

Knowledge Organiser

Year 9

Cycle 3

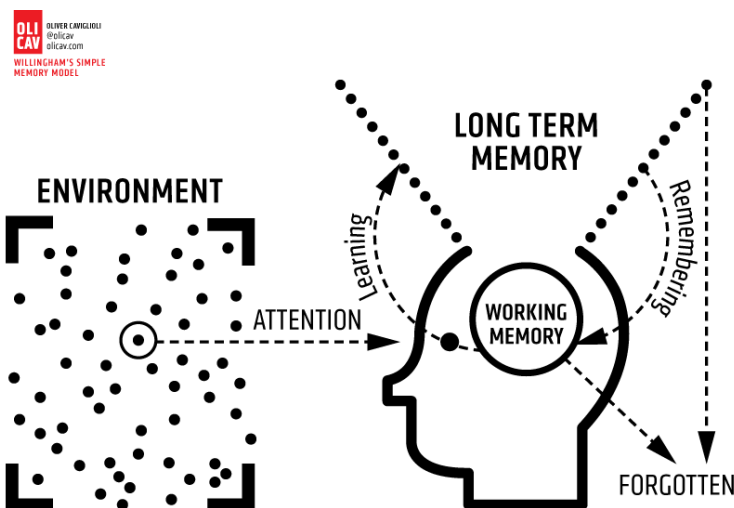
Name:



Inspiring Excellence

Using your Knowledge Organiser for homework

- Your Knowledge Organiser contains the essential knowledge that every student must know.
 - Regular use of the Knowledge Organiser helps you to recap, revise and revisit what you have learnt in lessons.
 - The aim is to help remember this knowledge in the long term and to help strengthen your memory
 - You will use the Knowledge Organiser to help learn during homework.
 - You will be assessed on the knowledge from your Knowledge Organiser; the more you revisit information the more likely it will be remembered for lessons, assessments and exams.
-
- For each homework you will be asked to look at a particular section of your Knowledge Organiser.
 - Make sure you follow the homework timetable below so that you do the right homework for the right subjects each day.
 - Each day (Monday to Friday) you will study 3 subjects for 20 minutes each.
 - All Knowledge Organiser homework is completed in your blue Knowledge Workbooks
 - All Maths and English homework is completed on SPARX and must be 100% completed each week.



Homework Timetable Year 9

	Monday	Tuesday	Wednesday	Thursday	Friday
Subject 1	Maths	History	Maths	English	Maths
Subject 2	English	Science	English	Science	Geography
Subject 3 Week A	French/Spanish	RPE	Drama	Food/3D Design	PE
Subject 3 Week B	French/Spanish	Art	Music	Computing	Life Skills

How to use your Knowledge Organiser

In your blue knowledge book you will always write the date, subject heading and ensure that they are underlined with a ruler.

Task 1: Questions

Where a subject includes questions to answer, you must answer these in your blue book. This is the main task to do as a minimum. If you have additional time, or where there are no questions, then do the following Tasks 2-4

Task 2: The Cover – Write – Check method

1. Study the relevant section of your Knowledge Organiser for several minutes.
2. Cover the Knowledge Organiser.
3. In your blue book, write out what you can remember.
4. Check the Knowledge Organiser to see if you got it right.
5. Correct any mistakes in purple pen.
6. Repeat the process – even if you got it 100% correct.
7. Complete sections that you have previously studied using the same process.

Task 3: Free recall

1. Pick a section of the Knowledge Organiser you have studied recently.
2. Without looking at the Knowledge Organiser write down everything you can remember about the topic.
3. Check the Knowledge Organiser to see how much you got right.
4. Correct any mistakes and add any missing parts in purple pen.

Task 4: Elaboration

1. Once you have completed the Cover – Write – Check method, add any additional details you can to your notes.
2. Remember your Knowledge Organiser only contains the core knowledge, there is much to learn beyond it so practise adding more detail when you can.

Year 9 Cycle 3

Knowledge Organiser Contents Page

Subject	Page Number
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Maths	45-46
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Religion, Philosophy and Ethics	50-52
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A. Visual Elements Keywords

Line	Line is the path left by a moving point. A line can be horizontal, diagonal or curved and can also change length.
Shape	A shape is an area enclosed by a line. Shapes can be geometric or irregular.
Form	Form is a three dimensional shape, such as a cube, sphere or cone.
Tone	This refers to the lightness or darkness of something. This could be a shade, or how dark or light a colour appears.
Texture	This is to do with the surface quality of something. There are two types of texture: Actual texture really exists, so you can feel it or touch it; Visual texture is created using marks to represent actual texture.
Pattern	A design that is created by repeating lines, shapes, tones or colours.
Colour	Red, yellow and blue are primary colours, which means they can't be mixed using any other colours.

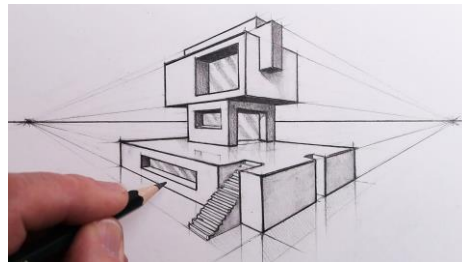
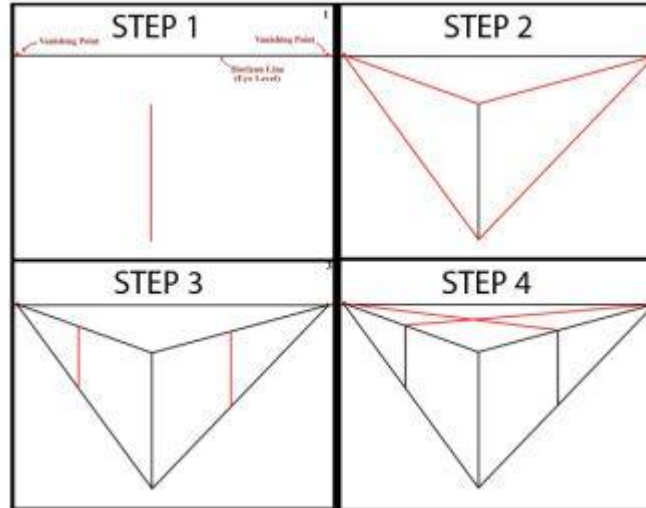
B. Key Knowledge 1: Brutalist Architecture

Brutalism, also known as **Brutalist architecture**, is a style that emerged in the 1950s and grew out of the early-20th century modernist movement. **Brutalism** was generally characterised by its rough, unfinished surfaces, unusual shapes, heavy-looking materials, straight lines, and small windows



E. Expert Modelling: Drawing in 2 point perspective

- Follow these steps to help you practice your 2 point perspective drawing
- To develop your drawings watch and follow the steps in F. Wider thinking / further reading
- Add Tone like the drawings below



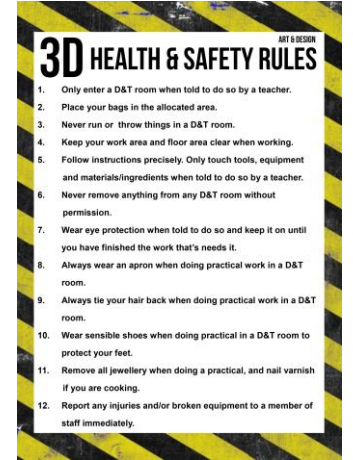
What Visual Elements can you see in this work?

CREATIVE ARTS

3D DESIGN – YR 9 – BRUTALISM

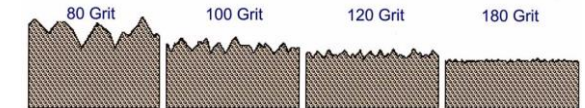
C. Key Knowledge 2: HEALTH & SAFETY RULES

Refer to your booklet for a larger version of the H&S Rules



D. Key Knowledge 3: Sand paper grades

Sandpapers are commonly graded as coarse (40 to 60 grit), Medium (80 to 120), Fine (150 to 180), Very Fine (220 to 240), Extra Fine (280 to 320) and Super Fine (360 and above). Sanding with progressively finer **grits** removes the scratches left by the previous paper and eventually leaves a smooth finish.



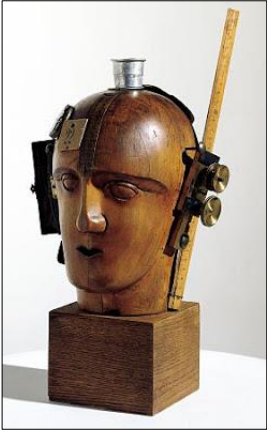
F. Wider thinking / further reading:

https://www.youtube.com/watch?v=w_LbQviO1K4

Check out this tutorial on drawing in 2 point perspective

Yr9 Art Cycle 3 Knowledge Organiser – Art Activism

Artists and designers use text and images to create work with personal, political or social messages. Art has the potential to influence human behaviour. It can evoke emotion and provoke action.



'The Mechanical Head' by Raoul Hausmann



'Earth Day' Poster by Robert Rauschenberg



'Your Body Is A Battleground' by Barbara Kruger



'Love' by Robert Indiana



'Power & Equality' Shepard Fairey



'Make Art Not War' Bob & Roberta Smith

Art History - Knowledge & Inspiration:

Dada was an art movement formed during the First World War in Zurich in negative reaction to the horrors of the war. The Dadaists protested through their art about the war and the current culture. They meant for us to rethink the items that surround us so that we might rethink our world.

Raoul Hausmann (1886-1971) was a German Dada artist. His sculpture titled 'The Mechanical Head' shows a man who cannot think for himself but accepts everything he is told. He has a wooden head with tight lips and eyes that show no expression. The mechanical man will never argue or share an opinion of his own.

Robert Rauschenberg (1925 –2008) was an American painter and graphic artist who also worked with photography and printmaking. Rauschenberg's belief in the power of art as a catalyst for positive social change was at the heart of his participation in a number of international projects in the 1970s. To mark the first 'Earth Day' he designed a poster built around the image of the endangered bald eagle using a collection of photographs of other endangered animals, deforestation and pollution.

Barbara Kruger (born 1945) is an American conceptual artist. Most of her work consists of black-and-white photographs, overlaid with captions, often in white-on-red. "Your body is a battleground" was produced by Barbara Kruger for the Women's March on Washington in support of anti-abortion. In the case of abortion, the campaign for a woman's right to choose occurs outside of her **body**, yet directly affects her. This image is both art and protest.

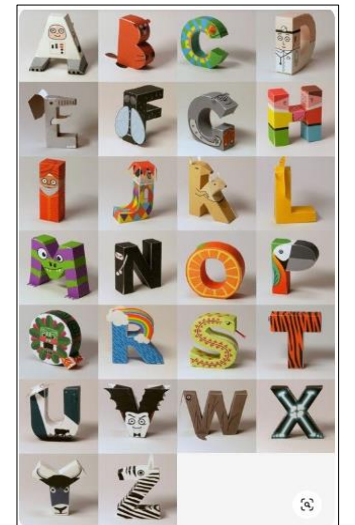
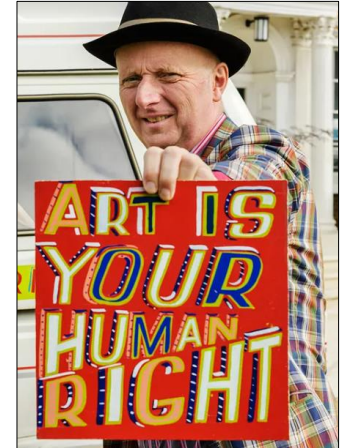
Robert Indiana (1928 - 2018) 'LOVE' was a Pop Art sculpture by American artist Robert Indiana. Pop Art presented a challenge to traditions of fine art by including imagery from popular culture such as advertising, news, and mundane everyday objects.

Shepard Fairey (born 1970) is an American contemporary street artist, activist. He is most famous for his designs for the Barack Obama "Hope" poster for the 2008 US presidential election.

Bob & Roberta Smith (born 1963) is in fact just one person, otherwise known as British artist Patrick Brill's. His paintings look like signboards, featuring slogans in brightly coloured letters that reflect on life, politics and the role of art.

Yr9 Art Cycle 3 Knowledge Organiser Page 2- Key terms and Definitions:

- **Art Activism** is a term used to describe art that is grounded in the act of campaigning to bring about political or social change.
- **Charcoal** is a burnt wood used in drawing. Willow charcoal is easily spread on a surface, easily smudges and is very easy to erase, it generally makes a lighter mark when you draw than compressed charcoal. Compressed charcoal is darker and harder to smudge or rub out than willow charcoal. A charcoal drawing can be "fixed" using fixative or hairspray to prevent smudging!
- **Collaboration** = The action of working with someone to produce something.
- **Collage (also known as Photomontage)** = Is a technique named after the French word 'coller' meaning 'to glue'. It is a process in which pieces of paper, photographs, fabric or other ephemera are arranged and stuck down onto a surface.
- **Combine** = to unite or to join together to make a single thing or group.
- **Font:** Font is an alphabet designed so that all the letters and symbols have similar features. A font, essentially, is the lettering that graphic designers use to put text on their images and videos. A good image paired with a great font gives your work an edge and helps you to better convey your message.
- **Influence:** Influence is the ability to persuade someone to think or act differently. Art influences people by inspiring them. Art can influence and effects each person differently.
- **Juxtaposition:** Putting two or more dissimilar images next to each other is called juxtaposition. This creates automatic comparisons between the images by asking how they are different, how are they similar, and what the artist is trying to convey.
- **Text Art:** Text art is a form of art that includes words or phrases, it is a combination of language and visual imagery.
- **Typography:** Typography is the art of arranging letters and text in a way that makes it legible, clear, and visually appealing when displayed. It involves font style, appearance, and structure, which aims to elicit certain emotions and convey specific messages.
- **Sculpture:** Sculpture is the art of making three-dimensional forms.

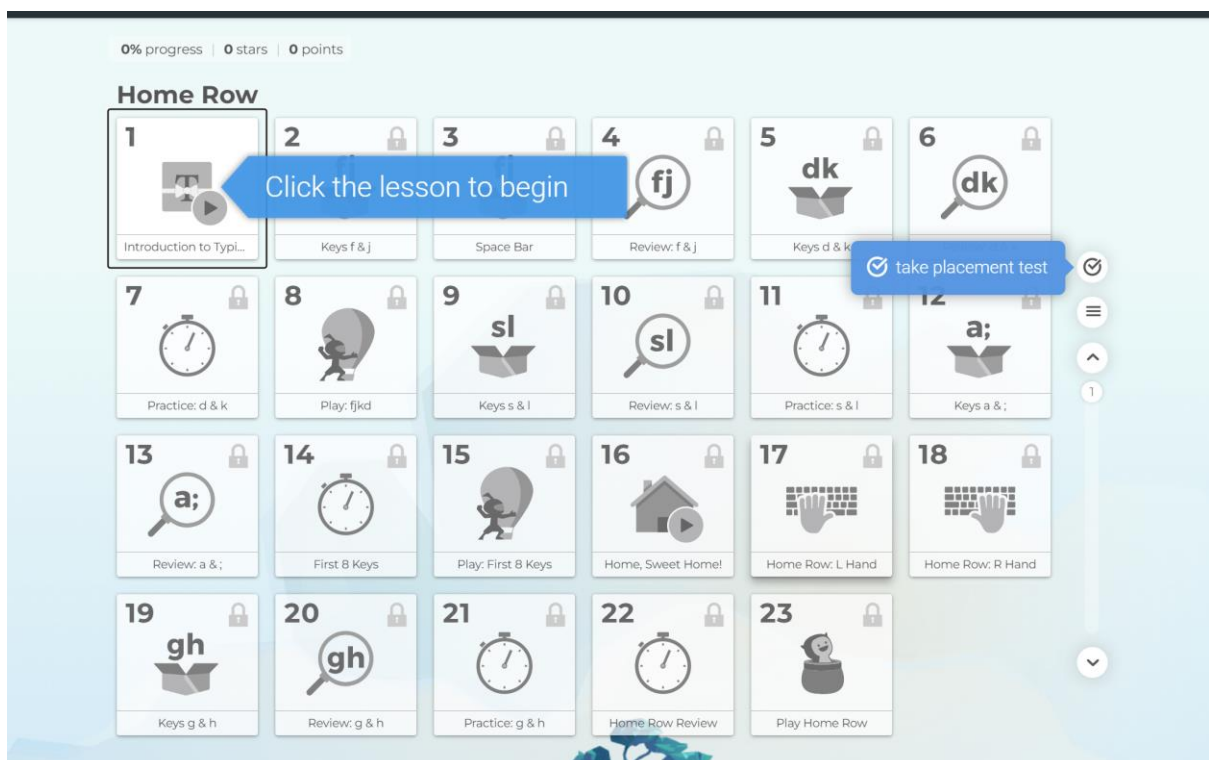
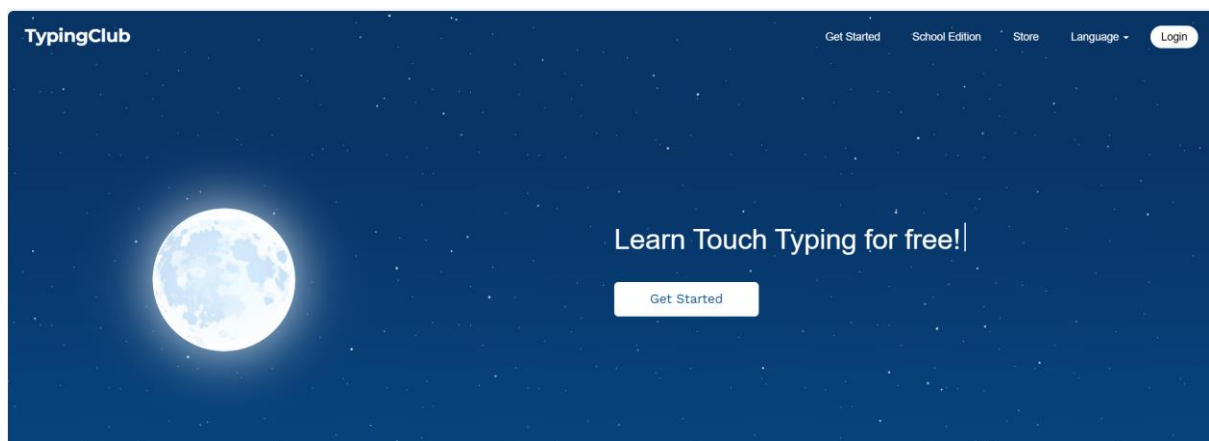



KS3 COMPUTER SCIENCE KNOWLEDGE ORGANISER CYCLE 3

www.typingclub.com

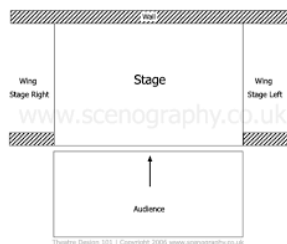
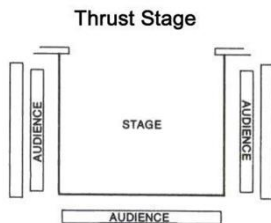
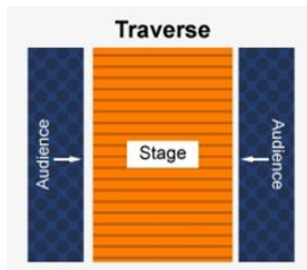
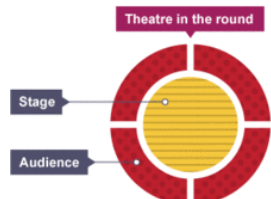


Learning to touch-type can improve your speed and efficiency at the computer. Typing skills can also help you grow your confidence at school and/or in the workplace. Depending on how you learn, typing might improve your spelling skills and writing fluency too

Using the login details provided to you in class follow the activities and increase your place on the class leader board!



