

ISCA ACADEMY



KNOWLEDGE ORGANISER
Autumn 2021

Year 10

Bullying Information

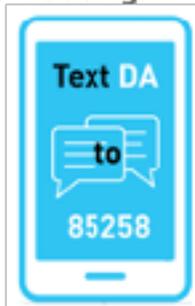


'Each of us deserves the freedom to pursue our own version of happiness. No one deserves to be bullied'
Barack Obama

Bullying affects lots of people and can happen anywhere: at school, travelling to and from school, in sporting teams, in friendship or family groups.

Bullying can take many forms including:

- emotional abuse
- social media
- Social exclusion
- threatening behaviour
- name calling
- sexting
- cyberbullying
- sexual exploitation



The Diana Award Crisis Messenger provides free 24/hr support.



The average child posts 26 times a day on social media, but only 6 out of 10 followers are really friends



'Don't you ever let a soul in the world tell you that you can't be exactly who you are'
Lady Gaga

Speak to someone. No one has a magic wand, but we always do our best and we really do care.

There are lots of things you can do to keep yourself safe online:

- Think before you post
- Don't share personal details
- Watch out for phishing and scams
- Think about who you are talking to.
- Keep your device secure
- Never give out your password
- Cover your webcam
- Use strong passwords
- Report anything you are unsure of

Images sent on sites like Snapchat can still be saved, screenshotted, and around FOREVER!

Set, protect, and respect boundaries for yourself

Talk to someone you trust



Support

'Blowing out someone else's candles doesn't make yours shine any brighter'
Drake

Any form of bullying will not be accepted at Isca

What we do at Isca to deal with Bullying:

Reporting bullying: Students are encouraged to report incidents of bullying to our trained anti-bullying ambassadors (please see the display board in the English corridor), as well as Tutors, Teachers, our Pastoral Care Manager (Mr Heywood), or any member of staff that you feel comfortable talking to.

Restorative justice brings all children involved together so everyone affected plays a part in repairing the harm and finding a positive way forward.

Remember: there is no reason for you to ever put up with any kind of bullying



Literacy across the Curriculum

Literacy Marking Codes			Reading Consistencies	
Code	What it means	What you need to do in purple pen	1. Following the text	Students use their bookmark to track the text below the line they are reading. If using a colour overlay, their bookmark should be placed on top of this.
sp	Incorrect spelling	You will write out the correct spelling in the margin in purple pen.	2. Switching readers	When reading the instruction, the student takes over the reading with no pause as they have been following the text.
C	Use a capital letter	Replace the lowercase letter with a capital in purple pen.	3. Pointing out the error	If students make mistakes, the teacher/tutor will correct them swiftly, and the student will be expected to reread the section they got wrong.
p	punctuation	Add in the correct punctuation.	4. Collecting ambitious vocabulary	When directed, students pause the reading to collect ambitious vocabulary, which is written down as instructed by the teacher/tutor.
//	New paragraph	Think why you need a new paragraph here (change of topic/time/place or a new speaker)		

The Isca Anthology - your reading journey:

'Imaginary Friend' - Stephen Chbosky: Christopher and his mother move to Mill Grove. All seems well until Christopher makes a new "friend" – and then disappears for six days.

'To Kill a Mockingbird' - Harper Lee: Scout Finch, 6, begins to understand and recognise the racial and social injustices of their community.

'Blame My Brain: the Amazing Teenage Brain Revealed' - Nicola Morgan: Read about the ups and downs of the teenage brain.

'Frankenstein' - Mary Shelley: An enduring investigation into what it truly means to be human.

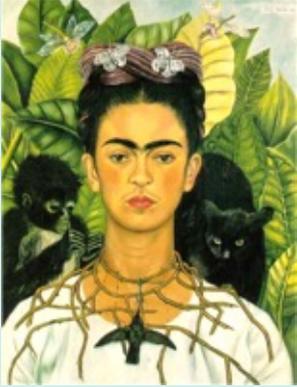
'Tribe: On Homecoming and Belonging' - Sebastian Junger: Tribe is a look at PTSD and the challenges veterans face returning to society.

'Fathers and Sons' - Ivan Turgenev: Arkady brings a university friend home after years away; but Bazarov's rejection of authority and social convention starts quarrels, misunderstandings, and romantic entanglements that will utterly transform the Kirsanov household and reflect the changes taking place across all 19th century Russia.

Art and Design

Project 2: HUMAN IDENTITY

First finish all work started in your last lesson and, then, do these tasks. Complete one task per week to achieve a grade 4 or above. For grade 6 or above please make sure to complete these tasks with flare and dedication, talking regularly to your teacher.

