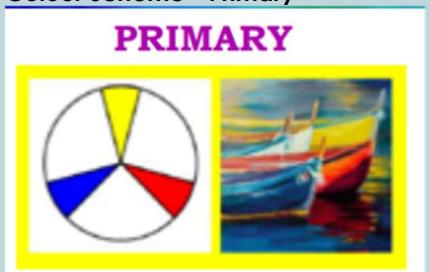
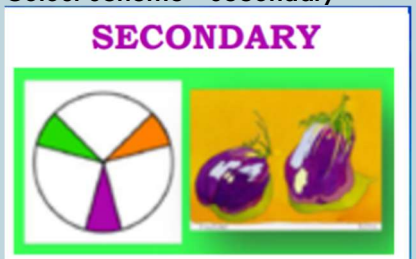
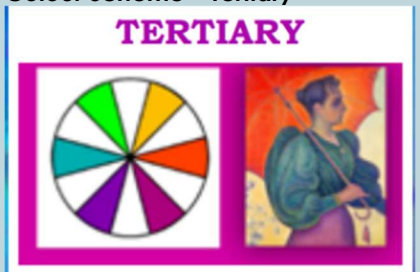
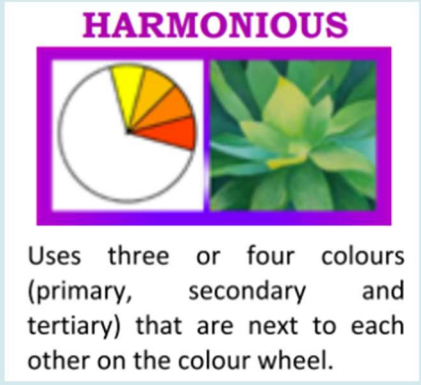
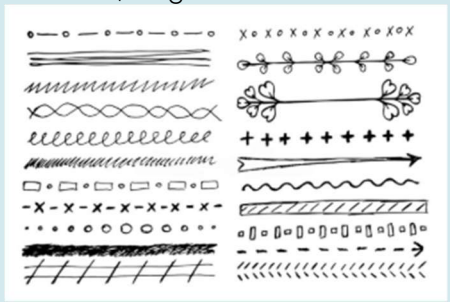
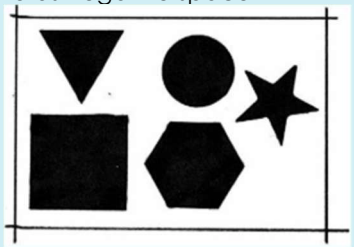
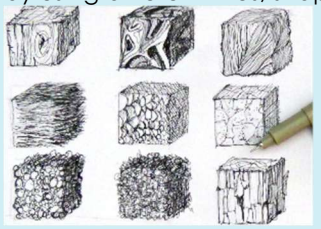
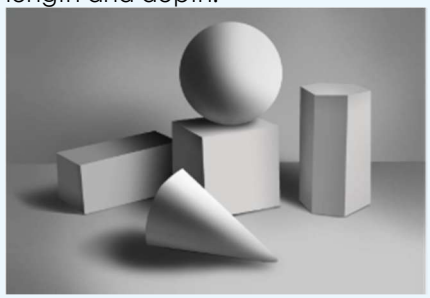
Art and Design

Week 1	Week 2	Week 3 -
Colour Scheme - Primary  Uses the primary colours: Red, Yellow & Blue. They can not be made by mixing other colours.	**Colour Scheme – Secondary**  Uses the secondary colours: Orange, Green & Purple. Each secondary colour is made by mixing two primary colours.	**Colour Scheme – Tertiary**  Uses the tertiary colours. They are made by mixing a primary and a secondary colour next to each other on the colour wheel.
Week 4	**Week 5 -**	**Week 6 -**
Colour Scheme – Complementary  Uses a pair of colours that are opposite each other on the colour wheel. The pairs are: Green/Red; Blue/Orange; Yellow/Purple.	**Colour Scheme – Harmonious**  Uses three or four colours (primary, secondary and tertiary) that are next to each other on the colour wheel.	**Formal Elements – Line** is the path left by a moving point, i.e. a pencil or a brush. A line can take many forms. It can be horizontal, diagonal or curved. 

Week 7 -	Week 8 -	Week 9 -
Formal Elements – Tone is the lightness or darkness of an object. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. In every 3D object there are minimum of 3 tones; light, mid-tone and dark. Tone can be flat or it can vary from dark to light. 	**Formal Elements – Shape** is an area enclosed by a line. It could be just an outline or it could be shaded in. When drawing shapes, you must consider the size and position as well as the shape of the area around it. The shapes created in the spaces between shapes are referred to as negative space 	**Formal Elements – Texture** is the surface quality of something, the way something feels or looks like it feels. Actual texture exists, you can feel it or touch it. You can create actual texture in an artwork by changing the surface. Visual texture is created using marks to represent actual texture. It gives the illusion of a texture or surface. You can create visual texture by using different lines, shapes, colours or tones. 
Week 10 -	**Week 11 -**	**Week 12 - Assessment**
Formal Elements – Form is a three dimensional shape (3D), such as a cube, sphere or cylinder. In 2D artworks, lines, tones and perspective can be used to create an illusion of form. The three dimensions of form are width, length and depth. 	**Formal Elements – Pattern** is a symbol or shape that is repeated. A design that is created by repeating lines, shapes, tones or colours. The design used to create a pattern is often referred to as a motif. Motifs can be simple shapes or complex arrangements. Tessellating any image creates a Repetitive pattern 	Use these sentence starters to direct your research: I particularly like…(title of the work) It is a… (painting, sculpture, textile etc) It has been created by… (what materials and techniques did the artist use?) The subject of this piece is… (what is in the work? If there are people in it what are they doing? If there are objects in it, what are they and where are they placed?) Describe it in detail. How was their work produced? What methods and materials did they use? I am interested in this type of work because at this stage I think I might… (what are you going to do?) To develop my ideas I will be experimenting with…

Computer Science

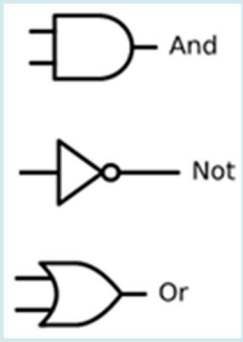
Week 1 - 2.3 Defensive Design	Week 2 - Maintainability of Programs	Week 3 - Maintainability of Programs
Function - Reusable block of code which must return a value. Procedure - Reusable block of code which does not have to return a value. Defensive Design - Defensive design is the practice of planning for contingencies in the design stage of a project or undertaking. Maintainability – Code is made maintainable by adding, comments, functions & procedures. Authentication - Verifying a user identity before they can use a program with username and password. Strong passwords over a certain length with symbols and mixed case are advised. Enquiry Task: Complete exam questions on page 109 in your Black and Purple book.	Input Validation - Ensuring data input by the user meets specific criteria before processing. Range Check - Checking data is within two limits - i.e. between 1- 16 to check a school child's age Length Check - Checking data is of a correct length, i.e. longer than 1 character but shorter than 10. Anticipating Misuse - The ability of a programmer to consider how the end user might accidently (or on purpose) break the program and then to write additional code to handle these situations. Using Functions - Code can be put into functions so that they can be reused with ease. Enquiry Task: Complete exam questions on page 110 in your Black and Purple book.	Indentation - Indenting makes it easy to see where structures begin and end. Conditions and iterations should be indented. Code inside procedures and functions should be indented Naming conventions - Naming variable and functions using a set of rules. Add Comments - Used by a programmer to explain sections of code. Ignored by the compiler. Syntax Error - Rules of the language have been broken. The program will not run. Variables not being declared before use. Incompatibility of variable types. Logical Error - The program runs but does not give the expected output. Division by zero. Infinite loop. Memory full. File not found. Enquiry Task: Complete exam questions 1-8 on page 116 in your Black and Purple book

Week 4 - Testing & Logic Gates

Iterative Testing - Each module of a program is tested as it is developed.

Final / Terminal Testing - Testing that all the modules of a program work together as expected. Checking the program meets the expectations of the user with real data.

Logic Gates



^

¬

v

Week 5 Truth Tables

AND Gate - Requires two 1's to create an output.

OR Gate - Requires 1 or the other or both

NOT Gate - Does the opposite of what you provide it with.

AND			OR			NOT	
A	B	Q	A	B	Q	A	Q
0	0	0	0	0	0	0	1
0	1	0	0	1	1	1	0
1	0	0	1	0	1		
1	1	1	1	1	1		

Enquiry Task for week 4 & 5 : Black and Purple Book questions on 92 & 93.

Week 6 Mid Cycle Assessment

File Handling – Open, read, write, close. Marks will be given for just opening and closing files.

SQL – Structured Query Language.

Arrays / Lists – A set of data items which are grouped together with an index. Most arrays start at 0.

Programming Techniques

Sequence – Any block of code

Selection – Any IF statement in a program

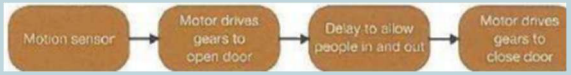
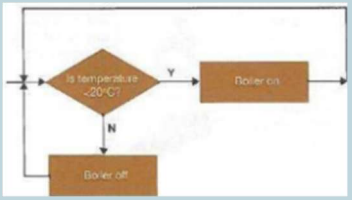
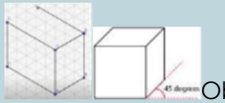
Iteration – Any loop, this could be FOR or WHILE

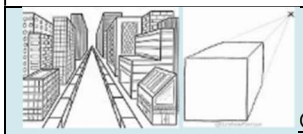
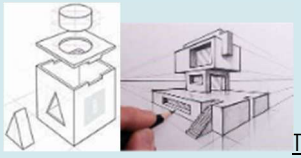
Enquiry Task: Complete workbook 2.4 on Google Classroom