	Week 1	Week 2	Week 3	Week 4	Week 5
YEAR 9 DRAMA– CYCLE 3	<p><u>Blood Brothers by Willy Russell</u></p> <p><u>Key Points</u> Blood Brothers is a musical with book, lyrics, and music by Willy Russell. The story is a contemporary nature versus nurture plot, revolving around fraternal twins Mickey and Eddie, who were separated at birth, one subsequently being raised in a wealthy family, the other in a poor family.</p> <p>The main Blood Brothers theme and issues are as follows:</p> <ul style="list-style-type: none"> • Social class. • Nature VS nurture. • Friendship & loyalty. • Growing up. • Fate & superstition. • Violence. <p>Nature vs. Nurture: Splitting up the twins shows us how the environment can have a huge impact on life chances.</p> <p>Relationship: The development and change in friendship between M, E, and Linda. The interaction between Mr and Mrs L, mother and son, and Mr</p>	<p><u>Performing Skills</u></p> <p><u>Gesture</u> This is a defined movement which clearly communicates meaning using body language and facial expression.</p> <p><u>Mime</u> A drama technique of expressing an idea or mood or portraying a character entirely by gesture and bodily movement without the use of words.</p> <p><u>Pace</u> The speed at which someone speaks to highlight the character or the mood of the scene.</p> <p><u>Pause</u> Moments within a piece of drama of silence to highlight a crucial moment or to comment on the action occurring.</p> <p><u>Characterisation</u> The act of changing voice, body language, movement, gesture etc when in role is called characterisation. The performer must use their skills to portray a character consistently throughout their performance.</p>	<p><u>Character Information</u></p> <p><u>Some words to describe the characters:</u></p> <p>Mickey Mickey and his family represent the working classes, who were badly affected by the economic downturn, whereas Edward and the Lyons family embody the middle classes, who thrived in the 1980s.</p> <p>Edward Like his twin brother Mickey, Edward is a sincere, honest, and good-natured boy. Despite having grown up in the lap of luxury with the high-strung and snobbish Mrs. Lyons, he is not entitled or arrogant. Indeed, his sheltered upbringing has made him more innocent and trusting than his lower-class twin.</p>	<p><u>Design Skills</u></p> <p><u>Staging</u> This plays a very importance role and the performer needs to consider how and why the characters move in a particular way and how they use the stage effectively in order for the audience to understand the aims and intentions of the play extract.</p> <p><u>Proxemics</u> This drama technique is also as key skill when blocking in drama, as it explores 'spatial relationships', between different characters within the elements of the set.</p> <p><u>Performance skills</u> Skills used by performers including voice/vocal skills, movement/physical skills, use of space/proxemics and facial expression/posture/ non-verbal skills.</p>	<p><u>Contextual Information</u></p> <p>Social: There was a large gap between working and middle class in Britain during this time. The Johnstones and Lyons families are class stereotypes. Many working class families struggled financially and to find work. There was also a class divide in education; this is shown when Mickey goes to secondary school and Edward attends a private boarding school.</p> <p>Margaret Thatcher: The first female Prime Minister in power during that time. She was responsible for lots of working-class people losing their jobs. During her time in power, unemployment rates raised higher than ever before. She believed everyone can be successful if they work hard.</p>
					

YEAR 9 DRAMA – CYCLE 3

	Week 6	Week 7	Week 8	Week 9	Week 10				
	<p><u>Design Elements</u></p> <p><u>Lighting</u></p> <p><u>Back Projection</u> A method of projecting images onto a translucent screen from behind. Often used for projected scenery or special effects.</p> <p><u>Barn Door</u> A rotatable attachment consisting of two or four metal flaps (hinged) which is fixed to the front of a Fresnel lantern to cut off the beam in a particular direction(s).</p> <p><u>Cyclorama</u> A fabric drop hung from a curved or segmented batten, or a curved wall at the back of the stage, upon which light can be cast to create effects (<i>cyc</i> for short).</p> <p><u>Flood</u> To wash the stage with general lighting. The name given to a basic box-shaped lantern with a simple reflector used to achieve this effect.</p> <p><u>Gel</u> A sheet of plastic usually composed of a coloured resin which creates coloured light on stage.</p>	<p><u>Design Elements - Types of Staging</u></p> <p><u>Proscenium Arch</u> A stage where the audience sits on one side only is called a proscenium stage (you might know this as end-on staging). The audience faces one side of the stage directly, and may sit at a lower height or in tiered seating. The frame around the stage is called the proscenium arch.</p>  <p><u>Thrust Staging</u> This type of staging is one that extends into the audience on three sides and is connected to the backstage area by its upstage end. A thrust has the benefit of greater intimacy between performers and the audience than a proscenium.</p> 	<p><u>Design Elements</u></p> <p><u>Types of Staging</u></p> <p><u>Traverse</u> This type of staging is when</p>  <p>the audience is on two opposite sides of the stage facing towards each other.</p> <p><u>Theatre-in-the-round</u> Is a form of theatrical</p>  <p>staging in which the acting area may be raised or at floor level, is surrounded by the audience.</p>	<p><u>Revision for Knowledge Organiser test:</u></p> <p>Revise areas on Performance and Design skills. Learn the types of staging and the different lighting elements.</p> <p>You may choose to look over all the performance and design elements and use the following to support you with your revision:</p> <table><tr><td>LOOK</td></tr><tr><td>COVER</td></tr><tr><td>WRITE</td></tr><tr><td>CHECK</td></tr></table> <p>Ensure you have knowledge of DNA. This includes understanding of the characters, the themes and knowledge of the original performance conditions.</p> <p>Remember how you used the performance and design elements when creating your drama work on key scenes from Act 1.</p>	LOOK	COVER	WRITE	CHECK	<p><u>DNA Original Performance Conditions</u></p> <p>Directed by Paul Miller</p> <p>Set, Costume and Video Designer by Simon Daw</p> <p>Lighting Designer by Paule Constable</p>  <p>Sound Designer by Rich Walsh</p> <p>Associate Video Designer by Paul Kenah</p>  <p>DNA had a forensic quality slowly moving through and exploring the spaces in which the play is set including a wood and a field.</p>
LOOK									
COVER									
WRITE									
CHECK									

Your English homework is to complete your Sparx Reader homework online.

You can access Sparx Reader by typing it into an internet search function, or you can sign into Sparx Maths, click 'Menu' and access Sparx Reader there.

You will not be able to complete Sparx Reader as your homework until you have completed the Sparx Reader test in one of your English lessons. If you have not yet completed this test, please use the following pages of the KO as your English homework, using the 'look, cover, write, check' method.

Once you are using Sparx Reader as your homework, you do not need to do the KO as well. If Sparx Reader does not work for any reason, return to completing the KO until you can access Sparx again. If your Sparx Reader is not working, let your English teacher know as soon as you can.



What do I have to do on Sparx Reader?

Select a book, read it and answer the questions that pop up as you read. The questions are checking your understanding of the book.

How will I know I have completed my homework?

Your target is to reach 300 SRP (Sparx Reader Points) every week. 300 SRP = roughly 30 minutes of reading. You get points by correctly answering questions. You get more points if you answer a question correctly the first time. You get more points the more carefully you read – Sparx Reader knows when you have read too quickly or improperly, which stops you from getting as many points.



Well done!

Your score was 4/4.

+38 SRP

+13 Check passed

+25 First try bonus

Next >

When will my homework be due in and checked?

Your English teacher will decide what day of the week you have to complete your homework by and they will inform you of this day. Don't worry if your homework is due a different day to your friend's homework; go by what your teacher has told you.

Task Progress







64 / 200 SRP





Continue >






What do I do if I'm confused or stuck?








Ask your English teacher as soon as you can – they will be able to help you with any questions you may have.




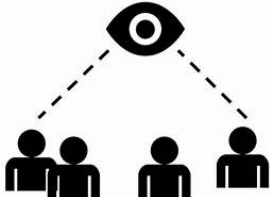

Start with Week 1. Each week, complete the next colour block. Write each word out 3 times and each definition once. Check it all with a purple pen. Tick what is correct, amend what is wrong.




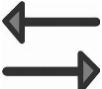
wk	Keyword	Definition	Example		Character/Theme/Plot/Context
Week 1	Ostentatious <i>os-ten-tey-shuh s</i>	Characterised by pretentious or showy display 	When celebrating the engagement, Birling refers to the port as being the one Gerald's father drinks, and therefore boasting.	Week 1	Mr Birling Mr Birling is the head of the Birling household . He has made himself very wealthy by being a ' hard-headed ' business man . He is an active member of the community in Brumley and thinks that he might be in the running for a Knighthood. At the start of the play he comes across as being arrogant, making long speeches about his predictions for the future. He also makes assertions about how a man should look out for number one and not waste time helping others. It is at this exact moment that the Inspector arrives. Sybil, his wife, is his 'social superior' and it is hinted that he is self-conscious about being from a more working-class background. He is materialistic and possessive and also has old fashioned views about women . 
	Condescending <i>con-de-scend-ing</i>	Having or showing an attitude of patronising superiority 	When Mr Birling meets the inspector he informs him 'I was an alderman for years – and Lord Mayor two years ago – and I'm still on the Bench – so I know the Brumley officers pretty well' to show his importance.		
	Belittling	Dismiss (someone or something) as unimportant	When discussing the possibility of war he says 'Fiddlesticks! The Germans don't want war. Nobody wants war.'		
	Context	The background information that shapes a piece of literature. 	The context of An Inspector Calls could be things like Britain in 1912, Britain in 1945, class structure, Priestley etc...		
	Capitalism	An economic and political system in which property, business, and industry are owned by private individuals and not by the state.			
Week 2	Materialistic	Excessively concerned with material possessions; money-oriented	When receiving the ring from Gerald Sheila says 'Now I really feel engaged'	Week 2	Sheila Birling Sheila Birling is Arthur and Sybil's daughter and is in her early twenties. At the start of the play she is celebrating
	Naïve <i>Ni-ave</i>	Showing a lack of experience, wisdom, or judgement	Sheila is is shocked to discover the true harsh of reality		








			<p>regarding girls like Eva. Her comment about Eva shows just how sheltered her life has been 'She was pretty and looked as if she could take care of herself'</p>	<p>her engagement to Gerald Croft and she is a giddy, naïve and childish young lady. The Inspector arrives and she is very shocked by the news of Eva Smith's death, she is also very regretful of her own involvement in the suicide.</p> 
	<p>Petulant <i>pech-uh-luhnt</i></p>	<p>Childishly sulky or bad-tempered</p> 	<p>The relationship she has with Eric at the beginning of the play is very childlike she says Eric is 'squiffy' and is excitable. In addition, her behaviour at Milwards when trying on the dress supports how childlike she acted believing Eva had laughed at her she then demanded her to be sacked.</p>	<p>As the play continues, she matures, admiring Gerald's honesty, even though he cheated on her. She shows an assertive side by standing up to her mother and father and she also shows that she is insightful and intelligent - she can see where the Inspector's investigation is going and tries to warn the others.</p>
	<p>Symbolism</p>	<p>the use of symbols in order to represent something.</p>	<p>The disinfectant that Eva/Daisy swallows should make her "clean," but it destroys her. In the same way the Inspector's questions should "make clean" the family by bringing people's secrets into the light of day. But these secrets nearly tear the family apart too.</p>	
	<p>Personal Responsibility</p>	<p>the duty to try hard to make your life worthwhile and to be fair to others.</p> 	<p>Priestley believed that we are all a community and have a responsibility to look after each other, and this crucial message is showcased through the character of the Inspector, the mouthpiece of Priestley.</p>	<p>By the end of the play she has grown up and has realised that her actions can have grave consequences.</p>





Week 3	Aristocratic aris-to-cratic	Of, belonging to, or typical of the aristocracy /upper classes 	e.g. holds the same view as Mr Birling and his father as to how their business should be run. He says after hearing Birling sacked Eva 'You couldn't have done anything else'	Week 3	Gerald Croft Gerald is described as 'an attractive chap about thirty, rather too manly to be a dandy but very much the easy well-bred young man-about-town'. Mr Birling is very pleased that Gerald is getting engaged to Sheila because his family are upper-class business owners, Mr Birling hopes they can join forces in business. At the beginning of the play, Gerald comes across as being confident and charming . This changes after his affair with Eva Smith is revealed. Gerald gives himself away when he hears that Eva changed her name to Daisy Renton. He initially is evasive and tries not to talk too much about it but redeems himself in the eyes of the audience by being more open and honest about it as he talks to Sheila. He lets himself down in the final act by trying to get the family out of trouble, he doesn't seem to have learned from his mistakes.  
	Duplicitous doo-plis-i-tuh s	Deceitful 	Gerald leads Daisy on by setting her up in a flat and giving her money, but then dropping her when he realised it couldn't go anywhere 'I didn't feel about her as she felt about me.'		
	Advantaged	Having a comparatively favourable position in terms of economic or social circumstances. 	being the son of Lord and Lady Croft Gerald is the perfect son-in-law for the Birlings. Gerald and Sheila's engagement offers the possibility of uniting the families.		
	Philandering	(Of a man) readily or frequently enter into casual sexual relationships with women	began a relationship with Daisy despite being in a relationship with Sheila (Sheila to Gerald) 'Except for last summer when you wouldn't come near me.'		
	Static	Lacking in movement, action, or change, especially in an undesirable or uninteresting way	quick to revert to normality after discovering the inspector wasn't a real one, he assumed he could pick up his relationship with Sheila now 'Everything's all right now, Sheila. Demonstrating that like the older Birlings he has learnt nothing from the inspector.		





Week 4	Prejudiced	<p>Having or showing a dislike or distrust that is derived from a biased opinion</p> 	<p><i>Mrs Birling taking an instant dislike to Eva because she used her name.</i></p>		
	Stereotypical	<p>Relating to a widely held but fixed and oversimplified image or idea of a particular type of person or thing</p> 	<p><i>Mrs Birling making assumptions about Eva because she is working class 'As if a girl of that sort of class would ever refuse money'</i></p>		<p>Sybil Birling</p>  <p>Mrs Sybil Birling is Arthur Birling's wife and right from the opening of the play she is cold-hearted and snobbish despite being a prominent member of local women's charity. Throughout dinner she tells Sheila and Eric off for things that she considers impolite whilst ignorantly turning a blind eye to her son drinking too much. It is clear that despite Eric being old enough to drink and Sheila getting married, she sees them both as children, not as a young man and woman.</p> <p>Her cold, uncaring nature leads to her downfall as the Inspector forces her to unknowingly condemn her own son.</p> 
	Unsympathetic	<p>Not feeling, showing, or expressing sympathy</p> 	<p><i>Her reaction to her daughter when Sheila discovers Gerald has cheated.</i></p>		
	Ignorant	<p>Lacking knowledge or awareness in general</p>	<p><i>Mrs Birling is unable to learn anything from the Inspector's visit.</i></p>		
	Conceited kuhn-see-tid	<p>Excessively proud of oneself.</p>	<p><i>when Eva used the family name Mrs Birling said 'She'd impertinently made use of our name' highlighting how she considers their name to be of great importance.</i></p>		
Week 5	Bourgeois boor-ghwa	<p>Belonging to or characteristic of the middle class, typically with reference to its perceived materialistic values or conventional attitudes</p> 	<p><i>Eric has been born into a middle class family and has been given a job at his father's company. It is expected he will take over the company in the future.</i></p>	Week 5	<p>Eric Birling</p> 

	Privileged	Having special rights, advantages, or immunities	<i>Eric being born into the family allows him at the beginning of the play to appear to be untouchable. Through his lack of responsibility given to him by his parents and being treated like a child.</i>		<p>Eric is the Birlings' son and is in his early twenties, he is described as being 'not quite at ease, half shy, half assertive'. In other words, he lacks confidence. At points he tries to stand up to his father but is talked down. It becomes clear that he is drunk at the dinner table and later it is revealed that he has been drinking too much for quite some time.</p> <p>It turns out that Eric had an affair with Eva Smith and that she was pregnant with Eric's baby when she committed suicide. Eric stole money from his father's business to help Eva. In the final act Eric makes an emotional attack on his parents and their values and shows that he can be assertive.</p> 
	Guilty	Responsible for a specified wrongdoing 	<i>When he describes his encounter with Eva 'I was in a state when a chap easily turns nasty.'</i>		
	Culpable <i>cul-pa-ble</i>	Deserving blame 	<i>Eric symbolised how those with money get what they want at the beginning of the play and for his treatment of Eva/Daisy. Therefore deserving the blame he felt through his abuse of power.</i>		
	Responsible	Being the primary cause of something and so able to be blamed or credited for it	<i>Eric accepts his part in the death of Eva, and also is prepared to face the consequences for his action he states 'we helped to kill her.'</i>		
Week 6	Omniscient <i>Om-nis-ee-uhnt</i>	Knowing everything 	<i>The inspector seems to have a deep knowledge of the whole family and uses this when he questions them.</i>	Week 6	<p>Inspector Goole</p> <p>The Inspector arrives whilst the Birling family are celebrating the engagement of Sheila and Gerald. The stage directions state that he 'need not be a big man' but that he must create an 'impression of massiveness, solidity and purposefulness'. The Inspector investigates each family member one at a time and in doing so, reveals the consequences of their behaviour.</p> 
	Solid	Firm and stable	<i>The Inspector does not get drawn into any petty quarrels, he questions the characters one at a time and remains unfazed by their reactions.</i>		

	Socialist	<p>One who believes that the means of production should be owned by or regulated by the community as a whole</p> 	<p><i>The Inspector represents socialism through his actions and being the voice of Eva, reminding the family that they do not live alone. Furthermore, he represents Priestley and his view point and the attempts to encourage those in society that held the same views as the character Birling to be more caring towards other and want an equal society to live in.</i></p>			<p>He drives forward the drama, with his questions creating shocking moments and gripping cliff-hangers for the audience. By the end of the play it is revealed that he isn't actually an Inspector. It is not entirely clear who he is, Priestley leaves it up to the audience to decide. His name 'Goole' suggests a supernatural or ghost like element, and he seems to know what the characters will say before they do - is he the conscience of the audience? Is he the voice of Priestley? Either way he delivers a frightening message when he leaves, that if people do not take responsibility for each other, the world is doomed.</p>
	Authoritative au-thor-i-ta-tive	<p>Commanding and self-confident; likely to be respected and obeyed</p> 	<p><i>In the stage direction he is described as 'He speaks carefully, weightily and has a disconcerting habit of looking hard at the person he addresses before actually speaking.' In addition, he controls the room the lighting changes from 'pink and intimate' to 'brighter and harder' once he arrives.</i></p>			
	Antithesis an-tith-uh-sis	<p>A person or thing that is the direct opposite of someone or something</p> 	<p><i>the inspector is a socialist and Mr Birling is a capitalist their views and opinions are the antithesis of each other's.</i></p>			

