopia has the second largest population in Africa with over 100 million people. The government is trying to develop the economy of this landlocked country. Although 80% of the population is still rural, urbanisation and economic development are accelerating fast. Much of the population is located in the capital city, Addis Ababa which is located centrally in the country.

People move to the city as they think they will be better off however, they end up living in slums which is becoming a big problem. Slums are often built illegally, they offer cheap rent but they have limited access to water and toilets. This can lead to a spread of disease and lots of problems for the government to solve.

Government Projects to solve some of the problems in Addis Ababa:

- **Building:** Hundreds of thousands are built every year. These new houses are bought-t—own, and opportunities to live in them are distributed by a public lottery.
- **Infrastructure:** The Light Rail Transit, the first in Africa, opened in 2015. Built with Chinese support, it cost US\$475 million.
- **Business:** Attract multinational companies to build factories in the city offering incentives and cheap labour.

Population Pyramid for Nigeria, 2017.



PopulationPyramid.net

Nigeria - 2017
Population: 191,835,936

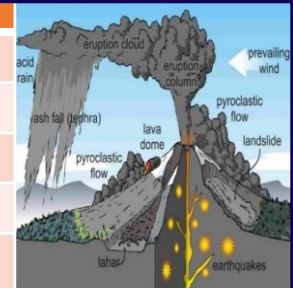
Trade between China and Africa.

- 15% of Africa's exports, mainly natural resources, go to China.
- China provides 21% of Africa's imports, including a range of machinery, transportation, communications equipment and manufactured goods.
- China is funding the building of factories and construction of roads, railways, ports, airports, hospitals, schools and stadiums, spending billions of dollars a year in Africa.
- More than 1 million Chinese, most of them labourers and traders, have moved to the continent in the past decade.

The structure of the Earth

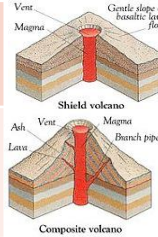
Types of volcanoes

Volcanic Hazards



The Crust	Varies in thickness (5-10km beneath the ocean. Made up of several large plates.
The Mantle	Widest layer (2900km thick). The heat and pressure means the rock is in a liquid state that is in a state of convection.
The Inner and outer Core	Hottest section (5000 degrees). Mostly made of iron and nickel and is 4x denser than the crust. Inner section is solid whereas outer layer is liquid.

Shield	Made of basaltic rock and form gently sloping cones from layers of runny lava. Location: hot spots and constructive margins. Eruptions: gentle and predictable
Composite	Most common type found on land. Created by layers of ash and lava. Location: Destructive margins Eruptions: explosive and unpredictable due to the build of pressure within the magma chamber.
Hotspots	These happen away from any plate boundaries. They occur because a plume of magma rises to eat into the plate above. Where lava breaks through to the surface, active volcanoes can occur above the hot spot. E.g. Hawaii.



Ash cloud	Small pieces of pulverised rock and glass which are thrown into the atmosphere.
Gas	Sulphur dioxide, water vapour and carbon dioxide come out of the volcano.
Lahar	A volcanic mudflow which usually runs down a valley side on the volcano.
Pyroclastic flow	A fast moving current of super-heated gas and ash (1000°C). They travel at 450mph.
Volcanic bomb	A thick (viscous) lava fragment that is ejected from the volcano.

Convection Currents

The Lithosphere is divided into tectonic plates which are moving due to convection currents in the asthenosphere.

- Radioactive decay of some of the elements in the core and mantle generate a lot of heat.
- When lower parts asthenosphere heat up they become **less dense and slowly rise**.
- As they move towards the top they cool down, become **more dense and slowly sink**.
- These **circular movements** of semi-molten rock are **convection currents**
- Convection currents create **drag** on the base of the tectonic plates and this causes them to move.

Case Study – Earthquake in an LIDC: Nepal earthquake, April 2015

Causes

- Pressure built up between the Indian and Eurasian plates at a COLLISION boundary. Pressure was released with no prior warnings, triggering a 7.8 magnitude earthquake.
- The focus was 15km below the surface (a shallow focus). The crust moved 3 metres in places.

Effects

547 landslides and avalanches were triggered. One was on Mt Everest and killed 12 people.
8635 people were killed
\$10 billion damage
19009 people were injured
180 buildings in Kathmandu completely destroyed

Management

Short term emergency aid from charities (Red cross and Oxfam) was given in the form of: 10 tonnes of blankets, 50 tonnes of water, 2 tonnes of medical supplies.
The Nepalese government were criticised for not acting quickly. Many rescue efforts were conducted by the public.