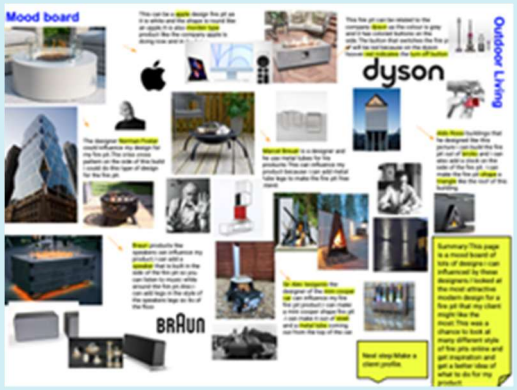
Week 7 Levels of Programming	Week 8 Programming	Week 9 Translators and Compilers
High Level language - A programming language more closely linked to English – Python is a high level coding language. Low Level language - A language which is close to machine code. Related closely to the design of the machine, coding in binary. Compiler - A program that translates a high-level language program, source code, into a computer's machine code. Interpreter - Translates and executes a program one statement at a time. Translator - A program that translates a program written in assembly language into machine code. IDE - Integrated Development Environment. This is the program you write code into. Enquiry Task: Black and Purple Book Questions on page 31, 33.	Variable - A value that can change, depending on conditions or on information passed to the program. Constant - A value that cannot be altered by the program during normal execution, i.e., the value is constant. Assignment - Giving a variable or constant a value. e.g. counter = 0. Boolean – Stores TRUE / FALSE. Char – A single alphanumeric character or symbol String – A sequence of alphanumeric characters and or symbols. Integer – Only stores whole numbers - if given a decimal it will round it to the closest whole number. Float/real – Stores decimal point numbers. Enquiry Task: Complete 1-2 Python Challenges on Google Classroom	Compiler - A program that translates a high-level language program, source code, into a computer's machine code. Translator - A program that translates a program written in assembly language into machine code. IDE Tools Error diagnostics - These are tools provided by IDE's which give detailed feedback on errors in your code. Auto-indentation - Automatically indents code when writing where necessary Colour Coded Keywords - Highlighting specific keywords in particular colours, IF, WHILE, PRINT Run Time Environment - An environment to test your code in. Enquiry Task: Black and Purple Book Questions on page 114

Week 10 IDE's & Programming	Week 11 Revision & Test	Week 12
IDE - Integrated Development Environment. This is the program you write code into. Count Controlled Loop – A loop which runs a set number of times: A FOR loop! For i in range(0,10): print(i) Condition Controlled Loop – A loop which could run indefinitely. A while loop! a = 0 while a< 10: print(a) If a is not incremented – this loop would run forever. <u>Enquiry Task:</u> Complete 1-2 Python Challenges on Google Classroom	Assessment week You will need to check all keywords throughout this knowledge organiser. All teacher resources and lessons are in google classroom. Black and Purple Book. Pages 104, 116 for full learning checklist	Use this QR code to check and update all of your key terminology on google classroom.

Design Technology

Week 1 – 2.5 - Composite Materials	Week 2 – 2.6 – Systems Approach to Designing	Week 3 – 6.4 Communicating Design Ideas 1
Composite Materials are 2 or more materials combined to improve material properties. E.g. GRP – Glass reinforced plastic – glass fibre matting covered in smooth resin. Lightweight and strong, resistant to heat chemicals and corrosion. Used in car body parts, pipes, helmets, boat hulls. CRP – Carbon fibre reinforced plastic – carbon fibres are embedded within plastics to make them stronger. Lightweight. Very expensive. Used in boat hulls, high performance sports equipment. Technical textiles – textiles with enhanced properties Gore-tex: waterproof, breathable, outdoor clothing Kevlar: very strong, heat protection, body armour Conductive fabrics – electrical current can pass through, used in clothing and toys	A system is parts or components working together to control tasks or activities Systems diagram – flowchart with input, process, output  Open loop – no feedback, makes no decisions  Closed loop – can make a decision using feedback  	Drawing types 2D Design – 2D design is better for plan views and expressing size and dimensions. 3D Design – better for conveying overall shape of design, visually explain aesthetic properties  Oblique drawing – 45 degree angle to draw lines for the depth and top of drawing. Isometric drawing – 30 degree angle, more realistic 3D drawing Annotated drawings – adding notes to explain details that a drawing cannot convey Working drawings – give enough detail for a prototype or product manufacture to take place. Needs front, end and plan view of the design. System diagrams – to visually and logically explain the order or events in mechanical or electronic systems. Blocks represent different stages of a system

Week 4 – 6.4 Communicating Design Ideas 2	Week 5 – 6.4 Communicating Design Ideas 3	Week 6: Introduction to Coursework (NEA)
 <u>One point perspective</u>: uses a vanishing point to create the illusion of depth  <u>Two point perspective</u>: uses two vanishing points set to the outer edges of the page. The main construction lines create the width and depth and are projected back to the two points. Gives a realistic view. <u>Exploded diagrams</u>: show how component parts fit together. Parts drawn separated from each other, with paths that represent the way they are assembled.	<u>Modelling and prototypes</u> Model construction – models can be constructed to test elements of a design. Models can be to size or scaled up/down. Initial models are often made out of cheaper materials such as cardboard. Prototypes – a prototype is a functioning representation of a designed product. Can be scaled up/down in size, or made accurately. <u>High quality prototypes:</u> • Satisfy clients design brief • Are innovative and creative • Have functionality to ensure design performs its task • Is aesthetically pleasing • Appeals to its target market	The exam board will provide the contexts for this year's Non-Examination Assessment ('NEA' - your coursework). This is worth 50% of your overall GCSE. You will be given a choice of three different contexts which we will briefly explore. You will pick two of the contexts and make a mini spider diagram for each to explore different possible scenarios within each context, before making a decision on which to choose for your coursework. • Example from last year: 

Week 7: NEA – Task Analysis Mind Map	Week 8 – NEA – Mood Board	Week 9 – NEA – Choosing a client & client questionnaire
You will create a full page mind map to explore your chosen context. You will look at different areas to find a problem that you can design a product to solve, such as who has the problem? What is the problem? Where is the problem? Why is this a problem? 	You will create a mood board to visually demonstrate your chosen context and initial ideas. You will show graphics to explain the user/design need, include words to emphasize design issues and intentions, and some visual examples of problems and potential solutions within your design context. 	Your product that you design but be designed for a client. You will choose an appropriate client (a real person who you know) and will work with this client throughout your coursework – they will give you feedback on your designs. You will choose your client and complete a client profile explaining why you have chosen them. You will then write a questionnaire to help gain some data from your client about what their user requirements are and what would be an effective product to design to solve your chosen problem. This will help influence the function and aesthetics of your product.

Week 10 – Revision	Week 11 – Assessment Week	Week 12 – Super teach
You'll need to revise the content covered in this knowledge organise using the following resources: • Seneca • BBC Bitesize – GCSE Design and Technology - AQA • Technology Student-technologystudent.com • CGP Revision Guides – GCSE AQA DT revision books Make the most of these resources to refresh your knowledge and feel confident going into your assessment. You've made excellent progress so far—keep it up!	1. For large, product analysis questions, use ACCESS FM (or similar headings) to structure your answer. We love structured answers. Using headings shows clear thinking and makes it easy to award marks. • Aesthetics – How it looks (colour, shape, style) • Cost – Materials, manufacture, target price • Customer – Who it's for (age, needs, lifestyle) • Environment – Sustainability, materials, lifespan • Size – Dimensions, ergonomics, storage • Safety – Hazards, standards, safety features • Function – What it does and how well it works • Materials / Manufacture – What it's made from and how	2. Don't describe – analyse Low marks = *what it is* High marks = *why it's good or bad* ✗ *"The handle is plastic."* ☑ *"The polypropylene handle is lightweight and impact-resistant, making it suitable for repeated use by children."* Use phrases like: • *"This means that…"* • *"This improves…"* *3. Link to the user* *Every product exists for a reason. Show the examiner you understand design intent.* Example: The rounded edges improve safety, which is important as the product is designed for children.

Drama

Week 1: Performance & Acting Skills	Week 2: Drama Techniques	Week 3: Stage & Design Elements
• **Physical skills** – movement, gesture, posture, facial expression • **Vocal skills** – tone, pitch, pace, pause, projection • **Characterisation** – how an actor creates a role • **Interpretation** – your personal understanding of a character or scene • **Rehearsal** – practice process before performance	• **Still image / Freeze frame** – a frozen moment to show meaning • **Thought-tracking** – speaking a character's thoughts aloud • **Hot seating** – answering questions in character • **Role play** – improvising in role • **Forum theatre** – audience suggests changes to improve outcomes • **Narration** – telling the story directly	• **Set** – scenery and staging • **Props** – objects used on stage • **Costume** – clothing worn by actors • **Lighting** – use of light to create mood/atmosphere • **Sound** – music or effects used in performance • **Stage directions** – instructions in a script
Week 4: Theatre Types & Styles	**Week 5: Audience & Purpose**	**Week 6: Evaluation & Coursework Language**
• **Naturalism** – realistic acting and believable characters • **Physical theatre** – storytelling through movement • **Epic theatre** – encourages audience to think (not just feel) • **Theatre in the round** – audience sits all around the stage • **Proscenium arch** – traditional "picture frame" stage	• **Audience** – who watches the performance • **Engagement** – how you keep the audience interested • **Intention** – what you want the audience to think/feel • **Atmosphere** – mood created in a performance	• **Analyse** – Explain how something works. • **Evaluate** – Judge strengths and weaknesses. • **Interpret** – Give your understanding of meaning. • **Justify** – Explain why you made a choice. • **Reflect** – Think about what went well and what to improve.