Week 7	Stoical <i>s-to-ical</i>	Enduring pain and hardship without showing one's feelings and complaining	<i>the inspector informed the family Eva had ' No work, no money coming in, and living in lodgings with no relatives to help her'</i>	Week 7	Eva Smith/ Daisy Renton 
	Diligent	Having or showing care and conscientiousness in one's work and duties 	<i>Putting herself in danger of losing her job because she felt passionate about how others were paid as well as herself.</i>		<p>We never meet Eva Smith during the course of the play, but she is a very important character. It is her death that is the cause of the Inspector's investigation which in turn drives the drama.</p> <p>The audience learns about Eva through the Inspector, who has read a letter and a diary she kept. They also learn about her through the characters she came into contact with. A lot of the information about her is inferred - from the incident at Mr Birling's factory we can infer that she was strong willed. From her interaction with Sheila the audience can see that Eva had a sense of humour. Her relationship with Gerald, when she changed her name to Daisy Renton, reveals her sensitivity. By the time she reaches Eric and Sybil, Eva is desperate and resourceful in trying to get herself help.</p> <p>Eva is always referred to in a positive light by the characters that met her but the Inspector never lets the audience or the Birlings and Gerald forget her gruesome death. The Inspector's final speech reveals Priestley's lesson that there are millions of Eva Smiths being exploited and this must not continue.</p> 
	Vulnerable	Exposed to the possibility of being attacked or harmed, either physically or emotionally 	<i>Eva/Daisy has placed herself in many situation where she was vulnerable when Gerald saved her from old man Meggarty and Eric forcing himself on her.</i>		
	Underprivileged	(of a person) not enjoying the same standard of living or rights as the majority of people in a society 	<i>Eva was a working class girl living in 1912 where there was a huge divide between the social classes.</i>		
	Emblematic <i>em-blem-at-ic</i>	Serving as a symbol of a particular quality or concept; symbolic	<i>when the inspector says 'One Eva Smith has gone – but there are millions and millions of Eva Smith's and John Smith's still left with their lives, their hopes and fears all intertwined with our lives'</i>		
Week 8	Dramatic Irony	 Irony that is understood by the audience but not grasped by the characters in the play.	The audience know what the characters don't; makes Mr Birling appear foolish & discredits his ideas	Week 8	Social Responsibility 

	Setting and props	Constant throughout but with subtle changes 	Lighting: reflects insular and self-centred view point of the Birlings Large suburban house, port and cigars, champagne glasses, the photograph		<p><i>An Inspector Calls</i> was first performed in the UK just after the end of World War Two, in 1946. It was a time of great change in Britain and many writers were concerned with the welfare of the poor. At that time there was no assistance for people who could not afford to look after themselves. Priestley wanted to address this issue. He also felt that if people were more considerate of one another, it would improve quality of life for all. This is why social responsibility is a key theme of the play. Priestley wanted his audience to be responsible for their own behaviour and responsible for the welfare of others.</p> 
	Stage Directions	Set the scene for tension, class and relationships at the beginning	This emphasises the change in Sheila and Eric by the end of the play,		
	Entrances and Exits	Used to create tension and emphasise key plot points to the audience * Cliff-hangers *	Entrances and Exits are often controlled by Inspector Goole Act 1 ends with the Inspector saying 'Well?' to Gerald. This is the same way that Act 2 begins. This cliff-hanger means the audience have to wait to find out what happens, even though they have already anticipated what will happen.		
	Contrasts	The audience are forced to make contrasts between the Birlings' self-interested attitudes and the beliefs of the Inspector.	The Inspector himself -It is especially clear that Priestley is using the Inspector to move the plot along, to control the pace of events and to decide the order in which the characters are questioned.		
	<u>Keyword</u>	<u>Definition</u>	<u>Which character does this link to?</u>		
Week 9	Exploitative <i>ex-ploit-at-ive</i>	Making use of a situation or treating others unfairly in order to gain an advantage or benefit 		Week 9	<p>Age/ Generation Gap</p> <p>Age is an important theme in <i>An Inspector Calls</i>. Priestley uses it to show how he believed that there was hope in the younger generation's ability to learn and change.</p>
	Boastful	Showing excessive pride and self-satisfaction in one's achievements, possessions, or abilities			
	Grandiose <i>gran-dee-ohs</i>	Extravagantly or pretentiously imposing in appearance or style 			

	Imperious <i>im-peer-ee-uhs</i>	Arrogant and domineering 			<p>The older characters' opinions and behaviours are stubbornly fixed. Mr Birling refuses to learn and Mrs Birling cannot see the obvious about herself and her children. Eric and Sheila however are younger - they accept their mistakes and offer the chance for a brighter future.</p> 
	Cruel	Wilfully causing pain or suffering to others, or feeling no concern about it			
Week 10	Arrogant	Having or revealing an exaggerated sense of one's own importance or abilities		Week 10	<p>Gender</p> <p><i>An Inspector Calls</i> was written after World War Two. As many British men went away to fight during the war, their positions in work had to be filled by women. This helped change existing perceptions. Men had to acknowledge the fact that women were just as capable as them. As a result of this, many women enjoyed a newfound freedom that working and earning money allowed them.</p> <p>Not all men saw this change in attitude as a good thing and stayed stuck in the past. Priestley explores the impact of these new gender roles through the independence of Eva Smith and the sexist attitudes of Mr Birling.</p>
	Rapacious <i>ruh-pey-shuhs</i>	Aggressively greedy or grasping			
	Covetous 	Having or showing a great desire to possess something belonging to someone else			
	Brazen	Bold and without shame			
	Avaricious <i>av-uh-rish-uh s</i>	Having or showing an extreme greed for wealth or material gain. 			

Make sure that you are confident with the AO2 Subject Terminology – You need to know the definition and be able to identify it in a passage of text.

Learn quotes – You will need to memorise quotes for all your GCSE Literature exams. You also need to be able to analyse the quotes – comment on the Why it is significant, What it demonstrates about the character, How it affects the audience and How it develops the themes within the play.

Key Characters

- (pick 1)
- ☐ Create a character sheet
 - ☐ Create a mind map
 - ☐ Plot their activities and actions
 - ☐ Draw their picture using evidence from the play
 - ☐ Write a letter home from their perspective
 - ☐ Write a script between two characters
 - ☐ Write what happens to a character after the play

Mr Birling * Eva Smith/Daisy Renton * Gerald * Sheila * Eric *
Inspector Goole * Sybil

AO3 – Social Context – *(Influences on the book and author)*

Developing Cultural Capital - Themes

Read a newspaper article on a theme from the play that's linked to current events.

Tasks: ☐ Print them out and highlight literary techniques.

(pick 1) ☐ Write a summary of the article

☐ Find two conflicting articles

CONTEXT

BRITAIN IN 1912

- Society was divided along class lines. Those with the most money had the most power.
- Only men who owned property could vote. Women could not vote.
- Women's lives were controlled by their families and husbands.

BRITAIN WAS HEADING TOWARDS THE FIRST WORLD WAR

- Tension between big European countries in 1912, resulting in WW1. This cost millions of lives.
- After WW1, many British people questioned the leadership given by the upper classes during the war.

BRITAIN IN 1945

- Britain was still divided by class, but women had more power and could vote.
- Conflict between businesses and owners, causing industries to grind to a halt.
- Great depression in 1930s.

PRIESTLEY SET THE PLAY IN THE PAST

- The end of WW2 changed Britain: the Labour Party focussed on improving the welfare system for the poorest.
- Priestley wanted to highlight what had improved since 1912, and also show what needed to be changed.

Sample Exam Questions

CHARACTER

How and why does Sheila change in An Inspector Calls?

Write about:

- how Sheila responds to her family and to the Inspector
- how Priestley presents Sheila by the ways he writes.

How far does Mr Birling change in An Inspector Calls?

Write about:

- how Mr Birling responds to her family and to the Inspector
- how Priestley presents Mr Birling by the ways he writes.

How and why does Eric change in An Inspector Calls?

Write about:

- how Eric responds to his family and to the Inspector
- how Priestley presents Eric by the ways he writes.

How does Priestley present the character of Mrs Birling in An Inspector Calls?

Write about:

- how Mrs Birling responds to her family and to the Inspector
- how Priestley presents Mrs Birling by the ways he writes.

How does Priestley present the character of Gerald in An Inspector Calls?

Write about:

- how Gerald responds to the Birling family and to the Inspector
- how Priestley presents Gerald by the ways he writes.

THEME:

How does Priestley explore responsibility in An Inspector Calls?

Write about:

- the ideas about responsibility in An Inspector Calls
- how Priestley presents these ideas by the ways he writes.

How does Priestley explore the issue of class in An Inspector Calls?

Write about:

- the ideas about class in An Inspector Calls
- how Priestley presents these ideas by the ways he writes

How does Priestley explore the idea of blame in An Inspector Calls?

Write about:

- the ideas about blame in An Inspector Calls
- how Priestley presents these ideas by the ways he writes.

How does Priestley explore the ideas of status and power in An Inspector Calls?

Write about:

- the ideas about status and power in An Inspector Calls
- how Priestley presents these ideas by the ways he writes.

How does Priestley explore the ideas of socialism in An Inspector Calls?

Write about:

- the ideas about socialism in An Inspector Calls
- how Priestley presents these ideas by the ways he writes.

Week 1 & 2

Nutrition recall

8 tips for a healthy diet

1. Base your meals on higher fibre starchy carbohydrates.
2. Eat lots of fruit and veg.
3. Eat more fish, including a portion of oily fish.
4. Cut down on saturated fat and sugar.
5. Eat less salt: no more than 6g a day for adults.
6. Get active and be a healthy weight.
7. Do not get thirsty.
8. Do not skip breakfast.

VITAMINS AND THEIR FUNCTIONS

	Function (what does it do?)	Source (foods found in)
A	<ul style="list-style-type: none"> • Healthy skin • Helps us see in the dark 	<ul style="list-style-type: none"> • Animals – liver and milk • Plants – carrots and red peppers
B	<ul style="list-style-type: none"> • Releases energy from food 	<ul style="list-style-type: none"> • Bread, fish, broccoli, liver, milk, peas, rice
C	<ul style="list-style-type: none"> • Keeps connective tissue healthy • Helps absorb iron 	<ul style="list-style-type: none"> • Oranges, blackcurrants, broccoli, red and green peppers
D	<ul style="list-style-type: none"> • Helps the body absorb calcium 	<ul style="list-style-type: none"> • Butter, eggs, milk, oily fish

MINERALS AND THEIR FUNCTIONS

	Function (what does it do?)	Source (foods found in)
Calcium	Build strong bones and teeth	Yoghurt, cheese, milk, tofu
Sodium (salt)	Keeps the correct water balance in the body	Cheese, ready meals, salted nuts, bacon
Iron	Keeps red blood cells healthy	Dark green vegetables, beans, fish, egg yolk, red meat

Questions:

1. What colour is each section of the Eatwell guide?
2. What should we cut down on eating too much of?
3. What do the letters GERM stand for in proteins function in the body?
4. What do the letter PIE stand for in fats functions in the body?

Week 3 & 4

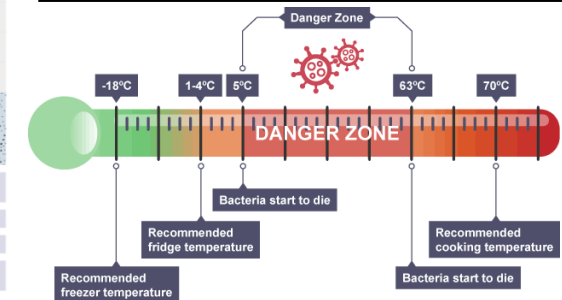
Food safety 1

Food safety advice when handling food:



How do bacteria grow?

Bacteria double every 10-20 minutes in the right conditions (asexual) e.g. 1 becomes 2, then 4, then 8 through binary fission



Definitions:

- **Food poisoning** is an illness caused by eating contaminated food. It's not usually serious and most people get better within a few days without treatment. In most cases, food is contaminated by bacteria.
- **High-risk foods:** ready-to-eat foods high in moisture and protein

Food poisoning bacteria and symptoms

Name	Foods it can come from
Salmonella	Undercooked poultry, Eggs, Unpasteurised milk
Listeria	Soft cheeses, pate
Campylobacter	Poultry, milk and milk products
E-coli	Undercooked meat – especially burgers, Unwashed contaminated fruit

Symptoms of food poisoning:

- Vomiting
- Stomach pains
- Diarrhoea
- Dehydration
- Nausea

Questions:

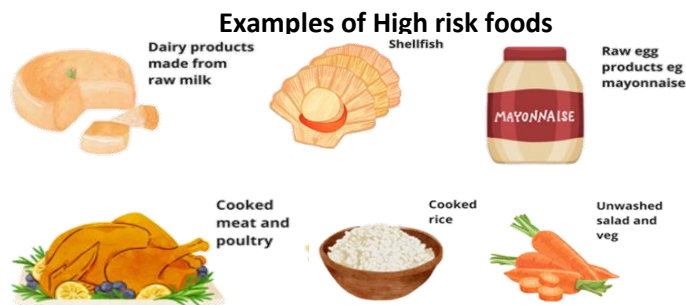
1. What are the 5 main things that bacteria need to grow?
2. What are the main symptoms of food poisoning?
3. How could you control or stop bacterial growth?

Week 5 & 6
Food safety applied

Definition:

Food poisoning is an illness caused by eating contaminated food. It's not usually serious and most people get better within a few days without treatment. In most cases, food is contaminated by bacteria.

High-risk foods: ready-to-eat foods high in moisture and protein



Using your knowledge of food safety from years 7, 8 and 9 and this knowledge organiser, answer the following questions:

1. Explain how the ingredients used to make a chicken curry should be stored. You can't repeat answers

Ingredient	Storage instruction
Raw mince	
Left over coconut milk	
Cooked curry	

2. Give 2 food safety rules that must be used for each of the following and explain why the rule is important.
3. Which type of food poisoning could you get from eating raw/undercooked chicken?
4. Name 3 high-risk foods

Week 7 & 8
Revision for assessment

You need to use all of the information from the knowledge organiser to revise for the end of rotation assessment. Use the following questions to help.

You don't need to answer them all in your book but you should be able to answer them. See which ones you can/can't answer.

1. Why should you eat a variety of foods?
2. List the 5 main nutrients needed by the body and give a function of each
3. How much water should we drink a day?
4. List the sections of the Eatwell Guide including foods you would find in each section
5. What is the 4 letter word to remember the functions of protein
6. Which groups of people need more protein in their diet?
7. What are proteins made from and how many are there?
8. Can the body make all of the amino acids?
9. What are 3 of the main functions of fat in the body?
10. Name 3 sources of animal fat & 3 sources of vegetable fat
11. Which type of fat should we be eating less of and which should we eat more of?
12. What is the main function of carbohydrate in the body?
13. What are the 3 main groups of carbohydrate?
14. What percentage of our energy should come from carbohydrates?
15. What problems do you think eating too many free sugars could cause in the body?
16. Explain the difference between a macronutrient and micronutrient?
17. Are macronutrients more important than micronutrients in the body?
18. Which vitamin helps the body absorb calcium?
19. Which vitamin helps the body absorb iron?
20. Why do teenagers need extra protein in their diets?
21. Which foods should adults avoid to prevent weight gain?
22. What type of drinks are suitable for pregnant women?
23. Why does the elderly need less energy than younger adults?

Year 9 French

Cycle 3



Instructions

- Look at the list of 12 words/phrases and practice saying them
- Cover the English side and try to say them to yourself, then write them down.
- Check your answers
- Repeat until you can remember all 12
- Keep doing this regularly until you are confident !

Challenge : Can you cover up the French side and remember all 12 including the spellings ?

You have **two** weeks to revise each vocabulary list at home.

You will then be tested in class on how well you know all 12 words/phrases.

Bon Courage !

Test 1 – School rules LC3

FRANCAIS	ANGLAIS
1. Au collège en Angleterre je dois porter l'uniforme	At school in England I have to wear a uniform
2. On doit travailler en classe	We have to work in lessons
3. Il faut être gentil(le)	It is necessary to be kind
4. Je ne dois pas utiliser un portable	I must not use a mobile phone
5. On ne doit pas crier dans les couloirs	We must not shout in the corridors
6. Il est interdit de harceler d'autres élèves	It is forbidden to bully other students
7. Je trouve ça juste car il faut protéger des jeunes	I find that fair because it's necessary to protect young people
8. Je trouve ça énervant car on n'est pas des bébés	I find that annoying because we are not babies
9. Je trouve ça facile car je veux apprendre	I find that easy because I want to learn
10. Je trouve ça ridicule car c'est trop stricte	I find that ridiculous because it is too strict
11. Il faut écouter le/la prof- je trouve ça normal	It is necessary to listen to the teacher- I find that normal
12. Je ne dois pas porter des bijoux- je trouve ça frustrant	I must not wear jewellery-I find that frustrating

Test 2 – What do you like to wear ? LC3

FRANCAIS	ANGLAIS
1. Au collège je porte une chemise bleue	At school I wear a blue shirt
2. À l'école je dois porter une jupe grise	At school I have to wear a grey skirt
3. On porte un pantalon noir	We wear black trousers
4. On doit porter un chapeau vert	We have to wear a green hat
5. Hier j'ai porté une veste blanche et un jean	Yesterday I wore a white jacket and jeans
6. Le weekend dernier j'ai porté un haut rouge	Last weekend I wore a red top
7. Selon moi l'uniforme est trop cher	In my opinion the uniform is too expensive
8. Je trouve que l'uniforme est assez confortable	I find that the uniform is quite comfortable
9. Je porte un pull jaune car j'aime le style courant	I wear a yellow jumper because I like the up-to-date style
10. Hier j'ai porté une chemise grise car j'aime les vêtements pratiques	Yesterday I wore a grey shirt because I like practical clothes
11. Au collège je trouve que l'uniforme est un peu moche	At school I find that the uniform is a bit ugly
12. Je porte un jean blanc car je préfère le style relaxe	I wear white jeans because I prefer a relaxed style

Test 3 – Languages and travel LC3

FRANCAIS	ANGLAIS
1. En ce moment j'apprends le français	At the moment I'm learning French
2. Actuellement j'apprends l'espagnol	Currently I'm learning Spanish
3. Un jour je voudrais apprendre l'arabe	One day I would like to learn Arabic
4. Je pense que c'est important car dans le futur je vais voyager	I think that it is important because in the future I'm going to travel
5. Après avoir fini mes études je vais faire du bénévolat	After having finished my studies I'm going to do volunteering
6. Dans le futur je vais habiter en Allemagne	In the future I'm going to live in Germany
7. Je vais faire une formation à l'étranger avec ma copine	I'm going to do some training abroad with my friend
8. Un jour je voudrais apprendre le grec et je vais habiter en Grèce	One day I would like to learn Greek and I'm going to live in Greece
9. Dans le futur je vais faire un échange scolaire avec mon copain	In the future I'm going to do a school exchange with my friend
10. Je vais soutenir un projet en Amérique du Sud	I'm going to support a project in South America
11. Après avoir fini mes études je vais avoir une carrière	After having finished my studies I'm going to have a career
12. Je vais faire une année sabbatique en Asie seul(e)	I'm going to do a gap year on my own

Test 4 – My future trip LC3

FRANCAIS	ANGLAIS
1. L'année prochaine je vais aller en France avec ma famille	Next year I'm going to go to France with my family
2. L'été prochain je vais aller en Espagne avec mon école	Next summer I'm going to go to Spain with my school
3. Je vais aller au Canada pour améliorer mon français	I'm going to go to Canada to improve my French
4. Bonjour, je peux vous aider ?	Hello, can I help you?
5. Je voudrais l'entrée et le plat du jour s'il vous plaît	I would like the starter and the dish of the day please
6. Et comme boisson ?	And as a drink?
7. Je voudrais de l'eau	I would like water
8. Je voudrais une chambre avec un grand lit	I would like a room with a double bed
9. Pour combien de nuits ?	For how many nights?
10. Je voudrais une chambre pour 8 nuits s'il vous plaît	I would like a room for 8 nights please
11. Je voudrais une chambre avec une vue sur la mer pour 2 nuits	I would like a room with a sea view for 2 nights
12. Ça fait 150 euros, merci et au revoir	That is 150 Euros. Thank you and goodbye