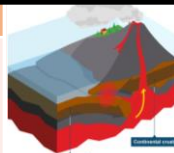
Types of Plate Margins

Knowledge Organiser Unit 4 – Tectonic hazards

Causes of Earthquakes

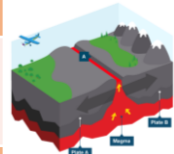
Destructive Plate Margin

When the denser plate subducts beneath the other, friction causes it to melt and become molten magma. The magma forces its way up to the surface to form a volcano. This margin is also responsible for devastating earthquakes.



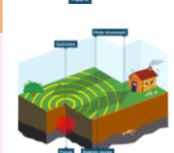
Constructive Plate Margin

Here two plates are moving apart causing new magma to reach the surface through the gap. Volcanoes formed along this crack cause a submarine mountain range such as those in the Mid Atlantic Ridge.



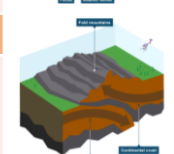
Conservative Plate Margin

A conservative plate boundary occurs where plates slide past each other in opposite directions, or in the same direction but at different speeds. This is responsible for earthquakes such as the ones happening along the San Andreas Fault, USA.



Collision Zones

Collision zones form when two continental plates collide. Neither plate is forced under the other, and so both are forced up and form fold mountains. These zones are responsible for shallow earthquakes in the Himalayas.

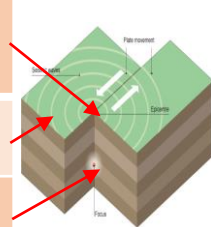


Earthquakes are caused when two plates become locked causing friction to build up. From this stress, the pressure will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of seismic waves, to travel from the focus towards the epicentre. As a result, the crust vibrates triggering an earthquake.

The point directly above the focus, where the seismic waves reach first, is called the **EPICENTRE**.

SEISMIC WAVES (energy waves) travel out from the focus.

The point at which pressure is released is called the **FOCUS**.



Depth of Earthquake

Shallow Focus

-Usually small and common.
-Seismic waves spread and damage wide area.

Deep Focus

-Occur on destructive margins.
-Damage is localised as seismic waves travel vertically.

How do we measure earthquakes?

Mercalli Scale

- Measures how much damage is caused, based on observations, not scientific instruments.
- Base from 'Instrument' and 'Weak' to 'Extreme' and 'Cataclysmic'.
- Limitations is that its subjective due to it being based on perception.

Richter Scale

- Is a scientific measurement based on the energy released.
- Measured by seismometers using measurement from 1 – 10
- Logarithmic – each point up the scale is **10 times greater** than the one before.

Earthquake Management

PREDICTING

Methods include:

- Satellite surveying (tracks changes in the earth's surface)
- Laser reflector (surveys movement across fault lines)
- Radon gas sensor (radon gas is released when plates move so this finds that)
- Seismometer
- Water table level (water levels fluctuate before an earthquake).
- Scientists also use seismic records to predict when the next event will occur.

PROTECTION

You can't stop earthquakes, so earthquake-prone regions follow these three methods to reduce potential damage:

- Building earthquake-resistant buildings
- Raising public awareness
- Improving earthquake prediction



Earthquake proof buildings ideas

- | | |
|--|---|
| 1. Counter-weights to the roof to help balance any swaying. | 2. Roof made from reinforced cement concrete. |
| 3. Foundations made from reinforced steel pillars, ball-bearings or rubber. | 4. Windows fitted with shatter-proof glass to reduce breakage. |
| 5. Lightweight materials that cause minimal damage if fallen during an earthquake. | 6. Ensure gas pipes have an automatic shut off to prevent risk of fire. |