Week 1&2: Old Masters & Chiaroscuro	Week 3&4: Van Gogh, Colour & Texture	Week 5&6: Kahlo & codes/symbols
<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: Take a photo similar to this one. Think about dramatic lighting (chiaroscuro), props, costume, location etc. Send them to your school email – or print out at home. Complete a study of it.</p> <p style="text-align: center;">Key Words</p> <p>Chiaroscuro: how light is used in an artwork – creating strong contrast of light and shadow. Old Master: a work of art by an established master and especially by any of the distinguished painters of the 16th, 17th and early 18th Century.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Vermeer, Girl with a Pearl Earring. 1665</p> <p>Artemisia Gentileschi, La Pittura. 1958-9</p>	<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: Take a photo of a figure and background like in The Old Guitarist (print and present it). Complete an emotive colour and texture study of it in response to your personal aims for this project.</p> <p style="text-align: center;">Key Words</p> <p>Post-Impressionist: European art movement that prioritized the use of vivid unnatural, emotive colour. Emotive: ability to express emotion.</p> <div style="display: flex; justify-content: space-around;">  </div> <p>Vincent Van Gogh, 'Joseph Roulin' and 'The Old Guitarist' - 1903</p>	<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: complete a development of your favourite study and add relevant codes and symbols.</p> <p style="text-align: center;">Key Words</p> <p>Visual code: a system of symbols or signals for visual communication. Symbols: a thing that stands for something else that is abstract.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Rene Magritte, The Son of Man. 1946</p> <p>Frida Kahlo, Self-Portrait with Thorn Necklace and Hummingbird. 1940</p>
Steps to success		
<p>Refer to your analysis template. Play around with your lighting – for example, darkened room and a torch for lighting. Take more than one photo to get your best shot.</p>	<p>Annotate your plans, observations and decisions in your book. Make it personal, justify your own choices with valid style reasons. Make links to the artists</p>	<p>Annotate your decisions, plans and observations in your book. Make it personal, justify your own choices with valid style reasons. Make links to the artist of reference.</p>

Art and Design

Week 7&8: Grayson Perry & Composition – plan your final piece

Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.

Enquiry task 2: select the best study overall, the piece that responds to the topic of Human Identity and fits your statement of purpose, your personal aims. Make a new version of it, maybe mixing two ideas. Think about composition, dominant element, colour schemes, visual codes and symbols...

Key Words

Composition: a considered layout/arrangement of all the visual elements/parts of an art piece.

Series: a collection of outcomes of the same theme.



Grayson Perry, Julie Cope's Grand Tour: The Story of a Life. 2015

Week 9&10: Produce your final piece

Enquiry task 1: Choose your canvas or paper of the right size. Pencil in, softly, the layout of your final image. Use a grid or guidelines if needed.

Enquiry task 2: Start adding tones and colours to your design. Apply colour washes and smears fast to set the general colour scheme. Then, work on the textures and detail.

Key Words

Creativity: the ability to form something new and somehow valuable.

Production: the action of making or manufacturing from components or raw materials.



Miles Donovan – Art 2day

Week 11&12: Complete your final piece and Careers

Enquiry task 1: Continue working on your final piece – complete it. Make a few notes of what's working, what's not and what you need to do next. **Keep working on your final piece.**

Enquiry task 2: research careers

Key Words

Final piece: masterpiece displayed in a gallery or exhibition

Realisation: the achievement of something desired or anticipated.



Follow the QR code or type in the link into your browser

<https://links.iscaexeter.co.uk/36b453>

Steps to success

Work fast and with a focused mind. Do not waste time doubting – test multiple times until you find the best outcome, work hard and follow your instinct.

Plan thoughtfully – choose from your best developments. Comment on your chosen outcome and how it relates to the theme. Test it out and review your work – www.ebi...

Make your ideas and artists influences clear. Explain your point of view on the theme “Human Identity”. What are you showing to the viewer? What are you making us look at?