Year 9 Cycle 3 Geography Knowledge Organiser – Resource Management



Week 1 – Friday 28 th March 2025		Week 2 – Friday 4 th April 2025	
Lesson 1 – Resource importance	Lesson 2 – UK water	Lesson 3 – UK water strategies	Key Word Practice
Key Terms: Resource: Anything that is used to satisfy a human need. It has a value and purpose.	Key Terms: Surplus: Supply exceeds demand. Deficit: Demand exceeds supply.	Key Terms: Water transfer: Physical movement of water from one location to another. Water pollution: Contamination of water bodies, usually because of human activity.	1. Resource 2. Malnourished 3. Under nourished 4. Consumption 5. Domestic 6. Surplus 7. Deficit 8. Kielder 9. Environment 10. Regulations
Content: Food: Your health is affected by how much you eat. Over 1 billion people in the world are malnourished . 2 billion suffer from under nourishment . In HICs some people consume too much and are considered obese. Water: Essential for survival. Many of the world's poorest countries do not have adequate supplies. There are two reasons: Physical scarcity : there is not enough (deserts) and economic scarcity : there is water but they are too poor to access/ clean it. Energy: This is essential for all industries. Energy production and consumption is increasing . Primary energy is oil, coal, gas, wind, sun. Oil is turned into petrol/ diesel for transport.	Content: Demand for water in the UK is increasing. It is estimated to rise by 5% between 2015-2020 because of a rapid growing population , more houses and an increase in water intensive domestic appliances (e.g., dishwashers). Domestic use is the largest 47% (toilet flushing), 22% is lost through leakage. Challenges of meeting demand <ul style="list-style-type: none"> • The north and west have a water surplus due to relief rainfall on the highlands. • The south and east have a water deficit. • Water stress (where demand exceeds supply) is experienced in more than half of England. 	Content: Kielder Water (water transfer). It is the largest reservoir in Europe. It supplies water to the south. There are plans to enlarge to include London. Opposition: high costs, effect on land and wildlife, and GHG released by pumping water. But it does provide HEP and tourism opportunities The quality of water in the UK is affected by multiple sources of pollution from urban and agricultural runoff and an ageing sewage infrastructure. Environment agency manage water quality by filtering sediment, purifying (add chlorine) and imposing strict regulations .	
Questions: <ol style="list-style-type: none"> 1. What is a resource? 2. How many people are malnourished? 3. What are the two reasons for not enough water? 4. Give examples of primary energy 	<ol style="list-style-type: none"> 5. What is surplus and deficit? 6. Give two reasons for an increase in demand for water in the UK 7. Where are areas of water surplus and deficit in the UK? 8. Where is water stress experienced in the UK? 	Questions: <ol style="list-style-type: none"> 1. What is water transfer? 2. Where does Kielder water supply? 3. What affects water quality? 4. How does the environment agency manage water quality? 5. Copy out each key word 3 times 	



Year 9 Cycle 3 Geography Knowledge Organiser – Resource Management



Week 3 – Friday 25 th April 2025		Week 4 – Friday 2 nd May 2025	
Lesson 4 – UK food demand and miles	Lesson 5 – Agribusiness and organic	Lesson 6 – UK energy	Key Word Practice
Key Terms: Export: Goods that are sold abroad. Import: Goods that are bought in from another country. Food Miles: The distance covered supplying food to consumers.	Key Terms: Agribusiness: Very large intensive farming aimed at maximising the amount of food produced. Organic: Growing of crops and animals without the use of artificial chemical fertilisers and pesticides.	Key Terms: Renewable: Energy from a source that is not depleted when used (wind, solar, HEP, hydro) Energy insecure: Amount of energy consumed is more than is produced.	1. Export 2. Import 3. Seasonally 4. Agribusiness 5. Technology 6. Fertiliser 7. Organic 8. Energy 9. Renewable 10. Consumption
Content: In 2013 47% of UK food was imported . 68% from within the EU, 32% from the rest of the world. Average Annual food miles is 18.8 billion miles. Why has demand increased? 1. Rising population 2. Demand for greater choice. 3. Not all foods can be grown the UK, 4. Food (such as meat) can be grown more cheaply elsewhere. Positive impacts: Jobs and wages for those in LICs, more tax income leads to a better quality of life. Negative impacts: less land for locals to farm for themselves, high water use and exposure to chemicals (pesticides and fertilisers). Buying local and eating seasonally can reduce this impact.	Content: Agribusiness: ✓ Use the latest technology ✓ Food prices are reduced × May put smaller farms out of business × Remove hedgerows and tree line × Large amounts of fertiliser and pesticides are used to maximise production Organic farming: ✓ Provide local employment ✓ Builds a strong relationship between farmer and consumer ✓ Has expanded beyond Devon ✓ Can Reduce food miles. × Can't meet demand for exotic foods × Often only grow seasonal foods × Higher cost to the consumers	Content: Primary energy: Raw fuels e.g., coal, oil, gas, wood, biofuel. Gas is the main primary fuel used to make electricity. Secondary Energy: Primary energy converted into a usable source e.g., Electricity Demand is rising due to more people and more technology. But UK energy consumption is falling due to the efficiency of technology (e.g., creation of the lithium battery) and reduction in heavy industry. Coal use has nearly stopped in UK. We have limited supplies of oil and gas. Importing these can be difficult as they may be interrupted . So, we are still energy insecure .	
Questions: 1. What are exports and imports? 2. State 4 reasons why food demand has increased 3. Give two positive impacts 4. Give two negative impacts	5. What is agribusiness? 6. Give 2 positive and negatives of agribusiness 7. What is organic? 8. Give 2 positive and negatives of organic farming	Questions: 1. What is renewable? 2. Why is energy demand rising? 3. Why is consumption falling? 4. What is energy insecure? 5. Copy out each key word 3 times	



Year 9 Cycle 3 Geography Knowledge Organiser – Resource Management



Week 5 – Friday 9 th May 2025		Week 6 – Friday 16 th May 2025	
Lesson 7 – UK energy mix	Lesson 8 – UK energy mix issues	Lesson 9 – Global water	Key Word Practice
Key Terms: Energy mix: The range of energy sources of a region or country, both renewable and non-renewable.	Key Terms: Fracking: Process of extracting natural gas from shale rock layers deep within the earth.	Key Terms: Physical water scarcity: Not enough water due to climatic or other physical reasons. Economic water scarcity: Not enough money to make the water drinkable.	1. Energy 2. Fossil fuel 3. Renewable 4. Efficiency 5. Fracking 6. Unreliable 7. Atmosphere 8. Scarcity 9. Surplus 10. Deficit
Content: In 1970 91% from fossil fuels. In 2015 65% fossil fuels (Coal 31%, Gas 25%), Nuclear 19%, Renewable 22%. Why have the changes taken place? 1.The UK has invested in renewable energy. 2.North Sea oil and gas decreasing. 3.EU regulations on gas emissions has led to a decrease in fossil fuel use. 4.Energy efficient appliances and industry mean less energy is used in homes and industry. 5.It is cheaper to import coal into the UK than to mine it. 6.Economic issues – costs, jobs, set up costs, research, reliability. 7.Environmental costs – ecosystems, waste, noise, emissions, pollution, radiation leaks.	Content: Nuclear energy: • Opportunities: Clean, reliable, efficient energy • Challenges: Radioactive waste, expensive to build, lack of public support Wind: Building offshore wind farms • Opportunities: Clean, free energy, especially for local residents • Challenges: Unreliable, can't store the excess produced, unsightly, unpopular Fracking: • Opportunities: Cheap and reliable • Challenges: Contaminated ground water, causes earthquake, uses a lot of energy. 3% of gas extracted is lost to atmosphere (methane).	Content: Areas of water surplus: North America, South America, North Western Europe and Oceania. Areas between 45°N and 60°N receive high (frontal) rainfall and lower temperatures. Areas of water deficit: Countries at 30°N and S of equator (deserts) suffer from physical water scarcity . Middle Eastern countries use desalination plants. LICs along the equator suffer from economic water scarcity as they can't transfer or clean it. Some parts of China and India suffer from water stress due to over abstraction and pollution.	
Questions: 1. What is an energy mix? 2. Where did our energy come from in 1970? 3. Where did our energy come from in 2015? 4. Give 3 reasons why it changed?	5. Give an opportunity & challenge of nuclear energy 6. Give an opportunity & challenge of wind energy 7. What is fracking? 8. Give an opportunity & challenge of fracking	Questions: 1. What is physical water scarcity? 2. What is economic water scarcity? 3. Give areas of water surplus 4. Give areas of water deficit 5. Copy out each key word 3 times	



Year 9 Cycle 3 Geography Knowledge Organiser – Resource Management



Week 7 – Friday 23 rd May 2025		Week 8 – Friday 6 th June 2025	
Lesson 10 – Water availability	Lesson 11 – Water insecurity impacts	Lesson 12 – Improving water supply	Key Word Practice
Key Terms: Permeable: Ability of water to move through rocks. Abstraction: The process of taking water from its source.	Key Terms: Water insecurity: Not enough water to meet demand. Irrigation: Supply extra water to where it's needed through channels.	Key Terms: Aquifer: A geological formation that can store and provide water.	1. Permeable
Content: Climate: The most important factor. 0° (equator) and 60° high precipitation. 30° N and S (deserts) have low levels. Geology: Permeable rocks can store water. Impermeable rocks may not. Pollution of supply: Waste from industry causes pollution of water supplies. Where sanitation is poor, sewage enters rivers and lakes. Over-abstraction: When water is pumped from the ground at a rate which is faster than it recharges/refills. Poverty: Nearly 1 billion people do not have access to clean, safe water. May spend 6 hours collecting means they are not working or at school Limited infrastructure: LICs have limited money to provide the infrastructure (pumping stations & pipes) needed for water.	Content: Pollution: Too many chemicals from agriculture and industrial waste pollute water supplies and ecosystems. Disease: Pollution can lead to waterborne diseases (cholera, typhoid) can limit ability to work. Food Production: Most agriculture relies on irrigation. If insufficient, crops can't be grown and animals die. Industrial output: Water is needed for cooling and other industrial processes. Water insecurity can affect energy supplies. Conflict: Limited water becomes a valuable resource. Can lead to tension or even "water wars". Tensions are inevitable when two or more countries share a river (Ethiopia and Egypt conflict over River Nile).	Content: Diverting supplies: Rainwater can be used to recharge aquifers. This helps support a clean supply of water that has been filtered by percolation. Water transfer: Water from areas of surplus is transferred to areas of deficit through canals and pipes. The infrastructure required can be expensive. Dams and reservoirs: Damming a river allows water to be stored in a reservoir and controls river flow. A long-term solution, but very expensive. e.g., Bakun Dam (Sarawak) in 2011. Desalination: Saline (salt) water is taken from the sea and salt removed. Water supplies cannot run out, but it uses a lot of energy and is expensive. Middle Eastern countries rely on these	2. Abstraction
Questions: 1. Where are areas of high and low precipitation? 2. How does pollution of supply happen? 3. What is abstraction? 4. What's the problem in LICs?	5. What is water insecurity? 6. What is irrigation? 7. How does insufficient irrigation impact food production? 8. What happens to water during conflict?	Questions: 1. What are aquifers? 2. How can diverting supplies improve supply? 3. What is removed during desalination? 4. Who relies on desalination? 5. Copy out each key word 3 times	3. Infrastructure
			4. Insecurity
			5. Irrigation
			6. Disease
			7. Agriculture
			8. Aquifer
			9. Reservoir
			10. Desalination



Year 9 Cycle 3 Geography Knowledge Organiser – Resource Management



Week 9 – Friday 13 th June 2025		Week 10 – Friday 20 th June 2025	
Lesson 13 – Lesotho Water Transfer	Lesson 14 – Sustainable strategies	Lesson 15 – Local water projects	Key Word Practice
Key Terms: HEP: Hydroelectric Power is electricity generated from flowing water.	Key Terms: Groundwater: Water held underground in soil and rock.	Key Terms: Intermediate technology: Equipment and techniques suitable for peoples' ability.	1. Hydroelectric Power 2. Lesotho 3. Sanitation 4. Groundwater 5. Conservation 6. Leakage 7. Government 8. Communities 9. Intermediate technology 10. Irrigation
Content: Lesotho Highland Water Project 40% of water from Segu River in Lesotho transferred to River Vaal in South Africa. Advantages – Lesotho Provides 75% of Lesotho GDP. Supplies Lesotho with all HEP requirements. Sanitation coverage up 15-20%. Disadvantage – Lesotho 30,000 people were relocated due to the first 2 dams built. The Polihali Dam will displace 17 villages. Advantages- S. Africa Provides safe water to 10% of the population without access in South Africa. Fresh water reduces the acidity of the Vaal River Disadvantage– S. Africa Cost likely to reach US\$4 billion. 40% of water is lost through leakages. Corruption within the project.	Content: Water conservation: Using less water. The use of more efficient white goods and toilets reduces water use for example dual flush toilets and low flow taps. Water meters charge for the water used. Groundwater management: Water can become polluted by fracking and mining. Governments can safeguard groundwater by creating protection zones. They can also ensure that leaky pipes are fixed. The UK loses 30% through leakage. Grey water / Water recycling - Water that has either been lightly used (e.g. shower water or sink water) or it is untreated rainwater. After filtering it can be used for toilet flushes.	Content: Wakel River Basin Project, India Rajasthan is the poorest and driest part of India. Water use has been poor due to over-use of irrigation. Aim: Increase water supply & storage. Raise awareness in local communities Increasing Water Supply: <ul style="list-style-type: none"> • Taankas: underground storage systems. • Johed: small earth dams to capture rainwater. • Pat System: irrigation channels transfer water. Local materials which can be replaced should they break. Intermediate technology which means it can be fixed easily. People are educated on how to fix it and conserve water to they can fix it themselves	
Questions: 1. What is HEP? 2. What is the Highland Project? 3. State an advantage and disadvantage for Lesotho 4. State an advantage and disadvantage for S. Africa	5. Give examples of water conservation 6. What is groundwater? 7. How can groundwater be managed? 8. What is grey water / water recycling?	Questions: 1. What is intermediate technology? 2. What is the aim of the project? 3. State 3 ways they are increasing water supply? 4. What's a benefit of local materials? 5. Copy out each key word 3 times	

25th March

Topic: Civil Rights

Date	Event
1861-65	American Civil War – slavery made illegal at the end
May 1954	Brown Vs Board of Education court ruling – said that segregation in schools was illegal and had to end.
25 th Aug 1955	Murder of Emmett Till
1 st Dec 1955	Rosa Parks bus protest – led to the boycott of buses
4 th Sep 1957	Little Rock Nine – Nine students including Elizabeth Eckford become the first black students to be integrated into a formerly segregated school.
28 th Aug 1963	March on Washington ' I have a dream ' speech.
2 nd July 1964	Civil Rights Act signed – gave black and white citizens legal equality.
4 th April 1968	Martin Luther King assassinated
11 th April 1968	Civil Rights Act signed by President Johnson – helped end differences in housing for black and white families.
15 th July 2013	#BlackLivesMatter used for the first time on twitter
2020	Murder of George Floyd sparks the Black Lives Matter protests across the world.

Questions:

1. In your homework book draw a timeline using the information above.
2. Try and do some further research about the topics above and add extra information!




1st April

Topic: Civil Rights

Key Word	Definition
slavery	The state of being enslaved (not free)
abolition	To bring something to an end
segregation	The system that kept black and white people separate in the southern states of USA
boycott	Refusing to use a service or buy from a shop/business as a way of protesting. E.g. The bus boycotts – people refused to travel by bus so the company lost money.
civil rights	The rights of citizens to social and political equality
civil disobedience	Breaking the laws that you disagree with on purpose as a way of protesting.
integration	Ending segregation – allowing black people to mix freely. E.g. ending separate schools for black and white children.
lynching	The brutal, public murders of black people by white mobs (large groups). This was often done by hanging from trees.
Jim Crow Laws	The laws that made segregation legal in the southern states of the USA
Ku Klux Klan	White supremacist group who used violence and murder to intimidate African Americans.
white supremacy	The belief that white people are better than black people.

Questions:


1. Copy out the definitions.
2. Then choose 3 words to practice using in a sentence that makes sense, to do with the topic.

22 nd April		29 th April	
Topic: Civil Rights		Topic - Civil Rights	
<div>Rosa parks</div> 	<div>American activist in the civil rights movement renowned for bus boycott. She refused to give up her seat for a white passenger</div>	<p>Although slavery was declared illegal in 1863, it existed until the end of the Civil War in 1865. The idea of <i>white supremacy</i> remained strong in the Southern States. The North may have won the Civil War and outlawed slavery but racist views were deeply embedded in the South.</p> <p>Changes were made to the <i>American Constitution</i> to try and correct this and create rights for former slaves:</p> <p>Civil Rights Act 1866 - All former slaves were to be citizens of the US and to have the same rights as white people.</p> <p>Reconstruction Act 1867 - The Southern States were divided into military districts under the control of army generals. Elections were to be held under army supervision and former slaves were allowed to vote.</p> <p>14th Amendment 1868 - No state shall make any law which shall reduce the rights of citizens of the United States.</p> <p>15th Amendment 1870 - The right of the American citizens to vote shall not be denied because of race or colour. These appeared to give black people equal rights to white people.</p> <p>Despite these rights, African Americans faced discrimination, violence and denial of civil rights. Black Codes took away their rights, and in 1896 Plessy Versus Ferguson ruled ‘separate but equal’ leading to discrimination against African Americans being made lawful in America.</p>	
<div>Martin Luther King Jr</div> 	<div>Spokesperson and leader in the civil rights movement from 1955 until his assassination in 1968. Gave the famous ‘I have a dream’ speech</div>		
<div>Malcom X</div> 	<div>A key civil rights leader. He influenced the Black Panthers, a group who were prepared to use violence to gain civil rights for African Americans</div>		
Homework questions <ol style="list-style-type: none"> What is an activist? Why are these individuals considered activists? Watch this video and write down 3 extra facts about Rosa Parks - https://youtu.be/9iQVMWGE3_s?si=vEmVblCeiJiNIN-S The Rosa Parks story (dramatisation) History - True Stories BBC Teach		Homework Questions <ol style="list-style-type: none"> What did the changes to the constitution do to African American rights? Which amendment do you think is most significant and why? What was treatment of African Americans like after these amendments were made? Watch this short video and write down 3 additional facts about treatment of AA during this time. Treatment of African-Americans - Reconstruction, African-Americans and Southern reaction to defeat - National 5 History Revision - BBC Bitesize 	

6 th May	13 th May
<p>Topic - Civil Rights</p>	<p>Topic - Civil Rights</p>
<p>On August 28, 1955, while visiting family in Money, Mississippi, 14-year-old Emmett Till, an African American from Chicago, is brutally murdered for allegedly flirting with a white woman four days earlier.</p> <p>His murderers—the white woman's husband and his brother—made Emmett carry a 75-pound cotton gin fan to the bank of the Tallahatchie River and ordered him to take off his clothes. The two men then beat him nearly to death, gouged out his eye, shot him in the head and then threw his body, tied to the cotton gin fan with barbed wire, into the river.</p> <p>After seeing the mutilated remains, Emmett's mother decided to have an open-casket funeral so that all the world could see what racist murderers had done to her only son. <i>Jet</i>, an African American weekly magazine, published a photo of Emmett's corpse, and soon the mainstream media picked up on the story.</p> <p>Less than two weeks after Emmett's body was buried, Milam and Bryant went on trial in a segregated courthouse in Sumner, Mississippi. There were few witnesses besides Mose Wright, who positively identified the defendants as Emmett's killers.</p> <p>On September 23, the all-white jury deliberated for less than an hour before issuing a verdict of "not guilty," explaining that they believed the state had failed to prove the identity of the body. Many people around the country were outraged by the decision and also by the state's decision not to indict Milam and Bryant on the separate charge of kidnapping. This led to the civil rights movement gaining widespread support, and increased activism to get change.</p>	<p>The Montgomery Bus Boycott</p> <p>In December 1955, Rosa Parks was arrested for refusing to give up her seat on a bus to a white passenger. This was not the first time she had refused to give up her seat, but on this occasion her <i>civil disobedience</i> triggered a city-wide response. The NAACP and WPC decided to organise a city-wide bus <i>boycott</i> on the day of Parks' trial. Most black people observed the boycott. Around 70 per cent of the bus users in Montgomery were black, this meant the bus company's profits were greatly reduced.</p> <p>After Parks was found guilty and fined \$10, a longer bus boycott was planned. It was to be organised by the Montgomery Improvement Association (<i>MIA</i>), which included a mixture of community and church leaders and was led by <i>Dr Martin Luther King Jnr</i>. As well as organising the boycott, the <i>MIA</i> initially demanded that:</p> <ul style="list-style-type: none"> • both white and black passengers should be permitted to sit anywhere on a bus, on a 'first come, first served' basis • white bus drivers should be polite to black passengers • the bus company should employ black drivers on routes mostly used by black passengers <p>Black people, who were most often on low incomes, commonly depended on buses to get to work. Therefore, the year-long boycott was a huge sacrifice for them. The <i>MIA</i> was determined that black people should stick with the boycott, as they believed it would only be effective if all black people were shown to be determined to fight segregation. To make things easier, the <i>MIA</i> also set up <i>car pools</i> and encouraged black taxi drivers to charge the same rate as the bus. In 1956 it was declared unconstitutional to segregate on transport.</p>
<p>Homework questions</p> <ol style="list-style-type: none"> 1. Who was Emmett Till? 2. What happened to him? 3. What does this reveal about treatment of African Americans in the South? 4. What enabled the world to hear about this murder? 5. How did this impact the Civil Rights movement? 	<p>Homework Questions</p> <ol style="list-style-type: none"> 1. What is a boycott? 2. What problem did African Americans boycott the buses about? 3. What action did they take? 4. Why was this difficult for many African Americans? 5. What impact did this activism have?