CORE					
Time phrases/Sequencers		Key verb phrases		Connectives	
normally	normalement	I have	j'ai	but	mais
often	souvent	I have not	je n'ai pas de	and	et
usually	d'habitude	I am	je suis	because	car/ parce que
from time to time	de temps en temps	I am not	je ne suis pas	also	aussi
sometimes	quelquefois/parfois	I would like	je voudrais	however	cependant
tomorrow	demain	it is	c'est	therefore	donc
next week	la semaine prochaine	it is not	ce n'est pas	as	comme
Summer / Autumn	en été / en automne	there is	il y a	or	ou
Winter / Spring	en hiver / au printemps	there is not	il n'y a pas de	however	pourtant
morning/afternoon/evening	le matin/l'après-midi/le soir	it will be	ce sera	on the other hand	par contre
then	puis	I'm going to....	je vais +infinitive	fortunately	heureusement
always/still	toujours	you must	on doit +infinitive	unfortunately	malheureusement
at the moment	en ce moment	you must not	on ne doit pas +infinitive	in addition	en plus
later	plus tard	you can	on peut +infinitive		
in the future	a l'avenir	you cannot	on ne peut pas +infinitive	Negatives	
yesterday	hier	it was	c'était	not	ne....jamais
last night	hier soir	it wasn't	ce n'était pas	never	ne...pas
last week	la semaine dernière	there was	il y avait	Comparisons	
last year	l'année dernière	there wasn't	il n'y avait pas de	more... than	plus ... que
next	ensuite	it would be	ce serait	less... than	moins ... que
firstly	d'abord	it would not be	ce ne serait pas		
after	après ça	if I was rich	si j'étais riche		
before	avant	in an ideal world	dans un monde idéal		
lastly	enfin / finalement	in my dreams	dans mes rêves		
Quantifiers/ Intensifiers		Opinions		Idioms	
very	très	In my opinion	à mon avis / selon moi	How awful !	Quelle horreur !
too	trop	I think that	je pense que	What luck !	Quelle chance !
quite	assez	I Like	j'aime	What a surprise !	Quelle surprise !
a bit	un peu	I love	j'adore	What an idiot!	Quel imbécile !
really	vraiment	I don't like	je n'aime pas	It's brilliant !	C'est le pied !
a lot	beaucoup	I hate	je déteste	It's not my thing !	Ce n'est pas mon truc !
		I prefer	je préfère	It's a waste of time!	C'est une perte de temps !
		My favourite ... is	ma/mon.... préféré(e) est	It's a waste of money!	C'est une perte d'argent !
		I find that	je trouve que		

CHALLENGE					
Time phrases/ Sequencers		Key verb phrases		Opinions	
today	aujourd'hui	you can see	on peut voir	for me	d'après moi
each/every	chaque	if it is	si c'est	I believe that	je crois que
currently	actuellement	there would be	il y aurait	according to...	selon...
the next day	le lendemain	there would not be	il n'y aurait pas de	I really hate	j'ai horreur de
in my dreams	dans mes rêves	you could	on pourrait +infinitive	I really love	j'apprécie
in an ideal world	dans un monde idéal	you couldn't	on ne pourrait pas	I can't stand	je ne supporte pas
when I was little	quand j'étais petit (e)	you should	on devrait +infinitive	my friends say that	mes copains disent que
when I'm older	quand je serai plus âgé (e)	you shouldn't	on ne devrait pas	my parents say that	mes parents disent que
for 5 years	depuis 5 ans	you must	il faut +infinitive	my teachers say that	mes profs disent que
since I was 5 years old	depuis l'âge de 5 ans	you must not	il ne faut pas	my mum tells me that	ma mère me dit que
				my dad tells me that	mon père me dit que
Quantifiers/ Intensifiers		Negatives		I would say	je dirais que
so	si	no...more/longer	ne... plus	I like /love it / them	j'aime/j'adore ça
rather	plutôt	nothing	ne... rien	I am for	je suis pour
extremely	extrêmement	no one/nobody	ne... personne	I am against	je suis contre
frankly	franchement	neither ...nor	ne... ni... ni	I agree with	je suis d'accord avec
hugely	énormément			I disagree with	je ne suis pas accord avec
incredibly	incroyablement			what I like is	ce que j'aime c'est
				it seems that	il semble que
				as far as... is concerned	en ce qui concerne...
Connectives		Comparisons/ Superlatives		Idioms	
nevertheless	néanmoins	best	meilleur (e)	Although it is...	Bien que ce soit...
whereas	tandis que	worst	pire	That's life !	C'est la vie !
even if	même si	the best thing is	la meilleure chose est	What a shame !	Quel dommage !
furthermore	de plus	the most important	la chose la plus	What a disaster !	Quelle catastrophe !
since	puisque	thing is	importante est	What a pain !	Quel ennui !
not at all	pas du tout	what I like the most is	ce que j'aime le plus est	It was so boring !	C'était la barbe !
				I was over the moon!	J'étais aux anges !
				I was bored to death!	Je m'ennuyais à mourir !
				I've had enough!	J'ai le cafard !
				I was so fed up!	J'en avais marre !