Week 7: Stage & Space	Week 8: Rehearsal & Development	Week 9: Structure & Meaning
• **Blocking** – Planned positioning and movement on stage. • **Levels** – Using height to show meaning or status. • **Proxemics** – Distance between performers. • **Spatial Awareness** – Understanding how to use the stage space. • **Entrances/Exits** – How performers come on/off stage.	• **Rehearsal** – Practice before performance. • **Refinement** – Improving performance work. • **Feedback** – Constructive comments for improvement. • **Collaboration** – Working effectively with others. • **Experimentation** – Trying different ideas.	• **Narrative** – The storyline. • **Structure** – How the piece is organised. • **Stimulus** – Starting point for a piece. • **Theme** – Main message or idea. • **Symbolism** – Using objects/actions to represent ideas.
Week 10: Places to revise	**Week 11: Revision**	**Week 12: Assessment Week: Careers**
Video-Based Learning • YouTube Search for: o *"BTEC Performing Arts Component 1/2/3 explained"* o Devising techniques o Evaluation examples • BBC Bitesize Good for: o Drama basics (skills, staging, terminology) o Easy-to-understand explanations	**Component 1: Exploring the Performing Arts** **What it is:** Study professional performances and styles. **Component 2: Developing Skills and Techniques** **What it is:** Build and improve your acting skills. **Component 3: Responding to a Brief** **What it is:** Create a performance from a set brief (exam).	There are many jobs or career areas related to Drama. Some of these are: • Actor • Dancer • Musical Theatre Performer • Director • Playwright • Choreographer • Lighting Designer • Sound Designer • Set Designer • Costume Designer • Stage Manager

English

Week 1- London	Week 2 – The Prelude	Week 3 - Exposure
London- BLAKE (1794) Ardent - very enthusiastic or passionate. Veiled Criticism - said so that the true meaning or purpose is hidden. Blake uses the poem 'London' as an ardent and thinly veiled criticism of those in power in Georgian London. Language 'I Wander thro' each charter'd street' 'Marks of weakness, marks of woe' 'The mind-forg'd manacles I hear' 'Every Black'ning church appals' Structure The rigid quatrain and rhyme scheme could evoke the rigid and corrupted power structures of London	The Prelude- WORDSWORTH (1839) Sublime - a greatness beyond all possibility of calculation. Intensely beautiful. Biographical – related to a particular person's life. Wordsworth's autobiographical poem reflects on the sublime beauty and awesome power of nature. Language 'One summer evening (led by her)' 'Small circles glittering idly in the moon' 'a huge peak, black and huge 'the grim shape Towered up between me and the stars' Structure Wordsworth's use of blank verse could evoke the sense of a heroic journey.	Exposure – OWEN (1917) Realistic - presenting things in a way that is accurate and true to life. Jaded - bored or lacking enthusiasm In 'Exposure', Owen's jaded tone 'exposes' the realistic effects of conflict on the human psyche. "Our brains ache in the merciless iced East winds that knive us" "But nothing happens"

Week 4 – Ozymandias	Week 5 – My Last Duchess	Week 6 – Storm on the Island
Ozymandias – SHELLEY (1818) Ephemeral - lasting for a very short time Extended Metaphor- using an entire poem as a metaphor for a bigger idea. A microcosm. In 'Ozymandias', Shelley uses the extended metaphor of a shattered statue to reveal the ephemeral nature of power. Language 'Half sunk a shattered visage lie 'My name is Ozymandias, King of Kings' 'Look on my Works, ye Mighty, and despair!' 'Nothing beside remains. Round the decay of that colossal wreck' Structure Shelley's use of a corrupted sonnet form could reflect the ephemeral nature of power and art.	My Last Duchess – BROWNING (1842) Megalomaniacal - an obsessive desire for power Naturalistic - closely imitating real life or nature based on the accurate depiction of detail. Browning's naturalistic presentation of the Duke in 'My Last Duchess' reveals the corrupting and megalomaniacal effects of power. Language 'That's my last Duchess painted on the wall/ Looking as if she were alive.' 'none puts by /The curtain I have drawn for you, but I' 'I gave commands; Then all smiles stopped together' Structure Browning's rigid iambic pentameter and rhyme scheme could evoke the narrator's total control.	Storm on the Island – HEANEY (1966) Normalised – when something happens so often it becomes normal. Desensitised- feeling less shocked due to overexposure to distressing events. In 'Storm on the Island', Heaney suggests that when a state of conflict is normalised, those exposed to it are ultimately desensitised to its effects. Language 'We are prepared: we build our houses squat' The Sea 'Exploding comfortably down on the cliffs...'spits like a tame cat Turned savage' 'Space is a salvo. /We are bombarded by the empty air' Strange, it is a huge nothing that we fear' Structure Enjambment could show the power and freedom of the wind. End Stop lines immediately after show how the storm eventually exhausts itself and loses power.

Week 7 – The Emigree	Week 8 - Remains	Week 9 – War Photographer
The Emigree- RUMENS (1993) Subjective - based on personal feelings, tastes, or opinions. Nostalgia - a sentimental longing for the past. In 'The Emigree' Rumens reflects on the subjective nature of memory and the power of the nostalgia it creates. Language 'There once was a country...i left it as a child' 'it may be sick with tyrants, but I am branded by an impression of sunlight' The white streets of that city, the graceful slopes glow even clearer as time rolls its tanks 'They accuse me of being dark in their city' Structure The rigid distinction between stanzas could reflect three different perspectives across time.	Remains – ARMITAGE (2006) Anecdotal - based on personal accounts rather than facts Expressionist - seeking to express the inner world of emotion rather than external reality. In 'Remains', Armitage's anecdotal tone provides an expressionist insight into of the effects of PTSD. Language 'probably armed, possibly not' 'I see every round as it rips through his life' 'The drink and the drugs won't flush him out' 'His bloody life in my bloody hands' Structure Enjambment between stanzas could reflect the distorting effects of PTSD on our perception and the idea that it is not possible to control the condition.	War Photographer – DUFFY (1985) Psychological- affecting, or arising in the mind Detached - separate or disconnected. In War Photographer, Duffy explores the psychological trauma of conflict and how it can lead us to become emotionally detached. Language 'In his dark room he is finally alone' 'spools of suffering set out in ordered rows' 'his hands, which did not tremble then, though they seem to now" 'A stranger's features faintly start to twist before his eyes, a half formed ghost.' Structure Duffy's rigid stanza structure and rhyme scheme contrasts with internal enjambment, possibly reflecting the Photographer's inner trauma.

Week 10 – Checking Out Me History	Week 11 – Tissue	Week 12 - Super Teach Week
Checking Out Me History – AGARD (2005) Eurocentric – a version of events that is centred on European perspectives. Trivialise - make (something) seem less important than it really is. In 'Checking out me History, Agard criticises Eurocentric presentations of history and their tendency to trivialise the achievements of black historical figures. Language 'Dem tell me wha dem want to tell me' 'Bandage up me eye with me own history' 'Blind me to my own identity' 'I checking out me own history...'I carving me identity' Structure The lack of punctuation,, irregular rhyme scheme and the use of Creole challenges Eurocentric conventions.	. Tissue – DHARKER (2006) Arbitrary – based on random choice Fractured- broken, cracked, unable to function. In 'Tissue', Dharker reflects on the arbitrary and fractured nature of human power. Language 'Paper that lets the light/ shine through, this/ is what could alter things' "Koran" "Maps" "Fine slips from grocery shops" 'Raise a structure never meant to last' 'paper smoothed and stroked and thinned to be transparent, turned into your skin.' Structure The contrast between rigid 4-line stanzas and enjambement between individual lines could symbolise the fluidity	

French

Week 1 Weather		Week 2 Imperfect		Week 3 Simple Future		Week 4 Perfect Tense		Week 5 Using Two Tenses	
le temps	weather	To say what was or used to happen, we use the imperfect tense. To form: Take the Nous form of the present tense, remove the -ons and add the imperfect endings.		To say what you will do you use the simple future. Pronoun + infinitive + simple future endings. Je -ai Tu -as Il -a Nous -ons Vous -ez Ils -ont		The perfect tense is used to describe a completed action in the past. It's formed with either *avoir* or *être* as the auxiliary verb. 1. Pronoun + 2. Auxiliary + 3. Past participle		pour	in order to
il fait	it is (weather)							sans	without
il y a	there is							quitter	to exit, leave
du vent	wind							reserver	to reserve
du soleil	sunshine							à l'étranger	abroad
du brouillard	fog	je faisais	I was doing					l'arrivée	the arrival
beau	nice	tu faisais	you were doing (s)	Je ferai	I will do	J'ai mangé	I ate	le depart	departure
mauvais	bad			J'aurai	I will have	Tu as fini	You finished	une île	an island
froid	cold	il faisait	he was doing	Il y aura	There will be	Il a entendu	He heard	le logement	accommodation
chaud	hot	nous faisions	we were doing	Je serai	I will be	Nous avons visité	We visited	le vol	flight
il pleut	it's raining			Ce sera	It will be			coûter	to cost
partir	to leave	vous faisiez	you were doing (pl)	J'irai	I will go	Vous avez voyagé	You travelled	se situer	to be located
ensemble	together			une année sabbatique	a gap year			près de	near to
								au bord de	Beside

préférable	preferable	ils faisaient	they were doing			Ils ont adoré	They loved	alors,donc	so
mangeable	edible			les habitants	the locals			c'était	It was
aimable	loveable	j'étais	I was	en Corse	in Corsica	Je suis allé	I went	les installations	facilities
désirable	desireable	j'avais	I used to have	dans le lac	in the lake	Nous sommes allés	We went		
pendant	during, for	il y avait	There was	dans un hôtel	in a hotel			les activités	activities
Enquiry Tasks—Complete in French									
Write a weather report for different Francophone countries.		Use the imperfect to talk about a past holiday		Write 50 words about your holiday plans for next year		Write a review of a tourist attraction you have visited		Create a revision map for the imperfect and perfect tense	

Week 6 Environment		Week 7 Saving the Planet		Week 8 Perfect with être		Week 9 Modal Verbs		Week 10 Revision
le réchauffement	Global warming	je voudrais	I would like	Verbs of movement use *être* as their auxiliary in the perfect tense. The past participle must agree with the subject.		Modal verbs will follow an infinitive. They are irregular.		Revise the vocabulary from this cycle ready for your assessment next week.
		j'aimerais	I would like			je dois	I must	
la véganisme	veganism	The conditional is used to say what would happen in the future. It is formed using the infinitive of the verb plus the conditional ending.						
protèger	to protect			je suis arrive(e)	I arrived	tu dois	you must	
éviter	to avoid					il doit	he must	
diminuer	to reduce	devenir	to become	tu es parti(e)	You left	nous devons	we must	
recycler	to recycle	couper	to cut			vous devez	you must (pl)	
essayer	to try	fabriquer	to make	il est descendu	he went down	ils doivent	they must	
jeter	to throw away	avoir lieu	to take place			Pouvoir and devoir follow a similar pattern		Week 11
		un moyen de vie	a way of life	nous sommes allé(e)s	We went			
augmenter	to increase					je peux	I can	Assessment Week
le recyclage	recycling	pour cent	percent	vous êtes sorti(e)s	You went out (pl)	tu peux	you can	Week 12
la planète	the planet	les droits	the rights			il peut	he can	Super Teach + Careers
la poubelle	dustbin	des produits ménagers	cleaning products	Ils sont restés	They stayed (m)	nous pouvons	we can	
des produits de saison	Seasonal products					vous pouvez	you can (pl)	In this cycle you have learnt about travel and the environment. Languages could offer careers in:
		les ressources	resources	l'espace	space	ils peuvent	they can	
écolo(gique)	green			un bain	a bath	vielle	old	