20 th May	3 rd June
Topic - Civil Rights	Topic - Civil Rights
<p><u>Little Rock 1957</u></p> <p><u>Causes</u></p> <p>In 1957, desegregation laws came into effect at Central High School in Little Rock, Arkansas.</p> <p>Central High decided to admit nine black students in September.</p> <p><u>Events</u></p> <p>This was opposed by the Governor of Arkansas, Orval Faubus who sent state soldiers to the school to stop the black students entering.</p> <p>President Eisenhower ordered Faubus to remove the state soldiers. He also sent 1000 US soldiers to protect the black students on their way to and from school.</p> <p>Although they were subject to threats and violence the black students never retaliated.</p> <p>One of the students, Elizabeth Eckford recalled my knees started to shake and I wondered if I would make it to school. The crowd moved closer. Somebody started yelling 'Drag her over to this tree! Let's take care of that *****'.</p> <p><u>Impact</u></p> <p>The events in Little Rock attracted worldwide attention to the civil rights movement and can be seen to have directly influenced the Civil Rights Act of 1957.</p> <p>Some have argued that, despite the intervention of the government, the events at Little Rock changed almost nothing for the majority.</p>	<p>Martin Luther King Jr was born on 15 Jan 1929, the son of a Baptist preacher.</p> <p>Martin Luther King's family were African American. He grew up at a time when the Southern States of America operated under the <i>Jim Crow laws</i> that kept Black and white people separate. This was called <i>segregation</i>.</p> <p>Black people had different schools, toilets and even sections of the bus to white people. They were also denied the right to vote in elections.</p> <p><u>The march on Washington</u></p> <p>Image caption,Dr Martin Luther King making his 'I have a dream' speech</p> <p>Also known as the March on Washington for Jobs and Freedom, the main purpose was to gain publicity for the new civil rights bill.</p> <p>On August 28, 1963, 250,000 people gathered at the Lincoln Memorial in Washington DC. Martin Luther King made his famous <i>I have a dream</i> speech to a worldwide audience. It has become one of the most famous speeches in history. It focuses on the dream of a society where black people and white people live together in harmony.</p> <p>In 1964 The <i>Civil Rights Act</i> was passed US President Lyndon B. Johnson.</p> <p>This saw an end to <i>segregation</i> in public places and a ban on employment discrimination.</p> <p>The voting act that followed allowed black people to exercise their legal right to vote.</p>
<p>Homework questions</p> <ol style="list-style-type: none">1. What is desegregation?2. What challenge was faced in Little Rock?3. How did the Federal Government deal with this?4. What does this reveal about African American rights to equal education during this time?5. Watch this video and make 3 extra notes about the event: Little Rock 1957 - Civil rights campaigns 1945-1965 - National 5 History Revision - BBC Bitesize	<p>Homework Questions</p> <ol style="list-style-type: none">1. Watch the videos on this page and write 3 facts about MLK and the activism during this period: KS3 Religious Education Northern Ireland - Historical figures: Martin Luther King - BBC Bitesize2. Who was MLK?3. What action did MLK take?4. What impact did his actions have?

10 th June	17 th June
Topic - Civil Rights	Topic - Cold War
<p>The civil rights campaigns during the late 1950s and early 1960s had a significant effect on US society. New laws were introduced which extended the rights of many black Americans and demonstrated that the Federal government was willing to support civil rights.</p> <p>However, riots between black and white people in several northern cities between 1964 and 1967, and the move by some civil rights campaigners towards the Black Power movement, demonstrated that the campaigns had not been a total success.</p> <p><u>Significant achievements -</u> Civil Rights Act 1957 - The Civil Rights Act meant that a national civil rights commission was convened and the Federal Justice Department would support African Americans if they went to court because they could not vote freely. Civil Rights Act 1964 - Discrimination on the basis of race in any or all public places in the USA was banned. Voting Rights Act 1965 - Literacy tests and many other obstacles to stop African Americans being able to register to vote were banned. The Poll Tax was removed. By the end of 1965, there were over 250,000 black voters newly registered and within 3 years, most of the black population of the South had registered to vote.</p>	<p>When World War Two ended in 1945, there was hope that the wartime allies - the UK, America and Soviet Union - could work together to build a peaceful future.</p> <p>However, relations between the <i>capitalist</i> US and the <i>communist</i> Soviet Union quickly deteriorated, leading to 45 years of tension, a nuclear arms race and a constant threat of nuclear war.</p> <p><i>Communism and capitalism are opposite ideologies.</i></p>
<p>Homework questions</p> <ol style="list-style-type: none"> 1. What caused laws to be passed? 2. Create a mini timeline describing progress of civil rights for African Americans. 3. Which achievement do you think was most significant and why? 	<p>Homework Questions</p> <ol style="list-style-type: none"> 1. What is capitalism? 2. What is communism? 3. Explain what the Cold War was. 4. Watch this video and make notes on the Cold War: The start of the Cold War 1945-55 - The Cold War - KS3 History - homework help for year 7, 8 and 9. - BBC Bitesize


24 th June	1 st July
Topic – Cold War	Topic – Cold War
<p><u>Berlin blockade & wall</u></p> <p>At the Yalta Conference in 1945, after World War Two, it was decided that Germany would be split into four zones. The Soviet Union, UK, America and France would each control a zone. Berlin, which was in the Soviet zone, would also be divided into four.</p> <p>In August 1961, the Soviet Union began to build a wall around West Berlin, which was controlled by the USA, UK, and France. The Berlin Wall remained in place until 1989. It became a symbol of the Cold War and the division between East and West.</p> <p>East Berlin citizens were told that if they tried to leave and escape into West Berlin they would be considered dissenters, and that they would be killed.</p> <p>By 1989, the Eastern bloc was coming under pressure. On 9 November 1989, the East German border guards opened checkpoints and allowed people to travel freely across the border into the West. Before long, thousands of people began to flood into West Berlin and started to tear down the wall. On 13 June 1990, the East German Border Troops officially began dismantling the Wall.</p>	<p><u>The Cuban Missile Crisis, 1962</u></p> <p>The Cuban Missile Crisis was probably the hot spot in the Cold War. For 13 days in October 1962 the world appeared to stand on the brink of nuclear war.</p> <p>Background</p> <p>Cuba is an island just 90 miles off the coast of Florida. Until 1959, it was closely allied to the United States under the leadership of the right-wing dictator, General Batista. There was considerable American <i>investment</i> in Cuba and the USA was the chief consumer of Cuba's sugar and tobacco.</p> <p>Figure caption, Fidel Castro and Nikita Khrushchev in the hall at the United Nations general meeting in September 1960</p> <p>In 1959 Batista was overthrown in a revolution led by Fidel Castro. One of Castro's first moves was to go to the USA to secure support for his new state, but President Eisenhower refused to speak with him. At the United Nations office in New York, Castro talked with representatives of the Soviet Union, and they offered their support for his new government. Castro had not been a <i>communist</i> before 1960, but was drawn to <i>communism</i> by the friendship and support offered by Khrushchev and his government. Castro <i>nationalised</i> all American-owned companies in Cuba, and refused to pay <i>compensation</i>. The USA then had a communist state 'in its own backyard'.</p> 
<p>Homework questions</p> <ol style="list-style-type: none"> Watch this video and write down 3 facts about the Berlin airlift: https://youtu.be/X8cY1q1u5_0?si=KgOTwbIRjdSWyq1s Where did the Berlin Wall separate? Why do you think East Berlin citizens might have wanted to escape to the West? How might this wall have affected lives? When was the wall brought down? 	<p>Homework Questions</p> <ol style="list-style-type: none"> Why was the Cuban Missile Crisis a crisis? Where is Cuba in relation to USA? How did the relationship between Cuba and USA change? Why was this an issue for USA?

8 th July	15 th July
Topic - Cold War	Topic - Cold War
<p>The Bay of Pigs:</p> <p>In April 1961, just after he was installed as President of the USA, John F Kennedy approved a plan to invade Cuba and overthrow communism. The <i>CIA</i> landed 1,400 Cuban <i>exiles</i> at the Bay of Pigs on the southern coast of Cuba with the aim of provoking an anti-communist uprising. Almost at the last minute, Kennedy cancelled an order that had promised the Cuban resistance US Air Force support for their <i>coup d'etat</i>. The lack of air support meant the rebels were easily defeated when they were met by 20,000 heavily armed Cuban troops. All were captured or killed.</p>	<p><u>Cuban Missile Crisis:</u></p> <p>Discovery of the missiles On 14 October 1962, an American spy plane flying over Cuba took pictures that showed the construction of Soviet missile launch sites. Experts estimated that they would be ready to fire in seven days. Meanwhile, another American spy plane discovered 20 Soviet ships carrying nuclear missiles in the Atlantic Ocean heading for Cuba.</p> <p>The threat to the USA Cuba was only 90 miles from the coast of Florida meaning that the USA, including many of its biggest cities like Washington DC and New York, would be well within range of these missiles. The lives of 80 million Americans were at stake.</p> <p>Kennedy's final decision was a US blockade of Cuba, which Kennedy called a 'quarantine zone', and which could stop further Soviet missiles coming to Cuba buying him time to negotiate with the Soviets.</p> <p>Both the USA and the USSR realised they had been on the brink of nuclear war and entered into talks. These talks eventually led to the 1963 Test Ban Treaty which began the process of ending the testing of nuclear weapons. In the long term, the crisis may have created a willingness on both sides to enter into the Strategic Arms Limitation Talks (SALT) later in the 1960s. At SALT1 an agreement was reached not to build any more Intercontinental Ballistic Missiles (ICBMs).</p>
<p>Homework questions</p> <ol style="list-style-type: none"> Watch the video and make notes about this event: https://youtu.be/n2X36tiDAuU?si=xRpol02XvvMsrLYS What was the purpose of the Bay of Pigs landing of Cuban exiles? What happened at the Bay of Pigs? Why was this seen as a failure? 	<p>Homework Questions</p> <ol style="list-style-type: none"> Watch the video and make notes about the Cuban Missile Crisis: https://youtu.be/bwWW3sbk4EU?si=RCfl-yhj1_rqxQLy Write an 'in a nutshell summary' about what the Cuban Missile Crisis was, using no more than 20 words. What was the consequence of this crisis?




Life Skills Knowledge Organiser - Cycle 3 Year 9




Lesson 1 and 2– Unhealthy Coping Strategies	Lesson 3 and 4 – Knife Crime
<p>Places to access support https://www.kooth.com/</p>	<p>Places to access support www.knifefree.co.uk www.childline.org.uk</p>
<p>Content: Mental Health- a person’s condition with regard to their psychological and emotional well-being.</p> <p>Anxiety is something that everyone experiences at low levels as part of day-to-day life. When thoughts of anxiety, fear or panic are repeatedly present over several weeks or months and/or they are beginning to impact on a young person’s ability to access or enjoy day-to-day life, intervention is needed.</p> <p>Depression: Ups and downs are a part of life, but for someone who is suffering from depression these ups and downs may be more extreme. Feelings of failure, hopelessness, numbness or sadness may invade day-to-day life.</p> <p>Unhealthy coping strategies are behaviours people use to deal with difficult emotions which have long-term negative consequences. Self-harm describes a wide range of ways in which a person might hurt themselves, put themselves at risk or neglect to take care of themselves in order to manage difficult thoughts, feelings or experiences.</p> <p>Teens can avoid unhealthy coping strategies by learning to manage their emotions in healthier ways. Here are a few tips: Talk to someone Find creative outlets Practice relaxation techniques Set goals and focus on positive activities Seek professional support: A therapist or counselor can help</p>	<p>Content: Why has knife crime increased in the UK? Social media is an accelerator to promote knife crimes because it is a medium for several audiences. The continuous increase in Knife Crime In the UK has led to a landscape of fear in the young community.</p> <ul style="list-style-type: none"> ➤ 96% of 10-29 year olds do not carry a knife ➤ A person can get up to 4 years in prison for carrying a knife, even if it is never used <p>County Lines’ is a term used when drug gangs from big cities expand their operations to smaller towns, often using violence to drive out local dealers and exploiting children and vulnerable people to sell drugs. In the last few years County Lines has become one of the most common forms of modern slavery in the UK. Children and young people are used because they are easier to manipulate, they can be deceived into working for little or no pay and are less likely to be detected.</p> 
<p>Questions</p> <ol style="list-style-type: none"> 1. What does mental health refer to? 2. When should someone get help for anxiety? 3. How can depression affect a person’s daily life? 4. What are unhealthy coping strategies, and why should they be avoided? 5. What are some healthy ways for teens to manage their emotions? 	<p>Questions</p> <ol style="list-style-type: none"> 1. How does social media contribute to the rise in knife crime? 2. What percentage of 10-29 year olds carry a knife in the UK? 3. What can happen to someone who is caught carrying a knife, even if they don’t use it? 4. What does the term "County Lines" refer to? 5. Why are children and young people often targeted by drug gangs in County Lines operations?



Lesson 5 and 6– Effects of Drugs	Lesson 7 and 8 – Sexually Transmitted Diseases
<p>Places to access support www.talktofrank.com www.fearless.org</p>	<p>Places to access support www.brook.co.uk Newton Abbot Hospital – Sexual Health Clinic</p>
<p>Content: Substance use disorder is the clinical term used to describe what is commonly referred to as addiction. It features a cluster of symptoms including the strong internal drive to use substances or impaired ability to control. Dependency A state in which a person relies upon a substance to feel or function as normal. This can be physical and/ or psychological Supply When a person distributes or gives someone a controlled substance including selling, exchanging for reward or ‘gifting’. Possession- When a person is found with a controlled drug for personal use. They don’t have to be using it they just need to have it.</p> <p>Short term effects of taking drugs:</p> <ul style="list-style-type: none"> ➤ Impaired judgment: Drugs can affect decision-making, making people more likely to take risks. ➤ Increased heart rate: Some drugs can cause your heart to beat faster or irregularly. ➤ Confusion or dizziness: Drugs can make it hard to think clearly or cause a feeling of being lightheaded. <p>Long term effects of taking drugs:</p> <ul style="list-style-type: none"> ➤ Addiction: Continued drug use can lead to physical and mental dependence, making it hard to stop. ➤ Mental health issues: Long-term drug use can increase the risk of anxiety, depression, or other mental health problems. ➤ Damage to organs: Drugs can cause long-term harm to organs like the heart, liver, or lungs, leading to serious health problems. 	<p>Content: Sexually Transmitted Infections are infections that are passed on mainly through sexual contact both vaginally, anally and orally. They can be bacterial or viral.</p> <p>Common STIs:</p> <p>Chlamydia (Bacterial)- Women often have no symptoms or may have pain with sexual intercourse, lower abdominal pain, changes in bleeding pattern. Men may have no symptoms or may have watery or thick discharge from penis, pain or urinating. Gonorrhoea (Bacterial) Women usually have no symptoms, but may have pain with sex, vaginal discharge, lower abdominal pain. Men may have no symptoms or discharge from penis, discharge from anus, pain in testicles, pain on urinating. Syphilis (Bacterial): Painless ulcer (chancre) usually on genitals; later swollen glands, rash, hair loss. Genital herpes (Viral Infection) Painful, red blisters, little sores or ulcers, flu-like symptoms, and sometimes a discharge.</p> <p>If a teen thinks they have an STI, they should:</p> <ul style="list-style-type: none"> ➤ Talk to a trusted adult or healthcare professional ➤ Visit a doctor or clinic ➤ Avoid sexual activity ➤ Get tested 
<p>Questions</p> <ol style="list-style-type: none"> 1. What is substance use disorder? 2. What is the difference between physical and psychological dependency? 3. What does it mean to have possession of a controlled substance? 4. What are some short-term effects of taking drugs? 5. How can long-term drug use affect a person’s health? 	<p>Questions</p> <ol style="list-style-type: none"> 1. What are sexually transmitted infections (STIs)? 2. What are some common symptoms of chlamydia in women and men? 3. How can gonorrhoea affect both women and men? 4. What are the signs of genital herpes? 5. What should a teen do if they think they have an STI?



Lesson 9 and 10– Female Genital Mutilation (FGM)	
<p>Places to access support</p> <p>https://www.gov.uk/female-genital-mutilation-help-advice</p>	
<p>Content:</p> <p>Female Genital Mutilation (FGM) comprises all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for nonmedical reasons.</p> <p>It is illegal for FGM to be performed in the UK or anywhere in the world on UK citizens or permanent residents of any age. Female Genital Mutilation (FGM) is practiced in several countries, mainly in parts of Africa, the Middle East, and Asia.</p> <p>Effects of FGM</p> <p>FGM can lead to serious health issues such as bleeding, urinary tract infections, shock, pain, pregnancy complications, difficulty during childbirth, menstruation problems, painful sex, infertility, and loss of bladder control.</p> <p>FGM Law UK</p> <p>In the UK, Female Genital Mutilation (FGM) is illegal. The Female Genital Mutilation Act 2003 makes it a criminal offense to perform FGM on anyone, regardless of their nationality or where the procedure takes place. It is also illegal to take someone abroad for FGM. Perpetrators can face up to 14 years in prison. The law applies to both residents of the UK and UK nationals who are abroad. Healthcare professionals and others working with children are required by law to report any concerns about FGM.</p>	
<p>Questions</p> <ol style="list-style-type: none"> 1. What is Female Genital Mutilation (FGM)? 2. In which countries is FGM most commonly practiced? 3. What are some of the serious health effects of FGM? 4. Is FGM legal in the UK, and what are the consequences for performing it? 5. What are the responsibilities of healthcare professionals regarding FGM in the UK? 	

Y9C3 Maths Key knowledge

Use this guide to make sure you know **what to do, when to do it and how to do it:**

Maths homework is to complete sparx



What to do

- Do Sparx **on the days in the homework timetable**
- **Compulsory Homework:** You **must** do this part of your homework every week
- **XP Boost/Target Homework:** Do this to **gain loads of XP** and to improve your maths!