CORE

Time phrases / Sequencers

normally	normalmente
often	a menudo
usually	generalmente
from time to time	de vez en cuando
sometimes	a veces
tomorrow	mañana
next week	la semana próxima
summer / autumn	en verano / otoño
winter / spring	en invierno / primavera
morning/afternoon/evening	por la mañana/ tarde/ noche
then	luego / después
always/still	siempre / aún
at the moment	en este momento / ahora
later	más tarde / después
in the future	en el futuro
yesterday	ayer
last night	anoche
last week	la semana pasada
last year	el año pasado
two years ago	hace dos años
next	luego
firstly	primero
after	después (de)
before	antes (de)
lastly	finalmente

Key verb phrases

I have	tengo
I have not	no tengo
I am	soy / estoy
I am not	no soy / estoy
I would like	me gustaría
it is	es / está
it is not	no es / está
there is	hay
there is not	no hay
it will be	será
I'm going to	voy a + infinitive
you must	se debe + infinitive
you must not	no se debe + infinitive
you can	se puede + infinitive
you cannot	no se puede + infinitive
it was	fue
it wasn't	no fue
there was	había
there wasn't	no había
it would be	sería
it would not be	no sería
if i was rich	si fuera rico/a
in an ideal world	en un mundo ideal
in my dreams	en mis sueños

Connectives

but	pero
and	y
because	porque / ya que
also	también
however	sin embargo
therefore	por lo tanto / por eso
as	como
or	o
however / although	aunque
on the other hand	por otro lado
fortunately	por suerte
unfortunately	por desgracia
in addition	además

Negatives

not	no...
never	no... nunca

Comparisons

more... than	más... que
less... than	menos... que

Quantifiers / Intensifiers

Very	muy
Too	demasiado
Quite	bastante
A bit	un poco
so	tan
Really	adjective ending -ísimo/a(s)
A lot	mucho

Opinions

In my opinion	en mi opinión
I think that	pienso que
I like	me gusta(n)
I love	me encanta(n)
I don't like	no me gusta(n)
I hate	odio
I prefer	prefiero
My favourite is	mi... favorito/a es...
I find it	me parece

Idioms

How great !	¡ Qué bien !
How bad !	¡ Qué mal !
How funny !	¡ Qué divertido !
How cool !	¡ Qué guay !
How boring / annoying !	¡ Qué aburrido! ¡Qué rollo !
How dreadful !	¡ Qué horror !
It's crazy !	¡ Es una locura !
It's a waste of time!	¡ Es una pérdida de tiempo !
It's a waste of money!	¡ Es una pérdida de dinero !

CHALLENGE					
Time phrases / Sequencers		Key verb phrases		Opinions	
today	hoy	you can see	se puede(n) ver	for me	para mí
each/every	cada	if it is	si es	as I see it	a mi modo de ver / a mi juicio...
currently	actualmente	there would be	habría	I believe that	creo que
the next day	al día siguiente	there would not be	no habría	according to...	según / para...
in my dreams	en mis sueños	you could	podría + infinitive	I really hate	detesto
in an ideal world	en un mundo ideal	you couldn't	no podría + infinitive	I really love	me chifla/ me mola
when i was little	cuando era pequeño/a	you should	debería + infinitive	I can't stand	no aguanto / no soporto
when i'm older	cuando sea mayor	you shouldn't	no debería + infinitive	my friends say that	mis amigos dicen que
for 5 years (now)	desde hace 5 años	you must	hay que + infinitive	my parents say that	mis padres dicen que
since i was 5 years old	desde que tenía 5 años	you must not	no hay que + infinitive	my teachers say that	mis profesores dicen que
				my mum/dad tell me that	mi madre / mi padre me dice que
				i would say	diría que
Quantifiers / Intensifiers		Negatives		I like/love it / them	me gusta(n) / me encanta(n)
so	tan	no...more/longer	ya no...	I am for	estoy a favor de
rather	bastante	nothing	no... nada	I am against	estoy en contra de
extremely	extremadamente	no one/nobody	no... nadie	I agree with	estoy de acuerdo con
frankly	francamente	neither... nor	no... ni...	I disagree with	no estoy de acuerdo con
entirely/ totally	totalmente			what I like...	lo que me gusta..
incredibly	increíblemente			it seems that	me parece que
				as for me	por mi parte / en cuanto a mí
Connectives		Comparisons / Superlatives		Idioms	
nevertheless	aun así	best	mejor	No more excuses !	¡ Basta de excusas !
whereas	mientras que	worst	peor	I am fed up !	¡ Estoy harto/a !
even if	aunque	the best thing is	lo mejor es	What a shame !	¡ Qué lástima !
additionally	asimismo	the most important is	lo más importante es	What a disaster !	¡ Qué desastre !
since	dado que / ya que	what I like the most is	lo que más me gusta es	It sounds funny /curious !	¡ Suena muy gracioso / curioso !
not at all	en absoluto			A dream come true !	¡ Es un sueño hecho realidad !
				It is the most exciting thing	¡ Es lo más emocionante que he visto
				I have ever seen!	jamás !
				It has been the most	¡ Ha sido la experiencia más
				important / unforgettable	importante / inolvidable de mi vida !
				experience of my life!	
				I have enjoyed it a lot	¡ Lo he disfrutado muchísimo !