<table>
<tr><td rowspan="2">les transports verts</td><td rowspan="2">Green transport</td><td>un arbre</td><td>a tree</td><td>une pièce</td><td>a room</td><td>historique</td><td>historic, old</td><td rowspan="4">Cabin crew
Hotel manager
Environmental consultant
Sustainability practitioner</td></tr>
<tr><td>un souci</td><td>a concern</td><td>chez</td><td>at the home of</td><td>joli</td><td>pretty</td></tr>
<tr><td colspan="8">Enquiry tasks – complete in French</td></tr>
<tr><td colspan="2">Write about what you do protect the environment</td><td colspan="2">Write a paragraph to discuss pros and cons of veganism</td><td colspan="2">Describe a home you used to live in. Use the past tense.</td><td colspan="2">Review the vocabulary from weeks 6-9.</td></tr>
</table>

History

1. Women in Nazi Germany	2. Young people in Nazi Germany	3. Workers in Nazi Germany
-Women were expected to look natural, be well built, not smoke and to be mothers and housewives foremost. This was encouraged through: • Propaganda • Loans (Law for Encouragement of Marriage '33) • German Mother's Honour Cross • Lebensborn (donate a baby to the Fuhrer) • Sterilisation Law Women were encouraged to join the BDM (League of German Maidens) and to train as a housewife through the Reich Mother's Service. They were to follow Kinder, Kuche, Kirche & forced out of jobs like teaching, doctors, lawyers & politicians.	Nazi Teachers' League. Students had to study Eugenics which 'proved' that Germans were superior to Jews. 15% of the timetable was PE. Boys studied Maths & Science whereas girls studied cooking and Biology. Boys, outside of schools, were encouraged to join the Hitler Youth and membership was made compulsory in 1936 (although not strictly enforced). They were trained to be soldiers Girls could join the League of German Maidens (BDM) to prepare them for their future. They were trained to be housewives and mother	The Reich Labour Service was introduced from 1935 provided manual jobs. The Nazis reduced unemployment from over 6 million to about 35,000 BUT they didn't include 'invisible unemployment' They created huge projects like the constructing autobahns to give more people jobs. The Strength Through Joy (KdF) programme tried to improve leisure time of German workers. They subsidised concerts, theatre visits, museums, holidays and cruises. The Beauty of Labour scheme improved working conditions by building pools & canteens.
4. Racial beliefs in Nazi Germany	5. Elizabeth's problems	6. The religious settlement
In October 1936, Jewish teachers were forbidden from teaching. By 1938, all Jewish children had been expelled from schools. By 1935 he introduced the Nuremberg Laws. These took away citizenship from Jews meaning they had no protection from the State & also made relationships between Jews & Germans illegal. On 9th November 1938, the SS carried out Kristallnacht. They destroyed 7500 Jewish businesses, put 20,000 Jews in concentration camps, destroyed 191 synagogues and killed over 100 Jews. In 1939 the Reich Office for Jewish Emigration was established and Jews were encouraged to leave Germany by confiscating their goods, property and	<u>Financial weakness:</u> The Crown was £100,000 in debt <u>Legitimacy:</u> In the view of the Catholics, Elizabeth was illegitimate <u>Foreign threat:</u> England was isolated, surrounded by Catholic enemies in both France, Spain, and Scotland <u>Gender & marriage:</u> Most people thought women were not capable of ruling alone. <u>Mary Queen of Scots:</u> Claimed that she was the legitimate Catholic heir	Act of Supremacy – Elizabeth was Supreme Governor of the Church Act of Uniformity – New prayer book, churches look the same Puritans – Didn't like the decoration, use of crucifixes, vestments, Bishops Catholics – Pope excommunicated in 1571. 1/3 Nobles still practiced Catholicism Led to Catholic Plots

businesses & being forced onto ghettos in appalling conditions.	<u>Religion</u> England was in a period of religious instability since Henry VIII's break with Rome.	

7. Plots	8. Causes war with Spain	9. Spanish Armada
Revolt of Northern Earls - 1569 - The Catholic Earls of Northumberland and Westmoreland hatched a plan to get Mary, Queen of Scots on to the throne. They failed. 800 rebels executed Ridolfi Plot – 1571 - Roberto Ridolfi planned to assassinate Elizabeth and make Mary Queen. He had the support of King Philip II of Spain, the Duke of Norfolk, and Mary, Queen of Scots. Failed. Throckmorton Plot – 1583 - Francis Throckmorton, organised a plan for a French army to invade England and replace Elizabeth with Mary, Queen of Scots, paid for by the Pope and King Philip II of Spain. Babington Plot – 1586 - Sir Anthony Babington planned to rescue Mary, Queen of Scots from jail and murder Elizabeth. Secret letters discovered.	The Netherlands – England involved. Dutch were rebelling and England supported the rebels. 7,000 men sent to help the rebels Trade – England wanted to trade with the new world. Attacked Spanish fleets and stole from them. Elizabeth supported the privateers Religion – Spain was Catholic. England was Protestant Political power – Spain was worried that England was becoming too powerful Drake's raid of Cadiz – 1587 – Sir Francis Drake attacked Spanish navy and destroyed 30 ships. Disrupted preparations for the Spanish Armada	English ships - Spanish ships were slower and less equipped for the bad weather than the English ships. Leaders - The Duke of Medina Sidonia led the Spanish fleet, but he was inexperienced in naval battle and so made many errors Planning - The strength of the Spanish fleet came from its crescent formation plan – but the English broke this up with their fireships Weapons - The English ships had cannon they could fire at a safe distance and could be reloaded quickly. The design of the Spanish cannon meant that they could only fire over short distances and were slow to re-load Weather - The lack of a secure port where the Spanish could take shelter meant that the Spanish ships were buffeted by the wind.

10. Education and leisure	11. Poverty	12. Exploration
In Elizabethan England there was no compulsory schooling. Wealthier boys were better educated than ever before. Grammar schools Petty schools opened for the poor. Oxford and Cambridge Universities. Leisure for the rich: Tennis/fencing/hunting Leisure for the poor: Football/drinking/wrestling Leisure for both: Gambling/theatre/cockfighting	Reasons – Wool trade – fewer farms growing crops. Population increase by 1 million. Inflation. Bad harvests increase price of food. Use of enclosures to keep sheep Attitudes – difference between idle poor (lazy) and deserving poor (those who deserved help) National poor rate to tax people to help the poor. If they didn't pay they could be sent to prison. Vagabond Act punished the vagabonds. Could be whipped. Executed More understanding of reasons for poverty and help given. But harsher punishments for those who did not want help	Reasons – More trade. New ships (more comfortable and could hold more food). Challenge the Spanish. Navigational aids improved. Showed that England was becoming a strong naval power and damaged relations with Spain further. Virginia – why – Undermining Spain. Roots of the British Empire. Trade with the new world Virginia – failings – Supplies on Tiger ruined. Illness. Set off too late to plant crops so no more food. Not skillful people on board. First attempt so lots of mistakes made.

Health and Social Care

Week 1-2

Health and Wellbeing

Holistic– looking at the whole person rather than just the part that requires treatment or care.

The holistic definition of Health and Wellbeing is a combination of physical health, and social and emotional wellbeing, not purely the absence of disease or illness. This means:

- looking after your physical health through diet, living conditions, exercise and personal hygiene
- meeting and mixing with others in appropriate environments
- feeling loved, respected and secure

The choices we make directly impact our health and wellbeing and it is important that the advice given views supporting the person as a whole

Substance Misuse

Alcohol–whilst accepted in many cultures, it can become addictive and cause many illnesses and problems including liver failure and cancer.

Week 3-4

Life Events and Relationships

	Positive relationships	Negative relationships
P	Day to day care & practical assistance	Peer pressure/Poor lifestyle choices
I	Shared experiences, supported learning	Less support with learning, conversation
E	Unconditional love, security, contentment	Loneliness, insecurity, anxiety, depression,
S	Companionship, social interactions	Relationship difficulties

Types of support

Formal support – provided by trained professionals such as counsellors, Doctors, trained carers

Informal support- provided by family, friends partners

Voluntary support- Given by community groups, voluntary and faith based organisations

Ill Health and Genetics

Inherited characteristics - height, eye colour Inherited conditions-Some alleles (genes) can be faulty & pass on conditions

Week 5-6

Barriers to accessing services

Types of barriers and how they can be overcome by the service providers and users

1. Physical barriers: issues getting into and around the facilities
1. Sensory barriers: hearing and visual difficulties
2. Social, cultural and psychological barriers: lack of awareness, differing cultural beliefs, social stigma, fear of loss of independence
3. Language barriers: differing first language, language impairments
4. Geographical barriers: distance of provider, poor transport links
5. Intellectual barriers: learning difficulties
6. Resource barriers for service provider: staff shortages, lack of local funding, high local demand
7. Financial barriers: charging for services, cost of transport, loss of income

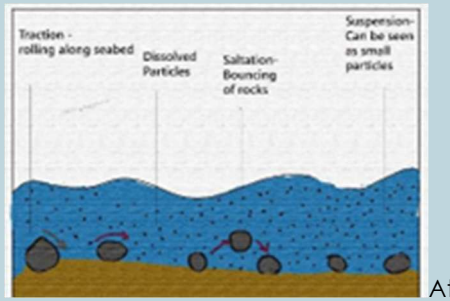
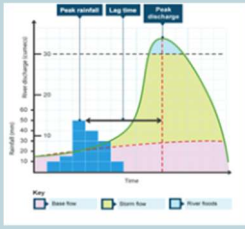
Enquiry Task:

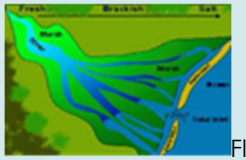
Smoking is legal but banned in public places in the UK. Nicotine, the drug in tobacco is highly addictive, Smoking can cause cancer, heart disease and other serious diseases. Drug misuse has profoundly damaging affects including loss of control and accidental death. a. Enquiry task: Research into the hazards of smoking and ways to encourage people to stop. Ensure you use SMART goals.	Dominant condition- One parent passes faulty allele on e.g. Huntington's Recessive condition- Both parents pass faulty allele on e.g. Cystic fibrosis Genetic predisposition - Some people are more likely to develop a condition due to genetic makeup Enquiry Task: What is Sickle Cell Anaemia?	Scenario: Amiya Dutta is 33 years old and a mum of 2 children aged 4 and 7. Amiya has recently moved to England from India and speaks very little English. She lives in a suburban flat and doesn't have a car. One of her children is unwell and requires medication but Amiya doesn't know what she should do. What barriers are preventing Amiya from seeking vital support? How could these be overcome?