Top Tips

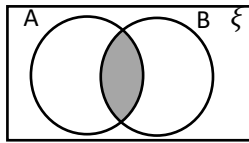
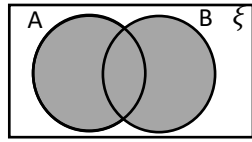
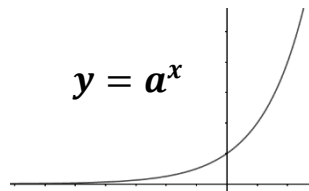
- Do your homework as soon as you can
- Watch the help video
- If you are stuck, speak to your maths teacher before hand-in or pop in to Sparx Support club during breaks

Always:

- Write down the date
- Write down your bookwork code
- Read the question carefully
- Show all your workings
- Highlight/underline your final answer
- Tick if correct/cross if wrong



Your Maths Homework is to complete your sparx

Y9C3 Maths Key knowledge									
Item	Description								
$A \cap B$	A 'and' B. Represented by: <div></div>								
$A \cup B$	A 'union' B (or A 'or' B). Represented by: <div></div>								
Similar	Shapes with the same angles but different side lengths. Similar shapes are enlargements of each other.								
Congruent	Shapes with the same angles and side lengths. Congruent shapes are identical.								
Scale factor	The multiplier that links side lengths of one shape to another. Also called the Length scale factor								
Area scale factor	Found by calculating <i>Length Scale Factor</i>²								
Volume scale factor	Found by calculating <i>Length Scale Factor</i>³								
Transformation	There are 4 transformations at GCSE. They are Rotation, Reflection, Transformation, & Enlargement								
Describe fully	Command words that are asking for all information about a transformation including the name. <table><tr><th>Rotation</th><th>Reflection</th><th>Transformation</th><th>Enlargement</th></tr><tr><td><ul style="list-style-type: none">• Angle• Direction• Centre of rotation</td><td><ul style="list-style-type: none">• Mirror line</td><td><ul style="list-style-type: none">• Vector $\begin{pmatrix} x \\ y \end{pmatrix}$</td><td><ul style="list-style-type: none">• Centre of enlargement• Scale factor</td></tr></table>	Rotation	Reflection	Transformation	Enlargement	<ul style="list-style-type: none">• Angle• Direction• Centre of rotation	<ul style="list-style-type: none">• Mirror line	<ul style="list-style-type: none">• Vector $\begin{pmatrix} x \\ y \end{pmatrix}$	<ul style="list-style-type: none">• Centre of enlargement• Scale factor
Rotation	Reflection	Transformation	Enlargement						
<ul style="list-style-type: none">• Angle• Direction• Centre of rotation	<ul style="list-style-type: none">• Mirror line	<ul style="list-style-type: none">• Vector $\begin{pmatrix} x \\ y \end{pmatrix}$	<ul style="list-style-type: none">• Centre of enlargement• Scale factor						
Exponential curve	A common graph shape. The equation has x as a power. Found a lot in nature and science. <div></div> $y = a^x$								
Speed	$\text{Average speed} = \frac{\text{distance}}{\text{time}}$								
Speed	The gradient of a distance time graph.								
Elevations	2D views of the different sides of a 3D object.								
Plan view	The top down/birds eye view of a 3D object.								

FILM MUSIC



A. The Purpose of Music in Film

Film Music is a type of **DESCRIPTIVE MUSIC** that represents a **MOOD, STORY, SCENE** or **CHARACTER** through music, it is designed to **SUPPORT THE ACTION AND EMOTIONS OF THE FILM ON SCREEN**. Film Music can be used to:

- Create or enhance a mood (though the **ELEMENTS OF MUSIC**) ->
- Function as a **LEITMOTIF** (see D)
- To emphasise a gesture (**MICKEY-DOUSING** – when the music fits precisely with a specific part of the action in a film e.g. cartoons)
- Provide unexpected juxtaposition/irony (using music the listener wouldn't expect to hear giving a sense of uneasiness or humour!)
- Link one scene to another providing continuity
- Influence the pacing of a scene making it appear faster/slower
- Give added commercial impetus (released as a **SOUNDTRACK**) – sometimes a song, usually a pop song is used as a **THEME SONG** for a film.
- Illustrate the geographic location (using instruments associated with a particular country) or historical period (using music 'of the time').

D. Leitmotifs

LEITMOTIF – A frequently recurring short melodic or harmonic idea which is associated with a character, event, concept, idea, object or situation which can be used directly or indirectly to remind us of one not actually present on screen. Leitmotifs can be changed through **SEQUENCING, REPETITION** or **MODULATION** giving a hint as to what may happen later in the film or may be heard in the background giving a "subtle hint" to the listener e.g. the "Jaws" Leitmotif



B. How the Elements of Music are used in Film Music

PITCH AND MELODY – **RIISING MELODIES** are often used for increasing tension, **FALLING MELODIES** for defeat. Westerns often feature a **BIG THEME**. **Q&A PHRASES** can represent good versus evil. The **INTERVAL OF A FIFTH** is often used to represent outer space with its sparse sound. **DYNAMICS** – **FORTE (LOUD)** dynamics to represent power; **PIANO (SOFT)** dynamics to represent weakness/calm/resolve. **CRESCENDOS** used for increasing threat, triumph or proximity and **DECRESCENDOS** or **DIMINUENDOS** used for things going away into the distance. Horro Film soundtracks often use **EXTREME DYNAMICS** or **SUDDEN DYNAMIC CHANGES** to 'shock the listener'. **HARMONY** – **MAJOR** – happy; **MINOR** – sad. **CONSONANT HARMONY OR CHORDS** for "good" and **DISSONANT HARMONY OR CHARDS** for "evil". **SEVENTH CHORDS** often used in Westerns soundtracks. **DURATION** – **LONG** notes often used in Westerns to describe vast open spaces and in Sci-Fi soundtracks to depict outer space; **SHORT** notes often used to depict busy, chaotic or hectic scenes. **PEDAL NOTES** – long held notes in the **BASS LINE** used to create tension and suspense. **TEXTURE** – **THIN/SPARE** textures used for bleak or lonely scenes; **THICK/FULL** textures used for active scenes or battles. **ARTICULATION** – **LEGATO** for flowing or happy scenes, **STACCATO** for 'frozen' or 'icy' wintery scenes. **ACCENTS (>)** for violence or shock. **RHYTHM & METRE** – 2/4 or 4/4 for Marches (battles), 3/4 for Waltzes, 4/4 for "Big Themes" in Westerns. **IRREGULAR TIME SIGNATURES** used for tension. **OSTINATO** rhythms for repeated sounds e.g. horses.

C. Film Music Key Words

SOUNDTRACK – The music and sound recorded on a motion-picture film. The word can also mean a commercial recording of a collection of music and songs from a film sold individually as a CD or collection for digital download. **MUSIC SPOTTING** – A meeting/session where the composer meets with the director and decides when and where music and sound effects are to feature in the finished film. **STORYBOARD** – A graphic organiser in the form of illustrations and images displayed in sequence to help the composer plan their soundtrack. **CUESHEET** – A detailed listing of **MUSICAL CUES** matching the visual action of a film so that composers can time their music accurately. **CLICK TRACKS** – An electronic **METRONOME** which helps film composers accurately time their music to on-screen action through a series of 'clicks' (often heard through headphones) – used extensively in cartoons and animated films. **DIEGETIC FILM MUSIC** – Music within the film for both the characters and audience to hear e.g. a car radio, a band in a nightclub or sound effects. **NON-DIEGETIC FILM MUSIC** – Music which is put "over the top" of the action of a film for the audience's benefit and which the characters within a film can't hear – also known as **UNDERScore** or **INCIDENTAL MUSIC**.

E. History of Film Music

Early films had no soundtrack ("**SILENT CINEMA**") and music was provided live, usually **IMPROVISED** by a pianist or organist. The first **SOUNDTRACKS** appeared in the 1920's and used existing music (**BORROWED MUSIC** – music composed for other (non-film) purposes) from composers such as Wagner and Verdi's operas and ballets. In the 1930's and 1940's Hollywood hired composers to write huge Romantic-style soundtracks. **JAZZ** and **EXPERIMENTAL MUSIC** was sometimes used in the 1960's and 1970's. Today, film music often blends **POPULAR, ELECTRONIC** and **CLASSICAL** music together in a flexible way that suits the needs of a particular film.

F. Film Music Composers and their Soundtracks



Jerry Goldsmith
Planet of the Apes
Star Trek: The Motion Picture
The Omen
Alien



John Williams
Star Wars
Jaws
Harry Potter
Indiana Jones
Superman, E.T.



James Horner
Titanic
Apollo 13
Braveheart
Star Trek II
Aliens



Ennio Morricone
The Good, The Bad and The Ugly
For a Few Dollars More
The Mission



Danny Elfman
Mission Impossible
Batman Returns
Men in Black
Spider Man



Hans Zimmer
The Lion King
Gladiator
Dunkirk
Blade Runner 2049
No Time to Die

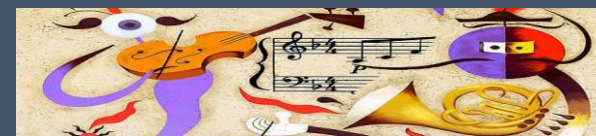


Bernard Herrmann
Psycho
Vertigo
Taxi Driver

New Directions

Exploring ways to develop music from small ideas in C20th Music

There were many different types, styles, genres and movements of music in the twentieth century. These include: Impressionism, 20th Century Nationalism, Jazz Influences, Polytonality, Atonality, **Expressionism**, **Serialism**, Microtonality, Electronic Music, Experimentalism, **Minimalism**, Pointillism and Music Concrète.








A. Features of Music in the Twentieth Century (How Composers used the Elements of Music)

A1. Melody & Dynamics	A2. Harmony	A3. Rhythm	A4. Timbres and Sonorities
CONJUNCT - wide leaps, angular and spiky. CHROMATIC -uses all 12 notes (black and white) of the CHROMATIC SCALE . DISSONANCE - harsh sounds. EXTREMES OF DYNAMICS - (pppp-ffff) No clear melody/"tune".	ATONALITY – no (sense of) key. POLYTONALITY – two or more keys played at once. DISCORDS – dissonant, clashing chords.	SYNCOPIATION – half beat followed by full beat emphasising weaker beats of the bar. IRREGULAR ACCENTS (>) – e.g. <i>The Rite of Spring</i> IRREGULAR TIME SIGNATURES – 5 or 7 beats per bar.	Strange, intriguing, and exotic sounds; striking, sometimes explosive, contrasts. PERCUSSION – expanded in orchestra and more emphasis on percussion timbre and sonorities. Unfamiliar sounds from strange instruments such as EXTREME PITCH RANGES and playing instruments in different and unusual ways. TOTALLY NEW SOUNDS often involving ELECTRONIC EQUIPMENT and MAGNETIC TAPE .

B. Minimalism	C. Expressionism	D. Serialism
Based on CELLS or MOTIFS – short simple ideas. Use of REPETITION – also called LOOPING . LAYERED TEXTURES NO CLEAR MELODY GRADUAL CHANGES OVER TIME PHASE SHIFT (PHASE IN/OUT) – when two or more motifs or cells begin in UNISON and gradually become “out of sync” with each other through displacement, either forwards or backwards. METAMORPHOSIS – tiny changes are made over time to one note or to one part of the rhythm. This can go a “full circle” and end up exactly the same at the end. ADDITIVE MELODY – adding notes to an original melodic cell gradually. ISORHYTHMIC OVERLAP – combining different length motifs or ostinato patterns AUGMENTATION – doubling the note values of a motif or cell. DIMINUTION – halving the note values of a motif or cell. RETROGRADE/INVERSION/RETROGRADE INVERSION (see D. Serialism) <i>Famous Minimalist Composers include: Terry Riley, Steve Reich, Philip Glass, Michael Nyman.</i>	“Expressionism” is borrowed from painting and is concerned with dark, secret terrors, mental breakdowns, and fantastic visions. ATONAL, DISSONANCE, DISJUNCT, LARGE ORCHESTRAS, UNUSUAL AND STRANGE TIMBRES AND SONORITIES. Expressionist composers often use HEXACHORDS as a form of ACCOMPANIMENT . Hexachords are chords formed of SIX NOTES . A hexachord can be formed on any note of the CHROMATIC SCALE , but must follow a strict pattern of TONES and SEMITONES : Semitone – Tone – Semitone – Tone+Semitone - Semitone The notes can then be arranged in any order in different (and often extreme!) pitch ranges. <i>Famous Expressionist Composers include: Arnold Schoenberg, Alban Berg, Anton Webern</i>	TONE/NOTE ROWS – use the 12 notes of the CHROMATIC SCALE into an order (the PRIME/ORIGINAL) on which the entire composition is based. All 12 notes are of equal importance and none should appear out of turn. As well as being used in its PRIME/ORIGINAL , the tone/note row could also be used in: INVERSION (intervals upside down) RETROGRADE (backwards) RETROGRADE INVERSION (the inversion row backwards) These 4 rows would then become the bases of the composition, used either vertically (as chords) or horizontally (as melody). <i>Famous Serialist Composers include: Arnold Schoenberg, Alban Berg, Anton Webern, Igor Stravinsky</i>



Year 9 Cycle 3 Sport and PE Knowledge Organiser

Week 1 and 2	Week 3 and 4	Week 5 and 6	Week 7 and 8	Week 9 and 10	Week 11 & 12
User Groups who participate in Sport	Barriers to Participation	Solutions to Barriers	Values Promoted through Sport	The Olympic and Paralympic Creed & Values	Conduct of Performers
1.Children 2.Teenagers 3.Single Parents 4.Families with young children 5.Disabled 6.Retired people/over 50 7.Ethnic minorities 8.Working singles/Couples 9.Unemployed/Economic ally disadvantaged  	1.Family commitments 2.Lack of money/disposable income 3.Lack of time/work commitments 4.Gender –perception that boys & girls don't do certain sports 5.Influence of peers/family 6.Lack of role models 7.Low self esteem 8.Provision and awareness of activities 9.Accessibility to facilities 10.Lack of transport 	PROMOTION (advertise it) <ul style="list-style-type: none"> •Targeted promotion (e.g. social media) •Using role models to encourage participation among different user groups •Initiatives aimed at promoting participation and inclusion PROVISION (what to put on and when) <ul style="list-style-type: none"> •Programme sessions for use by different user groups •Providing appropriate activities for user groups •Planning of times to suit different user groups ACCESS (Can people get to it) <ul style="list-style-type: none"> •Access to FACILITIES (e.g. transport if in country side or wheelchair ramps for disabled) •Access to equipment (e.g. a hoist for swimming pool access) •Sensible Pricing (e.g. reduction of charges for unemployed people or young children) 	1. Team Spirit –learning how to work together and support others 2. Fair Play –learning the importance of adhering to rules and being fair 3. Citizenship –get involved in your local community 4. Tolerance & Respect – developing understanding of different countries and cultures through sport 5. Inclusion -initiatives to get under-represented social groups involved 6. National Pride – supporters and performers unite behind the country in international events 7. Excellence -striving to be the best you can be	 <p>The creed and motto are meant to inspire the athletes to embrace the Olympic spirit and inspire them to perform to the best of their ability. The vision is 'To enable Paralympic athletes to achieve sporting excellence and inspire and excite the world.'</p> <p><i>"The important thing in life is not the triumph, but the fight; the essential thing is not to have won, but to have fought well."</i></p> <p>OLYMPIC AND PARALYMPIC VALUES</p> 	ETIQUETTE - Are the unwritten rules of a sport/activity, they are not enforced but usually observed & shows a level of respect & fairness for the sport & opponent e.g. acknowledging to your opponent if your shot hit the net and still went over so you win the point SPORTSMANSHIP - Is conforming to the rules, spirit & etiquette of a sport e.g. shaking hands with an opponent, being gracious in winning or losing. GAMESMANSHIP -Is the attempt to gain an advantage by stretching the rules to their limit e.g. timewasting, diving in football

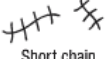


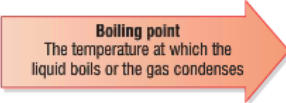


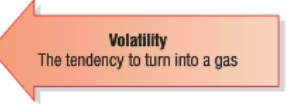


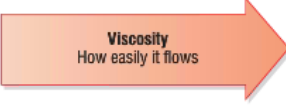




1 st April	29 th April
<p>Topic: IVF and Fertility Treatments</p> <p>Scientific progress has enabled humans to have greater control over their own fertility and potential for reproduction. Some people believe that we should continue to strive for greater knowledge and power concerning our biology. Many people see fertility treatments as a way for them to have children when they otherwise would be childless.</p> <p>Some religious believers are uncomfortable with humankind having too much power over nature. They often suspect that playing God may cause more problems than it will solve - raising issues that we would not have to worry about if we simply let nature take its course.</p> <p>However, many other religious believers would argue that using modern scientific progress to allow a couple to experience the gift of a child when they may otherwise not be able to is a way of expressing divine love. Many believe that the scientific knowledge and ability to carry out these procedures is God-given since everything comes from God.</p>	<p>Topic: Genetic Engineering</p> <p>Genetic engineering refers to the scientific process of altering an organism's DNA by introducing genes from another organism, allowing for desired traits to be developed. This raises ethical questions regarding the manipulation of life and the potential consequences of such modifications.</p> <p>Current uses include genetically modified bacterial cells which have been altered to produce insulin. This helps people to manage diabetes which can be life saving. Some crops have also been genetically engineered to be resistant to disease or carry certain nutrients. Scientists have added a gene to rice that makes it produce <i>beta-carotene</i>. This changes the colour of the rice to a golden colour. Beta carotene is needed by humans in order to make vitamin A - which is essential for good vision.</p> <p>Concerns about genetically engineering crops include: Could inserted genes spread to non-GM plants in the wild? Could GM crops harm humans and animals that eat them? Could there be allergic reactions to products of the new genes in food?</p>
<p>Homework Questions</p> <ol style="list-style-type: none"> 1. What is IVF? 2. Why are some religious believers against IVF? 3. Why are some religious believers in favour of IVF? 	<p>Homework Questions</p> <ol style="list-style-type: none"> 1. What is genetic engineering? 2. Give one advantage of genetic engineering? 3. Give one disadvantage of genetic engineering?