Key word	Description
Short term effects of exercise	Physical changes that occur in the body when you begin exercising.
Long term effects of exercise (physical)	Physical changes that occur in the body after months of following a training programme.
Heart rate	The number of times the heart beats per minute
Oxygen	A gas we breathe in and transport to our muscles and organs to use to create energy
Aerobic	Low intensity exercise than can be done for a long period of time
Anaerobic	High intensity exercise than can only be done for short time
Energy production	Using glucose and oxygen to create energy in the muscles and organs in the body
Respiratory rate	The number of breaths taken in one minute
Flexibility	The range of movement around a joint
Hypertrophy	A muscle increasing in size achieved through exercise
Stroke volume	The amount of blood ejected from the heart (left ventricle) per beat
Resting heart rate	The amount of times the heart beats per minute at rest (after lying down for 5 mins)
Efficient	Performing without wasting energy
Fitness	Being physically fit and healthy. Fitness components include cardiovascular endurance, muscular endurance, speed, flexibility, agility, power and strength
Coronary heart disease	A disease where there is a narrowing or blockage of the coronary arteries (blood vessels that carry blood and oxygen to the heart).
Diabetes	A health condition that affects how your body turns food to energy and your blood glucose can be too high.
Body mass index	Indicator of how healthy your weight is. Calculation: weight (kg) divided by height (m ²)
Body composition	The percentages of bone, fat, muscle and water in your body
Energy balance	The balance of energy (calorie) intake with energy (calorie) expenditure
Calories	A unit of energy consumed from food or drink.

Short term effects of exercise	Long term effects of exercise
Increase in heart rate	Increase in heart size (cardiac hypertrophy)
Increase in respiratory rate	Improved fitness
Increase in oxygen delivery to muscles	Increased bone strength
Increase in temperature	Reduced risk of coronary heart disease
Increase in flexibility	Reduced risk of diabetes
	Improved body composition

Keywords

Input	When the user enters data into a program
Output	When the program displays data to the user
Variable	An area data can be stored whilst the program is running
Concatenation	The operation of joining together two strings
Casting	When you convert from one data type into another
Sequence	Instructions being executed in order
Selection	When a program can make a choice about which line to execute based on a condition
Iteration	When a program is able to repeat blocks of code multiple times

Common Mistakes

<pre>Total = number1 + number2 print(total) Print(total)</pre>	Capital letters in variables names and commands
<pre>number1 = 25 number2 = 36 total = numbr1 + number2</pre>	Spelling of variable names and commands
<pre>print("Hello World) print("Hello World</pre>	Brackets and braces come in pairs, make sure that they are opened and closed.

Frequently used commands

command	comment
print()	Used to display to the screen
input()	Allows user to enter value
int()	Converts value to integer
<pre>if <criteria>: ... elif <criteria>: ... else: ...</pre>	Selection statement used to give choices (or paths) that the program can follow depending on a decision.
<pre>while <criteria>: ...</pre>	Condition controlled iteration, when you don't know how many iterations need to take place.

Assignment Operators

Description	Operator
Assign	=
Add then reassign	+=
Subtract then reassign	-=
Divide then reassign	/=
Mod then reassign	%=
Integer divide then reassign	//=

Relational Operators

Description	Operator
Equal to	==
Less than	<
Greater than	>
Not equal to	!=
Less than or equal to	<=
Greater than or equal to	>=