Week 7-8	Week 9-10	Week 11
<u>Physiological Indicators</u> Health Practitioners use certain aspects of a person's health to assess health and wellbeing. Some can be measured using equipment, but others are harder to assess. Health monitoring means illness prevention. It helps to detect quickly any problems that may arise in order to resolve them efficiently. Healthcare professions will also monitor as part of their support plan. Observed indicators are how healthcare practitioners observe if a person is flushed, sweating, limping, behaving oddly etc. These help them	<u>Improving Health and Wellbeing</u> Part of the role of a health care worker is to recommend actions based on a person's physiological indicators. The aim for that person is to improve their health to meet the 'norms' for their life stage. A norm is something that is usual or standard. <u>Barriers and Obstacles</u> Barriers are something unique to the health and social care system that prevents an individual accessing the services they need. Physical Barriers include access to a building but also	<u>Revision</u> For homework this week, review key topics from this term. • Use look, cover, write, check • Make flashcards—this will be useful for coursework • Review key phrases and terminology

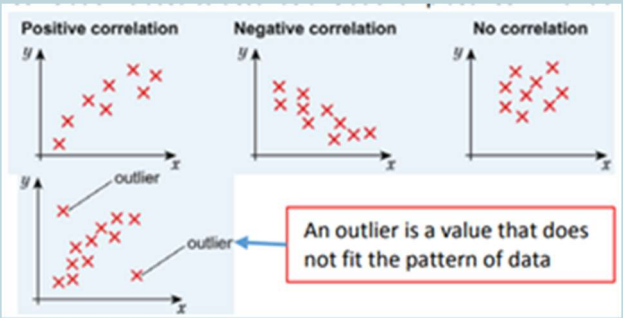
to make a clearer picture of how the patient is affected. Blood pressure is measured with a sphygmomanometer or blood pressure cuff. This important indicator can help to diagnose a wide range of illnesses with both high and low blood pressure being potentially fatal. Body mass index is the measure of body fat. It can be calculated using a BMI calculator or this formula: $BMI = \frac{\text{weight (kg)}}{\text{height (m}^2\text{)}}$ Enquiry Task: Create a leaflet on 'Blood Pressure made Simple'	Sensory Barriers include individuals with visual or hearing impairments. Social and Cultural Barriers include gender, diet, religion and age. Language Barriers are people who speak British Sign Language, have a speech impairment or English as an additional language. Geographical Barriers including transport and location. Resource Barriers including supply shortages. Financial Barriers including costs of visits. Obstacles are similar to barriers except personal to the individual. In addition to the above they can also include lack of motivation, time constraints and others. Enquiry Task: How can lack of support be a barrier to accessing care?	Week 12 - Super Teach Week (Careers) In this cycle you have looked at Health and Well-being. There are many jobs or career areas related this area of Health and Social Care. Some of these are: • Therapist • Occupation Health • Physiotherapist • Social Worker • Optician Research other possible jobs, thinking about career pathways and salary.

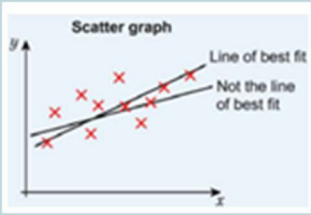
Geography

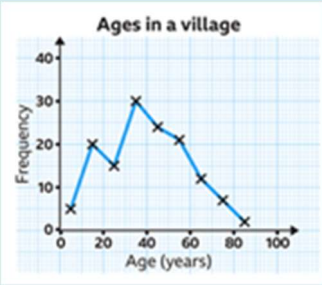
Week 1 – What are the types of erosion?	Week 2 – Key terms	Week 3 – Flooding
There are four types of erosion 1. Hydraulic action: When water hits the river bank, air is compressed into cracks leading to small explosions. 2. Abrasion: Bits of rock are thrown at the river bed and banks, wearing it away like sandpaper. 3.  Attrition: Water smash rocks and pebbles into each other so they become smaller and more rounded. 4. Solution: Acids contained in river water will dissolve some types of rock such as chalk or limestone. There are four types of transportation (shown in the diagram).	1. Interception: Rainfall that does not reach the ground that is prevented by vegetation e.g. trees 2. Transpiration: Plants releasing water vapour into the air 3. Infiltration: The movement of water into the soil 4. Surface run-off: The flow of water over the ground 5. Throughflow: The downhill flow of water through the soil	Flooding A hydrograph tells us how a river's discharge (how much water there is) rises and then falls after a rainfall event. The lag time is the time between the peak rainfall and peak discharge of a river. Factors which create a longer lag time: Vegetation – help to reduce flood risk by increasing the time it takes for water to reach a river by encouraging infiltration, intercepting and absorption Gradient – Drainage basin with a less steep gradient allows more time for infiltration to occur Factors which create a shorter lag time: Impermeable man-made surfaces such as concrete, speed up surface run off. Vegetation - Areas cleared by deforestation will respond quickly to rainfall due to the reduced interception. 

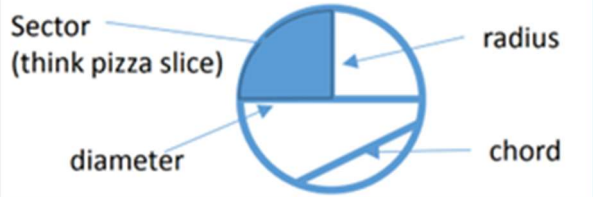
Week 4 – Landforms in the upper course	Week 5 – Landforms in the middle and lower course	Week 6 – Consequences of flooding
V-shaped valleys Rivers start in upland areas and flow quickly. They erode downwards. As they erode downwards the sides of the valleys are exposed to freeze-thaw weathering which loosens the rocks and steepens the sides. Loose material enters the river and further erodes by abrasion. Waterfalls and gorges 1. The river flows over bands of less resistant (softer) and resistant (harder) rocks. 2. The less resistant rock is more quickly worn away due to differential erosion. 3. The river undercuts the harder rock leaving an overhang which becomes unsupported and collapses into the plunge pool below. The waterfall is moved upstream, the process continues and a steep-sided gorge is cut back into the hillside.	Meanders 1.The river starts eroding sideways into its BANK rather than downwards into its bed 2.When rivers flow over flatter land they develop large bends called MEANDERS. 3.As a river goes around a bend most of the water is pushed towards the OUTSIDE causing increased EROSION (through hydraulic action and abrasion). And deposition occurs on the inside.  Floodplains 1. When a river bursts its banks, the land will be covered up – this is known as the floodplain. 2. The water spreads out and this results in an increase in friction, a decrease in velocity (speed) and suspended material is deposited. 3. The river's load is composed of different sized particles. When a river floods it deposits the heaviest of these particles first. Estuaries: are formed by deposition when the sea level rose at a rapid rate which flooded river valleys. They then became traps for sediments such as mud, sand and gravel leading to more deposition.	In 2015 Carlisle in Cumbria suffered from significant flooding. Social (+ and -) Properties flooded Loss of life Since the flood defence system has been improved. Economic (+ and -) Businesses destroyed, e.g. the McVities factory closed for 3 months Visitor centre destroyed Cost £50 million in damages Increase in tourism following the event Different groups of people who are affected: Tourism Local residents Water companies Environmental companies

Maths - Foundation

<table>
<tr><td>Week 1 -</td><td>Week 2 -</td><td>Week 3</td></tr>
<tr><td>
MEAN
$\frac{\text{Sum of all values}}{\text{Number of values}}$
MODE
Most Common
MEDIAN
Middle value when numbers are placed in order
RANGE
Largest value – smallest value
</td><td>
A scatter graph allows you to see the relationship between 2 sets of data.


</td><td>
A line of best fit can be used to predict data values within the range of data given.
This is called interpolation
It can also be used to predict data values outside the range of data given.
This is called extrapolation.


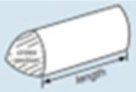
</td></tr>
<tr><td>Week 4</td><td>Week 5</td><td>Week 6</td></tr>
<tr><td>
When plotting a frequency polygon, plot the mid point against the frequency and join points using a ruler


</td><td>
Circle terminology
Circumference = perimeter of a circle (units)
Area = space inside a 2D shape (units^2)
Volume = the space inside a 3D shape (units^3)


</td><td>
<table>
<tr><th colspan="2">Circle</th></tr>
<tr><td>Circumference</td><td>$\pi \times diameter$</td></tr>
<tr><td>Area</td><td>$\pi \times radius^2$</td></tr>
</table>
</td></tr>
</table>

Week 7

Volumes

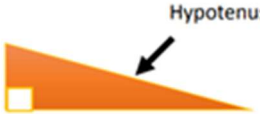
Cuboid	$l \times w \times h$	
Prism	$cross-section \times l$	
Cylinder	$\pi r^2 \times h$	

Week 8

Pythagoras Theorem $a^2 + b^2 = c^2$

*Pythagoras is used to find missing sides in **Right-angled triangles***

Key Facts



HYPOTENUSE

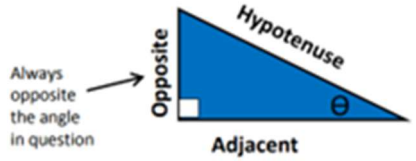
This is the longest side in a right-angled triangle and is **ALWAYS** opposite the right angle

Week 9

Trigonometry

Used to find missing sides and angles in right-angled triangles

You must label your sides correctly

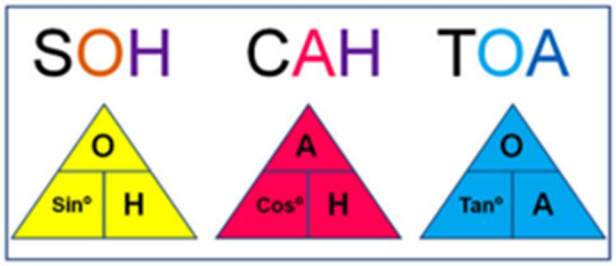


Week 10

SOH – CAH – TOA Pyramids

Cover the letter which is the unknown value, and then Multiply for horizontal relationships and Divide for vertical relationships