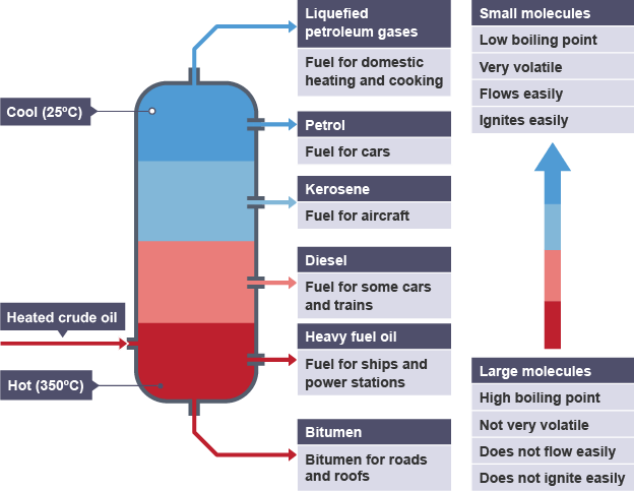
13 th May	3 rd June
Topic: Saviour Siblings	Topic: Organ Donation
<p>The term ‘saviour sibling’ refers to the practice of deliberately bringing a new baby into the world, with the purpose of using them to save the life of a sibling. The process involves using IVF, to preselect embryos with a genetic match, which stand the greatest chance of success in curing the specific illness. Although the practice is rare, it calls into question the ethical basis of creating life in order to save another.</p> <p>The Catholic Church disagrees with creating ‘saviour siblings’ as it teaches that children are a gift from God and so every child should be valued for itself, and not for its genetic material. Catholics also disagree with IVF (the process used to create a Saviour Sibling) as it creates lots of embryos but only one is chosen - the rest are discarded. This means that lots of potential life is lost. The Catholic Church teaches that creating lots of embryos and choosing only one because it has the right genetic characteristics is the wrong way and reason to have a child.</p> <p>However, the Church of England teaches that however a child is conceived they are still a gift from God, and it is therefore morally acceptable to have a child to save another. This child is still valued for themselves, and the fact that they may also be able to save the life of a sibling is a further gift from God. Many Christians argue that the scientific knowledge to be able to do this is God-given.</p>	<p>Organ donation is when someone chooses to give an organ to help someone else who needs a transplant. It can save or improve the life of the recipient. Some organs can be donated while the donor is still alive. For example, a healthy person can donate one of their kidneys. Most organ and tissue donations come from people who have died and registered as Organ Donors before their death. Organs that can be donated include the heart, lungs, kidneys, pancreas, liver, and small bowel.</p> <p>Christians try to follow the example of Jesus who lived his life compassionately and showed love to all. Therefore, most Christians are in favour of organ donation as it may be able to save someone’s life. Christians believe life is sacred and a gift from God, and many would argue that the ability to save lives through organ donation is a God-given gift. Many Christians believe that nothing that could happen to the body before or after death can affect a Christian’s relationship with God.</p> <p>Jehovah’s Witnesses accept organ donation as long as it does not involve blood, as they are against blood transfusions. This is because they believe the Bible commands Christians to abstain from blood. Blood represents life in some parts of the Bible, so Jehovah’s Witnesses avoid taking blood out of respect for God as the giver of life.</p>
Homework Questions <ol style="list-style-type: none"> 1. What are Saviour Siblings? 2. Why does the Catholic Church disagree with Saviour Siblings? 3. Why does the Church of England accept Saviour Siblings? 	Homework Questions <ol style="list-style-type: none"> 1. What is organ donation? 2. Why do many Christians accept organ donation? 3. What is the Jehovah’s Witness view on organ donation?

17 th June	1 st July
Topic: Animal Testing	Topic: Key Terms Revision
<p>Animal testing is when living animals are used in scientific research to test their reactions to how effective a medicine is or how safe a product is for people. It can involve lasting harm to the animals. Testing on animals in the UK is legal but only allowed if the benefits gained from the research outweigh any animal suffering, for example when used to test medicines. British law says a new medicine must be tested on two different types of animals - one a rodent and one a larger non rodent mammal - before being tested on humans. Animal testing is also used for things like household cleaning products, make up and skincare products, and food additives.</p> <p>Christianity teaches that humans have ‘stewardship’ over the Earth meaning that God has given humans the responsibility to care for the Earth and all its creatures. Therefore, many Christians are against animal testing as it harms animals. However, some Christians believe that testing medicines may be necessary to save human lives, even if it does involve harm to animals.</p>	<ul style="list-style-type: none">• IVF - In Vitro Fertilisation. A fertility treatment where egg cells are fertilised in a lab and then surgically implanted into the womb.• Sanctity of Life - The belief that life is sacred and special because it is created by God.• Quality of Life - A measure of how happy or fulfilling someone’s life is.• Sacred - Connected with God or dedicated to religion, special• Genetic Engineering - Deliberately changing DNA to change an organisms characteristics• Stewardship - The belief that humans have a responsibility to look after Earth• Dominion - The belief that God gave the Earth to humans to rule over• Consent - permission to do something• Right to Life - Everyone has the right to be alive and to not have their life taken away from them.
Homework Questions	Homework Questions
<ol style="list-style-type: none">1. What does ‘stewardship’ mean?2. Do you agree or disagree with animal testing?3. Why?	<p>Learn the definitions for these key terms. Write them into your homework book without looking once you have learned each one.</p>

Lesson 1 The Endocrine System	Lesson 2 Controlling Blood Sugar Levels	Lesson 3 Diabetes
<p>The Endocrine System Is a communication system in the body. It uses blood to transport chemical messengers (hormones) throughout the body.</p> <p>Hormones are made and released by glands. The hormones are detected by receptors on target organs.</p> <p>The Pituitary Gland is called the “Master Gland”</p> <ul style="list-style-type: none"> • It secretes lots of different hormones in to blood eg FSH, LH and Growth Hormone. • These hormones in turn act on other glands to turn them on so they can release hormones to bring about effects. <p><u>Thyroid gland</u>- Thyroxine- controls metabolism, growth and development.</p> <p><u>Adrenal gland</u>- Adrenaline- fight or flight response in times of stress.</p> <p><u>Ovaries</u>- Oestrogen and Progesterone- control female menstrual cycle.</p> <p><u>Testes</u>- Testosterone - sperm production</p> <p><u>Pancreas</u>- Insulin and Glucagon- control blood sugar level.</p>	<p>The Pancreas produces hormones the control blood sugar/ glucose levels.</p> <p>Foods containing carbohydrate put glucose into the blood.</p> <p>If our blood sugar levels go too high the Pancreas releases Insulin.</p> <p>Insulin converts glucose into glycogen.</p> <p>Glycogen is stored in the liver and muscles.</p> <p>Blood glucose levels go back down to normal levels.</p> <p><u>HIGHER TIER ONLY</u></p> <p>When blood sugar is too low GLUCAGON is released into the blood by the Pancreas</p> <p>Glucagon makes the liver convert glycogen into glucose.</p> <p>Glucose is released into the blood</p> <p>Blood sugar levels rise back to normal levels.</p>	<p>Diabetes is a medical condition where you can’t control blood sugar levels.</p> <p>Type 1 Diabetes</p> <p>Usually starts as a baby or early childhood. Pancreas doesn’t produce enough insulin</p> <p>So, glucose is not taken out of the blood and converted to glycogen for storage so blood glucose levels increase. This can cause damage to your organs eg heart.</p> <p>It is treated by using regular insulin injections</p> <p>Type 2 Diabetes.</p> <p>Can occur at any age linked to obesity.</p> <p>Either the pancreas slowly stops producing enough insulin or the liver or other cells become insulin resistant so the cells don’t respond to insulin in the right way</p> <p>Glucose is not converted to glycogen so blood sugar levels stay high.</p> <p>Treat by reducing levels of carbohydrate in diet and doing more exercise.</p>

Lesson 4 Hormones of Reproduction	Lesson 5 Contraception	Lesson 6 Uses of Hormones and Negative Feedback (HIGHER TIER ONLY)
<p>Puberty- when the body starts to produce sex hormones.</p> <p>Male Hormone- Testosterone is produced by the testes it stimulates the production of sperm.</p> <p>4 Female Hormones- Control the menstrual cycle which lasts approx. 28 days</p> <p>Days 1-4: Uterus lining breaks down (menstruation) Days 5-13: Uterus lining builds up and egg matures Day 14: Egg is released from ovary (ovulation) Days 15-28: Uterus lining remains thick so fertilised egg can implant. If the egg is not fertilised the cycle starts again</p> <p>Pituitary gland produces: Follicle stimulating hormone (FSH) causes maturation of an egg in the ovary. Luteinising hormone (LH) stimulates the release of the egg (ovulation) on Day 14 of the cycle</p> <p>Ovaries produce Oestrogen and Progesterone - involved in the growth and maintaining the uterus lining.</p>	<p>Contraceptives prevent the sperm fertilising the egg.</p> <p><u>Hormonal Contraceptives.</u></p> <p>Oral contraceptives (the Pill) contain hormones to stop FSH production so that no eggs mature.</p> <p>Injection, implant or skin patch of slow release progesterone to prevent ovulation for a number of months or years.</p> <p><u>Non-Hormonal Contraceptives</u></p> <p>Barrier methods such as condoms and diaphragms prevent the sperm reaching an egg.</p> <p>Intrauterine device (IUD) prevent the implantation of an embryo.</p> <p>Spermicides kill sperm</p> <p>Abstaining from sex when a woman is fertile.</p> <p>Surgical methods male and female sterilisation.</p>	<p><u>Fertility Treatment</u> - FSH and LH are given to a woman to increase chance of pregnancy..</p> <p><u>In Vitro Fertilisation (IVF) Treatment.</u></p> <ul style="list-style-type: none"> • FSH and LH are injected into a woman to stimulate the maturation of several eggs. • The eggs are collected from the mother and fertilised by sperm from the father in the lab. • The fertilised eggs develop into embryos. • One or two embryos are inserted into the mother's uterus (womb). <p><u>Drawbacks of IVF</u> emotionally and physically stressful, not always successful & can lead to multiple births which are a risk to both the babies and the mother</p> <p><u>Negative Feedback</u> High levels of Thyroxine in bloodstream. Pituitary gland releases TSH Thyroid gland stops releasing Thyroxine. Thyroxine levels drop. TSH levels fall. Thyroxine is released so levels rise again.</p>

Lessons 1 Hydrocarbons - Alkanes	Lessons 1 continued Hydrocarbons - Alkenes	Lessons 2 Properties of Hydrocarbons
<ul style="list-style-type: none"> Crude oil is a mixture. It contains hundreds of different compounds called hydrocarbons. Hydrocarbon are compounds made of <u>only</u> hydrogen and carbon. Alkanes are hydrocarbons. All the atoms are bonded by single bonds so they are called saturated compounds. They have the general formula for the homologous series of Alkanes C_nH_{2n+2}. <div data-bbox="129 694 835 1337"> <p>GVGB/PO/1.1.1</p> <p>ALKANES</p> <div> <chem>C</chem> METHANE </div> <div> <chem>CCCCC</chem> PENTANE </div> <div> <chem>CC</chem> ETHANE </div> <div> <chem>CCCCCC</chem> HEXANE </div> <div> <chem>CCC</chem> PROPANE </div> <div> <chem>CCCCCCC</chem> HEPTANE </div> <div> <chem>CCCC</chem> BUTANE </div> <div> <chem>CCCCCCCC</chem> OCTANE </div> </div>	<ul style="list-style-type: none"> Alkenes are hydrocarbons (made up of carbon and hydrogen) with a carbon-carbon double bond ($C=C$). They have the general formula C_nH_{2n} They are unsaturated compounds. Alkenes – used to make polymers Alkanes – used as fuels <div data-bbox="864 587 1256 997"> <p>Ethene</p> <chem>C=C</chem> <p>Propene</p> <chem>C=CC</chem> <p>Butene</p> <chem>CCC=C</chem> </div> <p>Pointers to help you name hydrocarbons:</p> <ol style="list-style-type: none"> Remember the prefix: (meth, eth, prop, but, pent, hex, hept, oct, non and dec) Remember to use capital C and H for drawing the displayed formula! Remember that the '-' represents bonds! Remember that the numbers in the formulae are on the floor and not in the sky. E.g. CH₄ NOT CH⁴ 	<ul style="list-style-type: none"> Boiling point – the temperature at which the liquid boils or the gas condenses Volatility – the tendency for a substance to turn into a gas Viscosity – how easily a substance flows Flammability – how easily a substance burns <div data-bbox="1429 555 2042 1284"> <div>  Short chain </div> <div>  Long chain </div> <div>    </div> <div>    </div> <div>    </div> <div>    </div> </div>

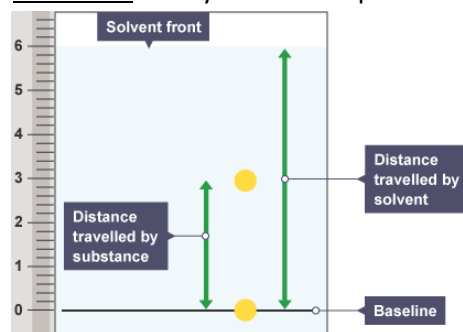
<p>Lessons 3 Fractional Distillation</p>	<p>Lessons 4 Combustion</p>	<p>Lessons 5 Cracking</p>
<p>A <u>fraction</u> is a set of hydrocarbon molecules of similar size and similar boiling points. Fractional distillation is used to separate crude oil into simpler, more useful mixtures. This method can be used because different hydrocarbons have different boiling points.</p>  <p>During the fractional distillation of crude oil: heated crude oil enters a tall fractionating column, which is hot at the bottom and gets cooler towards the top. Vapours from the oil rise through the column. Vapours condense when they become cool enough liquids are led out of the column at different heights.</p>	<p>Hydrocarbon fuels can undergo <u>complete combustion</u> or <u>incomplete combustion</u>, depending on the amount of oxygen available.</p> <p>Combustion is the burning of a fuel and is an exothermic reaction.</p> <p><u>Complete combustion</u> of a hydrocarbon fuel happens when there is a good supply of <u>oxygen</u> to produce carbon dioxide and water and the maximum amount of energy is given out.</p> <p>propane + oxygen → carbon dioxide + water</p> $\text{C}_3\text{H}_8 + 5\text{O}_2 \rightarrow 3\text{CO}_2 + 4\text{H}_2\text{O}$ <p><u>Incomplete combustion</u> happens when the supply of oxygen is low.</p> <p><u>Water</u> is still produced, but <u>carbon monoxide</u> and <u>carbon</u> (Soot) are produced.</p> <p>Less energy is released than during complete combustion.</p> <p>Carbon monoxide is a poisonous gas.</p>	<p><u>Cracking</u> is a reaction in which <u>larger saturated</u> hydrocarbon molecules are <u>broken down</u> into <u>smaller</u>, more <u>useful</u> hydrocarbon molecules, some of which are unsaturated. It starts with alkanes and the products of cracking include alkanes and alkenes.</p> <p>e.g. Hexane can be cracked to form butane and ethene: hexane → butane + ethene $\text{C}_6\text{H}_{14} \rightarrow \text{C}_4\text{H}_{10} + \text{C}_2\text{H}_4$</p> <p><u>Catalytic cracking</u> uses a temperature of approximately 550 °C and a catalyst known as a zeolite which contains aluminium oxide and silicon oxide.</p> <p><u>Steam cracking</u> uses a higher temperature of approximately 550 °C and no catalyst.</p> <p>Cracking is important as it helps to match the supply of fractions with the demand for them it produces alkenes, which are useful as feedstock for the petrochemical industry.</p> <p><u>Chemical test for Alkenes</u> (unsaturated hydrocarbons) Alkenes will react with bromine water and turn it from <u>orange/brown</u> to <u>colourless</u>. This is the way to test for a double C=C bond in a molecule.</p>

Lessons 1 Pure and Impure Substances	Lessons 1 continued Pure and Impure Substances	Lessons 2 Chromatography																		
<p>The word pure is used in chemistry in a different way from its everyday meaning. For example, shops sell cartons labelled as 'pure' orange juice. The label means that the contents are just orange juice, with no other substances added. However, the juice is not pure in the chemical sense, because it contains different substances mixed together. In chemistry: a pure substance consists only of one element or one compound, a mixture consists of two or more different substances, not chemically joined together.</p> <p>Different types of chemical substance - an element contains just one type of atom, a compound contains two or more types of atom joined together, a mixture contains two or more different substances that are not joined together the different substances in a mixture can be elements or compounds.</p> <p>Pure substances have a sharp melting point but mixtures melt over a range of temperatures. This difference is most easily seen when the temperature of a liquid is measured as it cools and freezes.</p>	<table border="1"> <thead> <tr> <th>Description</th><th>Example</th><th>Diagram</th></tr> </thead> <tbody> <tr> <td>Pure element</td><td>Oxygen</td><td></td></tr> <tr> <td>Pure compound</td><td>Carbon dioxide</td><td></td></tr> <tr> <td>Mixture of elements</td><td>Oxygen and helium</td><td></td></tr> <tr> <td>Mixture of compounds</td><td>Alcohol and water</td><td></td></tr> <tr> <td>Mixture of elements and compounds</td><td>Air</td><td></td></tr> </tbody> </table> <p>A formulation is a mixture which has been designed as a useful product. Formulations are all around us, for example: Fuels, cleaning products, paints, medicines, alloys, fertilisers, foods.</p> <p>In a formulation, every chemical has been added in a carefully measured amount. Each chemical has a specific purpose in the formulation.</p>	Description	Example	Diagram	Pure element	Oxygen		Pure compound	Carbon dioxide		Mixture of elements	Oxygen and helium		Mixture of compounds	Alcohol and water		Mixture of elements and compounds	Air		<p>Paper chromatography is used to separate mixtures of soluble substances and to provide information on the possible identity of the substances present in the mixture. These are often coloured substances such as food colourings, inks, dyes or plant pigments.</p> <p>Phases - Chromatography relies on two different 'phases':</p> <p>The mobile phase is the solvent that moves through the paper, carrying different substances with it.</p> <p>The stationary phase is contained on the paper and does not move through it. The different dissolved substances in a mixture are attracted to the two phases in different proportions. This causes them to move at different rates through the paper.</p> <div data-bbox="1451 885 2072 1228"> </div> <p>Paper chromatography</p> <ol style="list-style-type: none"> Spots of ink or plant dye are placed on a pencil line
Description	Example	Diagram																		
Pure element	Oxygen																			
Pure compound	Carbon dioxide																			
Mixture of elements	Oxygen and helium																			
Mixture of compounds	Alcohol and water																			
Mixture of elements and compounds	Air																			

Lesson 2 Continued Chromatography

Interpreting a chromatogram Separation by chromatography produces a chromatogram. A paper chromatogram can be used to distinguish between **pure and impure substances**: A **pure** substance produces **one spot** on the chromatogram, an **impure** substance produces **two or more spots**. A paper chromatogram can also be used to identify substances by comparing them with known substances. Two substances are likely to be the same if: they produce the same number of spots, and these match in colour the spots travel the same distance up the paper (have the same R_f value).

R_f values can be used to identify unknown chemicals if they can be compared to a range of



reference substances. The R_f value is always the same for a particular substance if run in the same solvent system.

$$R_f = \frac{\text{distance travelled by substance}}{\text{distance travelled by solvent}}$$

Lesson 2 Continued Required Practical

Required practical Aim To investigate how paper chromatography can be used to separate and tell the difference between coloured substances.

Method Draw a pencil line across the chromatography paper, 1 - 2 cm from the bottom

Use a pipette or capillary tube to add small spots of each ink to the line on the paper

Place the paper into a container with a suitable solvent in the bottom

Allow the solvent to move through the paper, but remove the chromatogram before it reaches the top

Allow the chromatogram to dry, then measure the distance travelled by each spot and by the solvent

Results Record your results in a suitable table.

Analysis

Calculate the R_f value of each spot. Compare the R_f values and colours of each spot in the inks. Describe their similarities and differences.

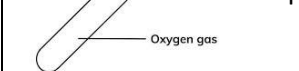
Evaluation Question - Explain why the distances travelled by each spot were measured in mm, rather than in cm.