Week 11



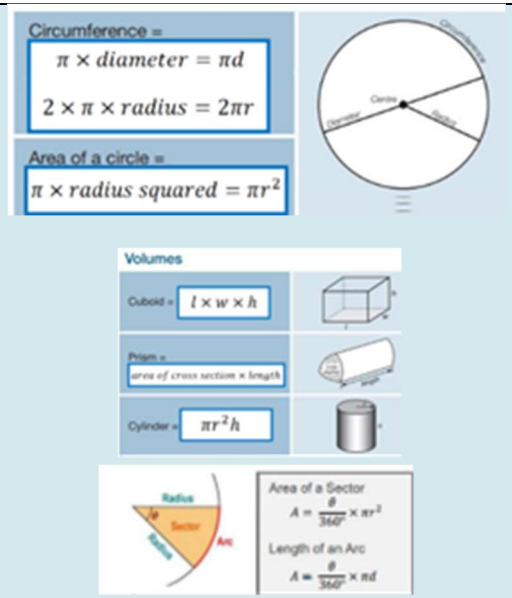
Week 12 - Super Teach Week (Careers)

Careers that use mathematics:

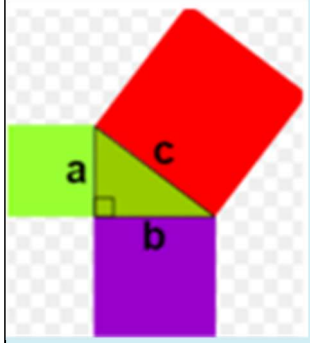
1. **A Data Analyst analyzes data to identify trends, make predictions and help businesses make data-driven decisions**
2. **An Architect uses mathematics to design functional and beautiful buildings**
3. **Cryptographers develop algorithms and security systems to encrypt sensitive information. They play a crucial role in cybersecurity, protecting data from unauthorized access and cyber threats**

Maths – Higher

Week 1	Week 2	Week 3
To calculate averages from a frequency table, you need to consider the frequencies of each data point or class interval. The mean is calculated by adding the product of each data point and its frequency, then dividing by the total frequency. The median is the middle value, and for grouped data, you'll need to find the interval containing the middle value. The mode is the data point with the highest frequency.  10 10 10 10 11 11 11 11 11 11 12 12 12 13 13 Age | Frequency | Age × Frequency 10 | × 4 | = 40 11 | × 6 | = 66 12 | × 3 | = 36 13 | × 2 | = 26 15 | 168	To calculate an estimate for the mean from a grouped frequency table: Set up a new column to write the midpoint of each class. Set up another column to multiply each midpoint by its frequency. Find the sum of the multiplications. This finds the estimated total of all the values in the frequency table. Add the frequencies to find how many values there are. Divide the total of all the values by how many values there are. To find the class that contains the median, identify the class that contains the middle value. For a set of data with values, the middle value is the (n+1)/2 th value. To find the modal class, identify the class with the highest frequency.	A histogram looks like a bar chart, except the area of the bar, and not the height, shows the frequency of the data. Histograms are typically used when the data is in groups of unequal width. The table shows the ages of 25 children on a school trip.  Age | Frequency | Class width | Frequency density 5-10 | 6 | 6 (5, 6, 7, 8, 9 and 10 are in this category) | 6 ÷ 6 = 1 11-15 | 15 | 5 | 15 ÷ 5 = 3 16-17 | 4 | 2 | 4 ÷ 2 = 2

Week 4	Week 5	Week 6
Capture recapture is a sampling technique used to estimate population size. To do this we need to set up a controlled investigation where the objects (usually animal populations) are captured, marked, released, and then recaptured after a period of time. The proportion of the marked members in the second sample can give an estimate to the population size. The formula is: $\frac{\text{Number found in 1st sample} \times \text{Number found in 2nd sample}}{\text{Number found in 2nd sample which were already marked}}$ There are several assumptions that have to be made when using the capture recapture methodology and study design, such as no population changes and opportunities for the group tagged to mix with the rest of the population.		Volume of a Sphere = $V = \frac{4}{3}\pi r^3$ Volume of a Pyramid $= \frac{1}{3} \times$ area of base $\times$ perpendicular height Volume of a Cone = $V = \frac{1}{3}\pi r^2 h$ Surface area of a Sphere = $4 \times \pi \times r^2$ Curved surface area of a cone = $\pi \times r \times l$ A frustum is simply a BIG cone minus a little cone. Frustum = BIG CONE – little cone

Week 7



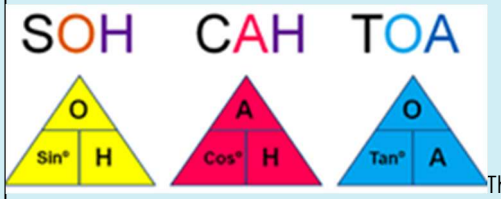
Pythagoras' Theorem: $a^2 + b^2 = c^2$

To find hypotenuse:
Square side a
Square side b
Add together
Square root

To find shorter side:
Square side c
Square side a or b
Subtract a or b from c
Square root

Week 8

In a right-angled triangle the side opposite the right is called the hypotenuse. This is the longest side.
le opposite the angle is called the opposite.



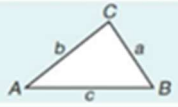
The side next to the angle is called the adjacent.

Week 9

Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

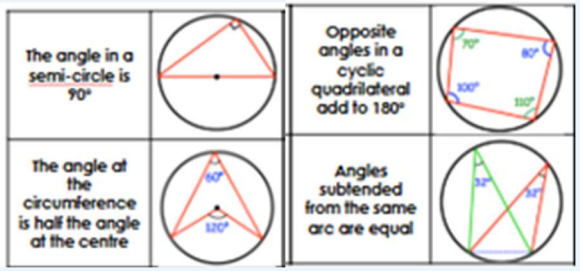
Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle $= \frac{1}{2}ab \sin C$

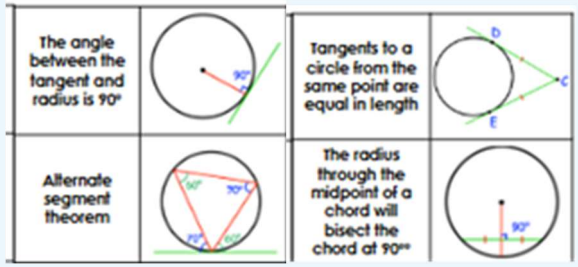


x	0°	30°	45°	60°	90°
$sinx$	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
$cosx$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
$tanx$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	Undefined (asymptote)

Week 10



Week 11



Week 12 - Super Teach Week (Careers)

In this cycle you have looked at Trigonometry, 3D
s, and Circle Theorems. These topics involve
tanding angles, dimensions, and the properties of
. There are many jobs or career areas related to
matics. Some of these are:

- Data Analyst
- Engineer
- Architect
- Statistician
- https://www.careerpilot.org.uk/job-sectors/search?q=mathematics+
- Actuary

Music

Week 1: Types of Venue	Week 2: Unions and Trade Bodies	Week 3: Service companies and agencies
Small and medium local venues • Pub • School stage • Small theatre Large multi-use spaces • Sports' arena • West end theatre • Outdoor festival	• MU (Musicians' Union) • Equity • BECTU (Broadcast Entertainment Cinematograph TheatreUnion) • MPG (Music Producers Guild) • APRS (Association of Professional Recording Services) • PLASA (Professional Lighting and Sound	PRS (Performing Rights Society) • Licenses the composer's copyright for public performances of your songs (broadcast, live, recorded). MCPS (Mechanical Copyright Protection Society • Licenses the composer's copyright (royalties) for sound recordings (i.e. CD, ringtone). It will be in physical format (i.e. digital). PPL Licensing (Phonographic Performance Limited • Licenses the right to perform sound recordings and collects royalties for record companies and performers on recordings.
Week 4: Marketing and distribution	**Week 5: Promoters**	**Week 6: Promoting practice**
Marketing • The action of promoting and selling a product Distribution • The movement of goods (CDs) from the source (record label) through a distribution channel (iTunes, HMV) right up to the customer	*Activity that supports (marketing and promotion) and encourages (publicity) a product for public awareness (i.e. live events).* • *Secure a venue for a show* • *Promote the show (media, posters)* • *Work with the artist to make sure all needs are covered (PA, effects)* • *Cover the venue costs and costs of promotion (taking a percentage)* • *Earn an agreed-to fee or royalties*	*Promotion is a part of marketing. Music is promoted using a variety of techniques and tools that constantly change and develop into newer and fresher ideas. Musicians have to consider what strategies are used in the music industry at the moment and why some promotional strategies work whilst others fail.*

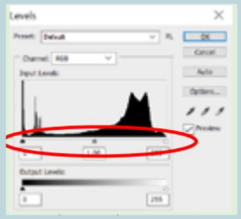
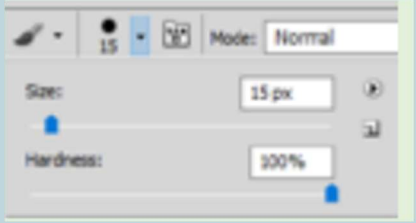
Week 7: Types of microphones	Week 8: Copyright law	Week 9: Types of Leads
Condenser • Very sensitive – breaks easily • Used for acoustic instruments and recording vocals  Dynamic • Very robust – hard to break • Use mainly for stage and live performances 	The law gives the creators of literary, dramatic, musical, artistic works, sound recordings, broadcasts, films and typographical arrangement of published editions, rights to control the ways in which their material may be used. In order for musiciansto legally cover songs for their own benefit, they first need to obtain a license.	XLR • Used primarily for microphones  Jack lead • Used primarily for instruments 
Week 10: Types of effects:	Week 11: Health, safety and security at venues	Week 12: Careers
• Compression – regulates the loudness of the track • Reverb – recreates sound echo of different room sizes • EQ – filtering the frequency range of the track	• Heating, lighting and ventilation • Electrical equipment • Toilets and drinking water • First aid and emergency exits • Obstacles appropriately lit/indicated • Adequate parking and parking arrangements • Flow of people in and out of venue • Secure ramps/stage scaffolding	There are many jobs or career areas related to Music . Some of these are: • Musician / Performer • DJ / Electronic Artist • Music Producer • Sound Engineer • Live Sound Technician • Studio Technician • Film/TV Composer • Game Audio Designer • Podcast Producer • Music Video Editor / Director • Instrument Tutor • Music Promoter

PE (GCSE)

Week 1 – Skills and Ability	Week 2 – Goal Setting	Week 3 – Information Processing Model
Skill is "A learned action/behaviour with the intention of bringing about predetermined results, with maximum certainty and minimum outlay of time and energy" Ability is "Inherited, traits that determine an individual's potential to learn or acquire a skill" Skills are classified into 4 different continua: 1. Basic and Complex 2. Self-Paced and Externally Paced 3. Open and Closed 4. Fine and Gross	There are two types of Goals: 1. Outcome Goals focus on end result/winning. i.e. Winning a fencing competition 2. Performance Goals focus on personal standards to be achieved. Performers are concerned with previous personal bests with no comparison to others. i.e. To make more tackles this game than last game. When setting goals we use the SMART process: Specific – Measurable – Accepted Realistic – Time Bound	Input: - Performer takes in information from the environment/ display (senses – sight, hearing or feel). Decision Marking - An appropriate response is chosen (movement/skill) from memory. Perhaps one they have used in this situation before. Output: - The decision chosen is sent to the appropriate muscles to carry out the movement. The action is performed with reference to the movement pattern stored in long term memory. Feedback. Information is received by the performer via Intrinsic and Extrinsic factors.
Week 4 – Guidance	Week 4 – Guidance	Week 6 – Arousal Theory
Visual guidance is what you can see. E.g. a demonstration, video or photo. An image tends to last for longer than any other form of guidance – develops a mental image. Verbal guidance is provided by another person speaking to you. This could be your coach/teacher talking to highlight technique Manual guidance is the physical moving of the performer. E.g. coach supporting the movement through physical touch. Mechanical guidance is using mechanical aids to assist a performer. E.g. using a float in swimming or a harness in trampolining.	Visual guidance is what you can see. E.g. a demonstration, video or photo. An image tends to last for longer than any other form of guidance – develops a mental image. Verbal guidance is provided by another person speaking to you. This could be your coach/teacher talking to highlight technique Manual guidance is the physical moving of the performer. E.g. coach supporting the movement through physical touch. Mechanical guidance is using mechanical aids to assist a performer. E.g. using a float in swimming or a harness in trampolining.	Arousal: Is a physical and mental (physiological and psychological) state of alertness/readiness, varying from deep sleep to intense excitement/alertness. The 'inverted-U theory' Optimal performance occurs when a performer reaches an optimal level of arousal. Techniques to change Arousal Levels: 1. Deep Breathing 2. Positive Self Talk 3. Visualisation 4. Mental Rehearsal

Week 7 – Aggression	Week 8 – Personality	Week 9 – Motivation
Sport often requires a degree of aggression to succeed. Aggression can be a negative, although as long as it is controlled, it can also become a positive. There are two types of aggression. Direct Aggression An aggressive act that involves physical contact with another person/player. Eg. Rugby, Boxing Indirect Aggression An aggressive act that does not involve direct physical contact with the player – instead it is taken out on an object such as a ball in tennis	Introverts Introverts are usually shy. They perform better at lower arousal levels. Too much stimulation will cause them to be over-aroused and they will not perform well. Introverts usually prefer individual rather than team sports. (For example, archery, golf and snooker). Extroverts Extroverts are socially outgoing. They need high arousal levels to perform. Coaches and team mates need to keep them 'excited' about performing. They prefer team games with open skills and lots of unpredictability. For example, rugby and boxing	Motivation is thought to be a combination of the drive within us to achieve our aims and the outside factors, which affect it. Intrinsic (Internal) Is from within ourselves – having a sense of pride about completing a task and gaining a sense of personal achievement Extrinsic (External) Is for another source/person. To gain something externally External rewards are split into two categories: Tangible: Certificates/Medals/Money Intangible: Praise/Feedback/Applause
Week 10 – Social Groups	Week 11 – Conduct of Performers	Week 12 - Super Teach Week (Careers)
There are 5 user groups of people who participate in sport. Each groups has their own factors that affect their participation in sport. 1. Gender 2. Disability 3. Age 4. Friends/Family/Peers 5. Race/Religion/Culture There are many factors that can affect the rates of participation for each group including: • Attitudes • Stereotypes • Accessibility	Etiquette: unwritten rule in an activity (not enforceable but observed), respect, honor and courtesy for opponents and game. Sportsmanship: conforming to the rules, spirit and etiquette of a sport. Gamesmanship: attempting to gain an advantage by stretching the rules to their limit. Contract to compete: an unwritten agreement between opponents to follow and abide by the written and unwritten rules of the sport.	Throughout this cycle you have looked at Health and Fitness. Careers in sport from this cycle: • Nutritionist • Physiotherapist • Sports Doctor • Sports Massage • Health improvement practitioner

Photography

Week 1	Week 2	Week 3 -
Levels (CTRL + L) **Levels** adjust the exposure of your photograph using the black/grey/white arrows under the histogram. The histogram tells you where the majority of your light falls, from mostly shadow on the left to highlights on the right. 	**Hue/ Saturation (CTRL + U)** To adjust the colours in your photograph/selection. **Hue** is the colour in your image. **Saturation** is the intensity, or richness of that colour/hue. **Lightness** controls the brightness value, but to a poor effect- use levels instead to control light. 	**Brush settings (under file/edit)** **Size** is the diameter of the brush (this can also be changed using the square brackets). **Hardness** controls the finish of the brush. A harder brush will have clear, sharp edges, whereas a softer brush will have blurred and less defined edges 
Week 4	**Week 5 -**	**Week 6 -**
Shortcuts **CTRL+T** – Transform Tool- use to resize elements. **CTRL+D** – Deselects your selection **CTRL+ / CTRL –** zoom in / out **[/]** (square brackets when using a brush based tool) will make your brush size smaller / bigger	**Shortcuts** **CTRL+C** – copy a selected area **CTRL+V** – paste a copied area **Shift** (when using a brush based tool) – hold down shift to connect brush strokes to form a straight line **Space** – hold space to pan around your screen	**Key words** **Exposure**: How light or dark an image is. Can be described when too much or too little light is in your photo **Highlight/ shadow**: Light and shadow in your photo can be created and controlled with artificial light (lamps or flash) or natural light (sun) **Contrast**: the difference between the darkest and lightest area in your photograph (high contrast = strong colours- punchy, Low contrast = grey/foggy) **Focal Point**: The part of the photograph that the eye is immediately drawn to **Composition**: To arrangement of the subject matter and how they relate to one another within the photograph

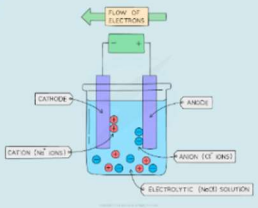
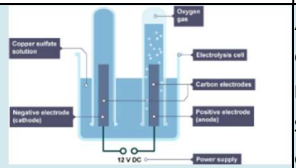
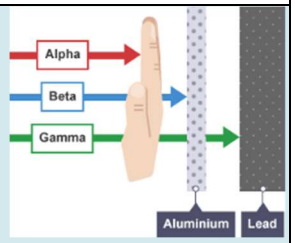
Week 7 -	Week 8 -	Week 9 -
Key Words **Portraiture**: a photograph of a person or group of people that captures the personality of the subject by using effective lighting, backdrops, and poses **Landscape**: shows spaces within the world. Landscape photographs typically capture nature but can also focus on the man-made features of the land **Still Life:** focuses on inanimate objects; manmade (clothing, technology...) and natural (food, shells…) Flay lay photography is a modern take on still life **Close up:** a photograph that shows a lot of detail because it is taken very near to the subject. **Macro** is where small items are photographed larger than life	**Tom Hussey** is an American photographer specialising in commercial advertising and lifestyle photography. 'Reflections of the Past' was used by a healthcare company in a marketing campaign for the treatment of Alzheimer's disease. The work features elderly models staring at reflections of their former selves 	**Slinkachu** is a London-based street installation and photographic artist. His work involves remodelling and painting of miniature model train set characters, which are then placed on the street. The titles given aim to reflect the loneliness and melancholy of living in a big city but along side this there is always some humour in the work. 
Week 10 -	**Week 11 -**	**Week 12 - Evaulations**
Zev Hoover (born 1999), from Natick, Massachusetts. Hoover creates work about a 'miniature world'. In his fantastical photos people (usually himself) are digitally shrunken. The process involves capturing the background image first, shrinking photos of people in similar lighting, manipulating the images in Photoshop and editing the colour scheme so that it all matches 	**Sandy Skoglund** is an American photographer and installation artist. Skoglund creates surrealist images by building elaborate sets, furnishing them with carefully selected coloured furniture and other objects. The works are characterized by an overwhelming amount of one object and either bright, contrasting colours or a monochromatic colour scheme. 	**Evaluating work** How did you take your photograph? How did you set up your shot/ control your background/ lighting? Why? Technical comments- depth of field? Rule of thirds? What can you tell me? How did you edit your photograph? Why? How does your work link to the photographer / theme? What are your opinions of your work? Is your end result successful? Why? How could you improve your work? Bonus do this! Did you enjoy your shoot? Why?