Hazards, risks and precautions

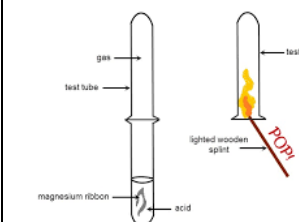
Hazard	Possible harm	Possible precaution
Harmful solvent	Skin irritation	Avoid skin contact, eg wear gloves
Harmful solvent	Breathing difficulties	Ensure adequate ventilation or use a fume cupboard

Lesson 3 Gas Tests

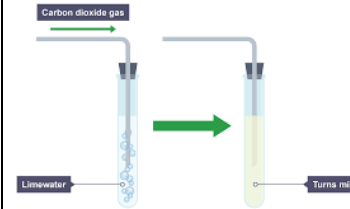
Oxygen O_2 - Glowing splint held in a test tube, the splint relights



Hydrogen H_2 - Lighted splint held in a test tube, a squeaky pop sound heard

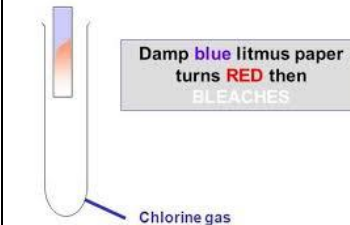


Carbon dioxide CO_2 - Gas bubbled through limewater, the

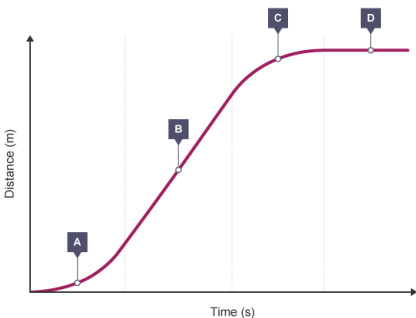
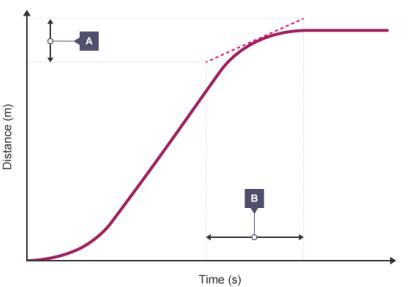


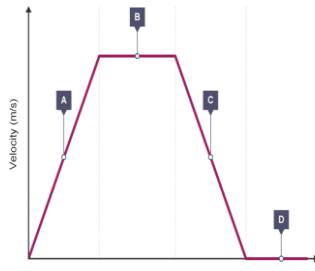
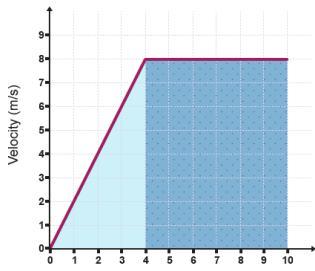
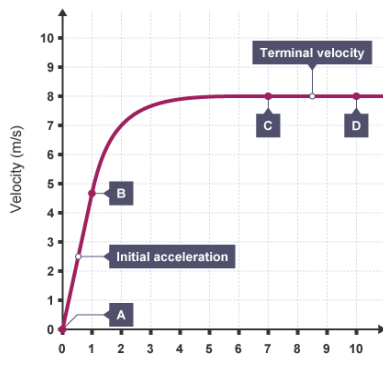
limewater turns milky or cloudy white

Chlorine Cl_2 - Damp litmus paper held in a test tube the paper turns white.



Lessons 1 & 2 Early atmosphere and its evolution	Lessons 3 & 4 Greenhouse effect and global warming	Lessons 5 Atmospheric pollutants										
<p>The envelope of gases surrounding the earth or another planet is called an atmosphere.</p> <p>Atmospheres are formed from mixtures of different gases.</p> <p>Atmospheres can be formed from different combinations of gases.</p> <p>Different planets have different types of atmospheres.</p> <p>Scientists predict that the early atmosphere contained :</p> <ul style="list-style-type: none">• a large amount of carbon dioxide• little or no oxygen• Water vapour• small amounts of other gases, such as ammonia and methane <p>One theory suggests that the early atmosphere came from intense volcanic activity.</p> <p>Combustion reactions happen in a volcano, where hydrogen and carbon react with oxygen to make Carbon dioxide and water vapour.</p> <p>As the Earth cooled the water vapour condensed to form oceans.</p> <p>Nitrogen was also released by volcanoes which gradually built up in the atmosphere because it is unreactive.</p> <table><tr><th colspan="2">Earths atmosphere Today</th></tr><tr><td>Nitrogen</td><td>78%</td></tr><tr><td>Oxygen</td><td>21%</td></tr><tr><td>Water</td><td>1%</td></tr><tr><td>Carbon Dioxide</td><td>0.04%</td></tr></table> <p>Photosynthesis by primitive plants and algae released oxygen, which gradually built up in the atmosphere.</p> <p>carbon dioxide + water → glucose + oxygen</p> <p>Oxygen is a reactive gas, as it built up in the atmosphere it reacted with other gases.</p> <p>Ammonia + Oxygen → Nitrogen oxide and water</p> <p>Methane + Oxygen → Carbon Dioxide +Water</p> <p>Carbon dioxide dissolved in the oceans, formed carbonate compounds and precipitated as limestone.</p> <p>Carbon dioxide is incorporated into living things which form fossil fuels.</p>	Earths atmosphere Today		Nitrogen	78%	Oxygen	21%	Water	1%	Carbon Dioxide	0.04%	<p>Greenhouse gases are gases that absorb heat radiated from the Earth then release energy in all directions, which keeps the Earth warm.</p> <p>Greenhouse gases present in the atmosphere include:</p> <ul style="list-style-type: none">• water vapour• carbon dioxide• methane <p>Human activities are increasing the amount of some greenhouse gases in the atmosphere. For example:</p> <ul style="list-style-type: none">• farming cattle releases methane• farming rice in paddy fields releases methane• burning fossil fuels in vehicles and power stations releases carbon dioxide• deforestation releases carbon dioxide and reduces the absorption of carbon dioxide through photosynthesis <p>Greenhouse effect</p> <ol style="list-style-type: none">1. electromagnetic radiation a short wavelength, (e.g. UV) passes through the Earth's atmosphere2. the Earth absorbs most of the radiation.3. Some of the radiation is reflected as long wave radiation ,(infrared radiation)4. some of the infrared radiation is absorbed by the covalent bonds between the atoms in greenhouse gases.5. The greenhouse gases can then emit the infrared radiation back into the atmosphere. <p>Global warming is the term used to describe the warming of the climate in the past 200 years</p> <p>The effects of global warming include:</p> <ul style="list-style-type: none">• glaciers and polar ice melting• sea levels rising• patterns of rainfall changing, producing floods or droughts• habitats changing	<p>Combustion creates pollutant gases:</p> <p>Methane + Oxygen → Carbon dioxide + water</p> <p>Complete combustion of a hydrocarbon fuel occurs when there is a good supply of oxygen. It releases the maximum amount of energy and produces carbon dioxide and water.</p> <p>Incomplete combustion of a hydrocarbon fuel occurs when there is a poor supply of oxygen. Less energy is released.</p> <p>Water is produced along with carbon monoxide , carbon dioxide and carbon.</p> <p>Carbon monoxide is a poisonous gas</p> <p>It binds to haemoglobin in your red blood cells, preventing them from carrying oxygen to the cells in your body. Carbon monoxide is colourless and has no smell.</p> <p>Particulate carbon</p> <p>Causes health problems for humans because it irritates the lining of the lungs, can make asthma worse, and perhaps even cause cancer.</p> <p>Particulate carbon can also cause global dimming, which may reduce rainfall.</p> <p>Sulfur dioxide is caused when sulfur atoms which are present in some fossil fuels are oxidised:</p> <p>Sulfur dioxide is then further oxidised in the atmosphere to sulfur trioxide, SO₃. This gas dissolves in rainwater to make acid rain, which is a dilute solution of sulfuric acid, H₂SO₄.</p> <p>Acid rain harms and kills plants and animals, especially those that live in aquatic environments. It can also damage man-made objects like statues and buildings</p> <p>Nitrogen is not present in fuels, but the high temperatures and pressures inside a car engine can cause the nitrogen and oxygen in the air to react together to make oxides of nitrogen.</p> <p>Nitrogen oxide gases can cause acid rain, and they also react in the atmosphere with other pollutants to make photochemical smog.</p> <p>Smog can have major health effects, causing asthma attacks and even death.</p>
Earths atmosphere Today												
Nitrogen	78%											
Oxygen	21%											
Water	1%											
Carbon Dioxide	0.04%											

Lesson 1 and 2 Distance, displacement, speed and Velocity.	Lesson 3 Acceleration	Lessons 4 & 5 Distance time graphs															
<p>Distance is how far an object moves. It is a scalar quantity. Displacement includes both the distance an object moves, measured in a straight line from the start point to the finish point and the direction of that straight line. Displacement is a vector quantity. Speed is a scalar quantity. The speed of a moving object is rarely constant. The speed that a person can walk, run or cycle depends on many factors including; age, terrain, fitness and distance travelled. Typical values: walking ~1.5 m/s running ~3 m/s cycling ~6 m/s</p> <p>Distance travelled in a specific time can be calculated using the equation:</p> $\text{distance travelled} = \text{speed} \times \text{time}$ $[s = v t]$ <p>distance, s, in metres, m speed, v, in metres per second, m/s time, t, in seconds, s</p> <p>Example: A car travels 500 m in 50 s, then 1,500 m in 75 s. Calculate its average speed. First calculate total distance travelled (s): 500 + 1,500 = 2,000 m Then calculate total time taken (t): 50 + 75 = 125 s Then rearrange $s = v t$ to find v:</p> $v = \frac{s}{t}$ $v = 2,000 \div 125$ $v = 16 \text{ m/s}$ <p>The velocity of an object is its speed in a given direction. Velocity is a vector quantity. When an object moves in a circle the direction of the object is continually changing. This means that an object moving in a circle at constant speed has a continually changing velocity. (Higher Tier only)</p>	<p>Acceleration is the rate of change of velocity. It is the amount that velocity changes per unit time.</p> <p>The average acceleration of an object can be calculated using the equation:</p> $\text{acceleration} = \text{change in velocity} / \text{time taken}$ $[a = \frac{\Delta v}{t}]$ <p>acceleration, a, in metres per second squared, m/s^2 change in velocity, Δv, in metres per second, m/s time, t, in seconds, s</p> <p>If an object is slowing down, it is decelerating (and its acceleration has a negative value).</p> <p>Example A car takes 8.0 s to accelerate from rest to 28 m/s. Calculate the average acceleration of the car. final velocity, $v = 28 \text{ m/s}$</p> <p>initial velocity, $u = 0 \text{ m/s}$ (because it was at rest - not moving)</p> <p>change in velocity, $\Delta v = (28 - 0) = 28 \text{ m/s}$</p> $a = \frac{\Delta v}{t}$ $a = 28 \div 8$ $a = 3.5 \text{ m/s}^2$ <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>An object will always accelerate (change velocity) in the direction of the resultant force. Remember velocity is both speed and direction.</p> </div>	<p>Distance Time graphs: If an object moves along a straight line, how far it is from a certain point can be represented by a distance–time graph.</p>  <p>The speed of an object can be calculated from the gradient of its distance–time graph.</p> $\text{gradient} = \frac{\text{vertical change}(A)}{\text{horizontal change}(B)}$ <p>If an object is accelerating or decelerating, its speed can be calculated at any particular time by:</p> <ul style="list-style-type: none"> -drawing a tangent to the curve at that time -measuring the gradient of the tangent  <table border="1" data-bbox="1411 694 1904 877"> <thead> <tr> <th>Section</th> <th>Gradient</th> <th>Speed</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Increasing</td> <td>Increasing</td> </tr> <tr> <td>B</td> <td>Constant</td> <td>Constant</td> </tr> <tr> <td>C</td> <td>Decreasing</td> <td>Decreasing</td> </tr> <tr> <td>D</td> <td>Zero</td> <td>Stationary (at rest)</td> </tr> </tbody> </table>	Section	Gradient	Speed	A	Increasing	Increasing	B	Constant	Constant	C	Decreasing	Decreasing	D	Zero	Stationary (at rest)
Section	Gradient	Speed															
A	Increasing	Increasing															
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Lessons 6 & 7 Velocity time graphs	Lessons 8 Equation of motion	Lessons 9 Terminal Velocity																				
<p>The acceleration of an object can be calculated from the gradient of a velocity – time graph.</p> <p>The distance travelled by an object can be calculated from the area under the graph calculated from the area</p>  <table border="1" data-bbox="203 684 663 865"><thead><tr><th>Section</th><th>Gradient</th><th>Velocity</th><th>Acceleration</th></tr></thead><tbody><tr><td>A</td><td>Positive</td><td>Increasing</td><td>Positive</td></tr><tr><td>B</td><td>Zero</td><td>Constant</td><td>Zero</td></tr><tr><td>C</td><td>Negative</td><td>Decreasing</td><td>Negative</td></tr><tr><td>D</td><td>Zero</td><td>Stationary</td><td>Zero</td></tr></tbody></table>  <p>The area under the graph can be calculated by:</p> <p>Finding the area of the triangle: $\frac{1}{2} \times \text{base} \times \text{height}$ $0.5 \times 4 \times 8 = 16 \text{ m}^2$</p> <p>Finding the area of the rectangle: $(10 - 4) \times 8 = 48 \text{ m}^2$</p> <p>Adding them together= $16 + 48 = 64\text{m}$ travelled (Displacement)</p>	Section	Gradient	Velocity	Acceleration	A	Positive	Increasing	Positive	B	Zero	Constant	Zero	C	Negative	Decreasing	Negative	D	Zero	Stationary	Zero	<p>The equation for uniform (constant) acceleration:</p> <p>$(\text{final velocity})^2 - (\text{initial velocity})^2 = 2 \times \text{acceleration} \times \text{distance}$</p> <p>$v^2 = u^2 + 2as$</p> <p>final velocity, v, in metres per second, m/s initial velocity, u, in metres per second, m/s acceleration, a, in metres per second squared, m/s² distance, s, in metres, m</p> <p>Using the equation: A biscuit is dropped 300 m, from rest. Calculate its final velocity. (Gravity=9.8N/Kg)</p> <p>$v = \sqrt{u^2 + 2as}$</p> <p>$v = \sqrt{0^2 + 2 \times 9.8 \times 300}$</p> <p>$v = \sqrt{5880}$</p> <p>$v = 76.7 \text{ m/s}$</p> <p>A train accelerates uniformly from rest to 24 m/s on a straight part of the track. It travels 1.44 km (1440m). Calculate its acceleration.</p> <p>$a = \frac{v^2 - u^2}{2s}$</p> <p>$a = \frac{24^2 - 0^2}{2 \times 1,440}$</p> <p>$a = 576 \div 2,880$</p> <p>$a = 0.2 \text{ m/s}^2$</p> <div><p>Equations</p><p>$v = \sqrt{u^2 + 2as}$</p><p>$a = \frac{v^2 - u^2}{2s}$</p><p>$u^2 = v^2 - 2as$</p><p>$s = \frac{v^2 - u^2}{2a}$</p></div>	<ul style="list-style-type: none">Near the Earth's surface any object falling freely under gravity has an acceleration of about 9.8 m/s².An object falling through a fluid initially accelerates due to the force of gravity. Eventually the resultant force will be zero and the object will move at its terminal velocity <p>Velocity-time graphs for falling objects</p>  <p>Between A and B: The object accelerates because of the force of gravity. Its speed increases. The resultant force acts downwards because the frictional force acting against it is less than the weight of the object.</p> <p>Between B and C: Its acceleration decreases. Its speed still increases but by a smaller amount. The resultant force still acts downwards but is decreasing. This is because the frictional force is increasing as the speed increases.</p> <p>Between C and D: The object is not accelerating. It has reached its terminal velocity and is falling at a steady speed. The resultant force is zero because the frictional force acting against it is equal to the weight of the object. The object does not stop falling once its resultant force is zero, unless it has hit the ground.</p>
Section	Gradient	Velocity	Acceleration																			
A	Positive	Increasing	Positive																			
B	Zero	Constant	Zero																			
C	Negative	Decreasing	Negative																			
D	Zero	Stationary	Zero																			

Year 9 Spanish

Cycle 3



Instructions

- Look at the list of 12 words/phrases and practice saying them
- Cover the English side and try to say them to yourself, then write them down.
- Check your answers
- Repeat until you can remember all 12
- Keep doing this regularly until you are confident !

Challenge : Can you cover up the Spanish side and remember all 12 including the spellings ?

You have **two** weeks to revise each vocabulary list at home.

You will then be tested in class on how well you know all 12 words/phrases.

Buena Suerte!

Test 1 ¿Cómo es Barcelona?–LC3

Español	Inglés
1. Barcelona es una ciudad animada	Barcelona is a lively city
2. No es una ciudad fea	It is not an ugly city
3. Era una ciudad bastante sucia	It was quite a dirty city
4. Barcelona no era una ciudad económica	Barcelona wasn't a cheap city
5. Será una ciudad muy peligrosa	It will be a very dangerous city
6. Mejor que / peor que	Better than / worse than
7. Está en el norte / sur	It is in the North / south
8. Está situada en el oeste / este	It is (located) in the West/ East
9. Está cerca de la playa	It is near the beach
10. Está lejos de la costa	It is far from the coast
11. Barcelona es una ciudad moderna y está en Cataluña	Barcelona is a modern city and it is in Catalonia
12. Barcelona era una ciudad histórica pero también industrial	Barcelona was a historic but also industrial city

Test 2 - ¿Cómo es Costa Rica? – LC3

Español	Inglés
1. Me encanta Costa Rica porque hay animales	I love Costa Rica because there are animals
2. Me gusta Costa Rica porque no hay muchos ruidos	I like Costa Rica because there aren't lots of noises.
3. Me gustaría visitar porque me gustan los lagos	I'd like to visit because I like lakes
4. Hay bosques donde puedo pasear	There are forests where I can go for a walk
5. Voy a visitar Costa Rica porque hace sol	I'm going to visit Costa Rica because it is sunny
6. Quiero visitar Costa Rica porque se puede pasarlo bien	I want to visit Costa Rica because you can have a good time
7. Hay espacios verdes pero también se puede bailar	There are green spaces but you can also dance
8. Hay parques nacionales donde me gusta montar	There are national parks where I like to ride
9. Hace calor pero no hay ríos	It is hot but there are no rivers
10. Odio Costa Rica porque hay peligros	I hate Costa Rica because there are dangers
11. Voy a ir a Costa Rica porque hay mercados donde puedo caminar	I'm going to go to Costa Rica because there are markets where I can walk
12. Me gustaría ir a Costa Rica porque hay pájaros y me gusta pintar	I'd like to go to Costa Rica because there are birds and I like to paint

Test 3 - ¿Qué tal lo pasaste en.....? – LC3

Español	Inglés
1. El año pasado visité Barcelona	Last year I visited Barcelona
2. El verano pasado fui a Costa Rica	Last summer I went to Costa Rica
3. La primavera pasada visité España	Last Spring I visited Spain
4. Lo mejor fue cuando comí y bebí	The best was when I ate and drank
5. Lo peor fue cuando me quemé	The worst was when I got sunburnt
6. Lo mejor fue que había arena blanca	The best was that there was white sand
7. Lo peor fue que había pobreza	The worst was that there was poverty
8. Lo peor fue que no había fiestas	The worst was that there were no parties
9. Lo mejor fue cuando fui de compras	The best was when I went shopping
10. Había islas bonitas y me divertí	There were beautiful islands and I had fun
11. Visité Barcelona y lo mejor fue cuando tomé el sol	I visited Barcelona and the best was when I sunbathed
12. Lo mejor fue que había castillos y probé platos típicos	The best was that there were castles and I tried typical dishes

Test 4 - ¿Quieres tomar un año sabático?- LC3

Español	Inglés
1. En el futuro voy a aprender a conducir	In the future I'm going to learn to drive
2. Antes de trabajar quiero ser turista	Before working I want to be a tourist
3. Antes de la universidad quisiera ganar dinero	Before university I'd like to earn money
4. Después del colegio espero visitar latinoamérica	After school I hope to visit Latinamerica
5. Sueño con viajar	I dream of travelling
6. Voy a ayudar en mi comunidad porque me importa	I'm going to help in my community because it is important to me
7. Quisiera hacer un viaje en tren por Europa	I'd like to do a train journey through Europe
8. Para un año sabático voy a enseñar inglés	For a gap year I'm going to teach English
9. Quisiera practicar mi español	I'd like to practice my Spanish
10. Voy a ayudar en un proyecto medioambiental	I'm going to help an environmental project
11. Quiero cruzar fronteras porque parece guay	I want to cross borders because it seems cool
12. Sueño con trabajar como voluntari@	I dream of working as a volunteer