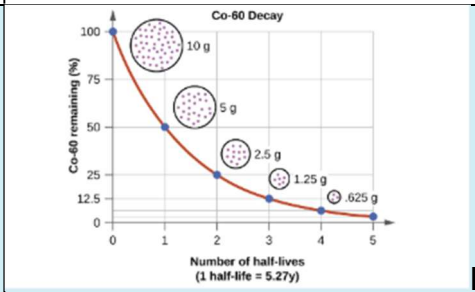
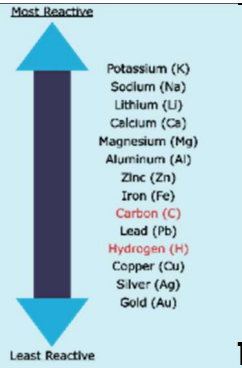
Religious Education

Week 1 - Origins of the World (Theme B)	Week 2 - Humans / Value of the World (Theme B)	Week 3 - The Environment (Theme B)
- The big bang suggests that there was a massive expansion of space that set the universe in motion. - Christians use the creation story in Genesis to explain the origin of the universe. - Some Christians are literal and take the creation story as word for word true. Liberal Christians suggest it is more symbolic and metaphorical. - Christians believe the earth is a gift from God. - Buddhism sees the universe as being cyclical, with no creator. Each universe is followed by another, there is no beginning or end to the process. - Buddhists value the world as it provides and sustains life.	- Most Christians believe that God made man and woman together, on day 6 of creation. This suggests equality. - Some Christians suggest man was made first and then woman was made afterwards, as an 'afterthought'. - Some Christians believe that we evolved, as science explains. However, God allowed this evolution of humans to take place. - Buddhists don't say much about creation, as their focus is on suffering and ending it. However, they generally accept the Buddhist concept of creation.	- Most Christians believe God gave humans the responsibility to care for the world and protect the environment. This idea is known as stewardship. - *'Rule over the fish of the sea, birds of the air…'*. Some Christians use this to suggest they have dominion over the environment. - Buddhist teachings such as dependent arising and the five moral precepts encourage Buddhists to protect the environment. - Buddhists suggest we need to protect the environment for future generations. - The overuse of natural resources is a problem in the world today.
Week 4 - Animal Rights (Theme B)	**Week 5 - Abortion / Euthanasia (Theme B)**	**Week 6 - Death & Afterlife**
- Many Christians believe that animals should be treated kindly, but humans are more important *'rule over the fish of the sea…'* / *'humans are made in God's image'*. - Some Christians believe that humans were created by God for humans to use and care for. - Some Christians say testing is ok if it is necessary. - Buddhists believe that it is important to treat animals with loving kindness (metta) and compassion (karuna). - Many Buddhists are vegetarians or vegans. - Buddhists are against animal experimentation, but it might be ok if it saves a human life.	- Abortion is legal in the UK. - An abortion is the ending of a pregnancy / ending the life of a fetus. - Abortions can take place up to 24 weeks in England. - Euthansaia is the legal ending of a life. - Christians and Buddhists generally oppose abortion and euthanasia, although some agree with it in certain situations. - 'Thou shall not kill' is a Christian teaching. - 'Do not harm' is a Buddhist teaching.	- Christians and Buddhists both believe death is not the end. - Many Christians believe that after death they are judged by God and spend eternity in heaven or hell. - Many Buddhists believe that after death they are reborn. Rebirths continue until they reach enlightenment and escape the cycle of samsara.

Week 7 - Current Wars (Theme D)	Week 8 - Violence & Terrorism (Theme D)	Week 9 - WMD (Theme D)
- War is a state of armed conflict between different countries or different groups within a country. - Wars can take place for a variety of different reasons, such as resources, retaliation, greed etc. - There are lots of wars that have taken place in the past such as WW1 and WW2. - At present there is a war / conflict between Russia and Ukraine. - There has been religious conflict between Catholics and Protestants in Ireland.	- In the UK the right to protest is a freedom, but it is illegal to protest violently. - Terrorism is the unlawful use of violence, usually against civilians, to achieve a political gain. - Christianity and Buddhism are against violent protest and terrorism. - In the 1950s and 60s MLK organised peaceful protests against unjust racial laws in the USA. - In the 1990s the Cambodian Buddhist monk Ghosananda led peaceful marches in protest at a repressive Vietnamese government. His aim was to encourage reconciliation and peace after years of civil conflict.	- Nuclear weapons are weapons that work by nuclear reaction. They devastate huge areas and kill large numbers of people. - Other types of WMD include chemical and biological weapons. - US forces used atom bombs in the Japanese cities of Hiroshima and Nagasaki during WW2. In response Japan surrendered. - Christians believe only God has the right to take life, although stockpiling WMD may be okay to prevent an attack. - Buddhists believe they cause mass suffering and peace should be the only option.
Week 10 - Peacemaking (Theme D)	**Week 11 - Victims of War (Theme D)**	**Week 12 - Super Teach Week**
- Pacifism is the belief of people who refuse to take part in war and any other forms of violence. - Many Christians are not pacifist because they believe that war is sometimes necessary in self defence. - Buddhists are pacifist and believe that war is never justified. - Peacemaking is the action of trying to establish peace and a peacemaker is someone who wants to establish peace in the world or a certain part of it. - Christians believe 'blessed are the peacemakers, for they shall be called children of God'. - Buddhists think that we should not 'harm'.	- Victims of war may include those directly involved in the fighting, their families and dependents, and refugees whose homes and societies have been destroyed. - There are many organisations that offer help and care for victims of war (such as Caritas and the Tzu Chi Foundation). - Christians support such organsations because Jesus taught people to 'love your neighbour'. - The Good Samaritan teaches that we should love others. - Buddhists support these orgainsations as they believe all suffering should be stopped.	In this cycle you have looked at Theme B and Theme D. This has included looking at the creation of the world, abortion, euthanasia, war, peace and conflict. There are many jobs or career areas related to Christianity and Buddhism. Some of these are: • Social influencer • Chaplin • Marketing • Newspaper Journalist https://www.careerpilot.org.uk/job-sectors/search?q=journalist+ • Human Resources

Science

Week 1 – Key vocabulary	Week 2 – Health and disease	Week 3 – Pathogens and immunity
Activation energy: minimum energy needed for particles to react. Antibody: protein made by white blood cells to bind to antigens. Antigen: molecule on a pathogen that triggers an immune response. Communicable disease: infectious disease that can spread between organisms. Decay equation: shows changes in atomic and mass number during radioactive decay. Displacement reaction: more reactive metal replaces a less reactive one. Electrolysis: breakdown of an ionic compound using electricity. Equilibrium: state where forward and backward reaction rates are equal.	Health is a state of physical and mental wellbeing. Disease is a departure from good health and can be communicable or non-communicable. Non-communicable diseases are not infectious and are often linked to risk factors such as smoking, alcohol, obesity, lack of exercise and poor diet. These risk factors can damage body systems over time. Coronary heart disease (CHD) occurs when fatty material builds up in the coronary arteries, narrowing them and reducing the supply of oxygen to heart muscle. This can lead to chest pain or heart attacks. Treatments include lifestyle changes, medicines to reduce blood pressure or cholesterol, and stents to keep arteries open.	Pathogens are microorganisms that cause disease, including bacteria, viruses, fungi and protists. They spread by air, water, direct contact and vectors e.g. insects. Bacteria release toxins and reproduce rapidly, while viruses reproduce inside host cells and damage them. The body has non-specific defences like skin, mucus and stomach acid. White blood cells defend by: • phagocytosis (engulfing pathogens) • producing antibodies to bind to antigens • producing antitoxins to neutralise toxins Vaccination introduces antigens safely so memory cells are produced. Antibiotics kill bacteria but do not work against viruses. Overuse can lead to antibiotic-resistant strains.
Week 4 – Electrolysis principles	**Week 5 – Electrolysis core practical**	**Week 6 – Atomic structure and radiation**
Electrolysis breaks down ionic compounds using electricity and requires mobile ions in molten or aqueous solutions. Reduction occurs at the cathode where positive ions gain electrons, and oxidation occurs at the anode where negative ions lose electrons. The products depend on the ions present and their relative reactivity. 	$Cu^{2+}(aq) + 2e^- \rightarrow Cu(s)$ In the electrolysis of copper sulfate, copper metal is produced at the cathode. With inert electrodes, oxygen forms at the anode; with copper electrodes, copper dissolves from the anode. Half-equations show electron transfer and help explain observations. Correct electrode labels and safety points are key exam marks. 	Atoms contain protons and neutrons in the nucleus and electrons in shells. Isotopes are atoms of the same element with different numbers of neutrons. Ionising radiation includes alpha, beta and gamma radiation, which differ in penetration and ionising ability. Exposure risk depends on radiation type, time and distance. 

Week 7 – Key vocabulary	Week 8 – Radioactive decay and half-life	Week 9 – Reactivity and extraction
Half-life: time for activity or count rate to halve. **Ionising radiation: radiation that removes electrons from atoms.** **Non-communicable disease: disease not passed between people.** **Oxidation: loss of electrons.** **Pathogen: microorganism that causes disease.** **Reactivity series: order of metals by reactivity.** **Reduction: gain of electrons.** **Reversible reaction: reaction that can go forwards and backwards.** **Risk factor: factor that increases likelihood of disease.** **Vaccination: exposure to antigens to provide immunity.**	 **Radioactive decay is random, so the decay of individual nuclei cannot be predicted. Half-life is the time taken for activity or count rate to halve and can be determined from graphs or repeated halving. Alpha, beta and gamma decay affect atomic and mass numbers differently. Safety explanations should include shielding and distance.**	 **The reactivity series orders metals by how easily they form positive ions. Metals below carbon can be extracted by reduction with carbon, while more reactive metals require electrolysis. Displacement reactions show relative reactivity. Extraction methods depend on reactivity, energy cost and environmental impact.**
Week 10 – Redox and LCA	**Week 11 – Equilibrium and Haber process**	**Week 12 – Science Careers**

$Mg(s) \rightarrow Mg^{2+}(aq) + 2e^{-}$ OX $Cu^{2+}(aq) + 2e^{-} \rightarrow Cu(s)$ RED --- $Mg(s) + Cu^{2+}(aq) \rightarrow Mg^{2+}(aq) + CU(s)$ $REDOX$ **Oxidation is loss of electrons and reduction is gain of electrons; most reactions involve both processes. Lifecycle assessment compares environmental impacts from raw material extraction to disposal. Recycling metals reduces mining and often saves energy, but still has environmental costs.**	**In reversible reactions, dynamic equilibrium occurs when forward and backward reaction rates are equal. Changing conditions shifts the equilibrium position.** **https://www.bbc.co.uk/bitesize/guides/z26wfcw/revision/1** **The Haber process makes ammonia using a catalyst, high pressure and moderate temperature to balance rate and yield. Exam answers must link condition changes to particle collisions and yield.** **https://www.bbc.co.uk/bitesize/guides/z26wfcw/revision/2**	• **Medical Researcher – Studies diseases, pathogens, and how immunisation protects people.** • **Microbiologist – Investigates bacteria and viruses that cause disease.** • **Immunologist – Researches the immune system and vaccines.** • **Nuclear Scientist – Works with atomic structure, nuclear radiation, and radioactive decay.** • **Radiographer – Uses controlled nuclear radiation for medical imaging.**

		• **Chemical Engineer – Uses processes like electrolysis and the Haber process to make useful chemicals.** • **Metallurgist – Extracts and processes metals from ores.** • **Environmental Scientist – Uses Life Cycle Analysis to assess environmental impacts of products.**

Spanish

Sports Studies