Computer Studies

Week 1	Week 2	Week 3																																																
<p>Function - Reusable block of code which must return a value.</p> <p>Central Processing Unit - The main part of the computer (the brain), consisting of the registers, ALU and control unit.</p> <p>Arithmetic Logic Unit - Performs calculations e.g. $x = 2 + 3$ and logical comparisons e.g. $IF\ x > 3$ in the CPU.</p> <p>Control Unit - Decodes instructions. Sends signals to control how data moves around the CPU.”</p> <p>Cache - Memory in the processor providing fast access to frequently used instructions and data.”</p> <p><u>Enquiry Task:</u> Complete the first half of the exam questions in your Black and Purple book on 1.1</p>	<p>Register - Tiny areas of extremely fast memory located in the CPU normally designed for a specific purpose, where data or control information is stored temporarily e.g. the MAR, MDR etc.</p> <p>Program Counter - Holds the address of the next instruction to be executed. Step 1 of the FDE</p> <p>Memory Address Register - Holds the address of data ready for use by the memory data register, or the address of an instruction passed from the program counter. Step 2 of the FDE.</p> <p>Memory Data Register: - Holds the data fetched from or to be written to the memory. Step 3 of the fetch, decode, execute cycle.</p> <p><u>Enquiry Task:</u> Complete the second half of the exam questions in your Black and Purple book on 1.1</p>	<p>Embedded System - A computer which has been built to solve a very specific program and is not easily changed. For example the operating system placed inside a washing machine.</p> <p>General Purpose Computer - Any computer system which is not an embedded system</p> <p>BIOS - Basic Input Output System, sometimes referred to as the bootstrap. Contains the boot up information.</p> <p>Primary Storage - RAM and ROM. It holds data and instructions which the CPU can much more easily and quickly access than from secondary storage devices.</p> <p>Secondary Storage - Persistent storage - non volatile</p> <p><u>Enquiry Task:</u> Complete the second half of the exam questions in your Black and Purple book on 1.2</p>																																																
Week 4	Week 5	Week 6 Mid Cycle Assessment																																																
<p>Binary - Base 2 number system due to only having 2 numbers available 0 or 1. The main numbers are powers of 2.</p> <table border="1" data-bbox="138 1010 479 1201"> <tr><td>1</td><td>6</td><td>3</td><td>1</td><td>8</td><td>4</td><td>2</td><td>1</td></tr> <tr><td>2</td><td>4</td><td>2</td><td>6</td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td></tr> </table> <p>The above number to convert into denary (normal numbers) would be 212. Which is $128 + 64 + 16 + 4$.</p> <p><u>Enquiry Task:</u> Black and Purple Book Binary questions on 1.2</p>	1	6	3	1	8	4	2	1	2	4	2	6					8								1	1	0	1	0	1	0	0	<p>Hexadecimal- Base 16 number system due to it having 16 digits available. These are</p> <table border="1" data-bbox="781 976 1382 1043"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>A</td><td>B</td><td>C</td><td>D</td><td>E</td><td>F</td></tr> </table> <p>The key advice is to know that A is equal to 10, the rest of the letters are then easier to remember - i.e. B = 11 etc.</p> <p>A5 in Hexadecimal to convert to denary. Take the first character and multiply it by 16. Then add the second character.</p> $A5 = (A * 16) + 5 = (10 * 16) + 5 = 165$ <p><u>Enquiry Task:</u> Black and Purple Book Hexadecimal questions on 1.2</p>	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	<p>Left Shift - This is moving a binary number to the left. It doubles the value of the binary number with each shift. Example: 11010 Shifted Left 1 = 110100</p> <p>Right Shift - This is moving a binary number to the right which removes a digit. It halves the value of the binary number with each shift. Example: 11010 Shifted Right 1 = 1101.</p> <p>Programming Techniques</p> <p>Sequence – Any block of code</p> <p>Selection – Any IF statement in a program</p> <p>Iteration – Any loop, this could be FOR or WHILE</p>
1	6	3	1	8	4	2	1																																											
2	4	2	6																																															
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1	1	0	1	0	1	0	0																																											
0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F																																			

Computer Studies

Week 7	Week 8	Week 9
<p>Ascii - A character set of how letters and symbols on a keyboard translate into binary. Has 2⁷ symbols.</p> <p>Extended Ascii - A larger character set which can be used for multiple languages. Has 2⁸ symbols.</p> <p>Unicode - A very large character set used by computers. It contains 2¹⁶ symbols.</p> <p>Colour depth - Also known as bit depth, is either the number of bits used to indicate the colour of a single pixel, in a bitmapped image or video frame buffer, or the number of bits used for each colour component of a single pixel.</p> <p>Resolution - The number of pixels in the image.</p> <p>File size - This increases as you increase colour depth or resolution.</p> <p><u>Enquiry Task:</u> Black and Purple Book Questions on 1.2 Character Sets</p>	<p>Sample Rate - The number of samples taken per second, measured in Hertz (Hz)</p> <p>Sample Bit depth - The number of bits available to store each sample e.g. 16-bit</p> <p>Lossy Compression - A compression scheme where their generally involves a loss of resolution in parts of the image where experiences shows that it will be least noticed.</p> <p>Lossless compression - A compression scheme that allows the original images to be recreated</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px 0;"> <p>Calculating Sound File Size File size in bits = Sample rate x duration(s) x bit depth</p> </div> <p><u>Enquiry Task:</u> Black and Purple Book Questions on 1.2 Compression</p>	<p>Compression - The process of reducing the size of a file in terms of its storage size.</p> <p>Metadata - is data about data. Such as dimensions, file size, date edited</p> <p>Binary Addition Rules $0 + 1 = 1$; $1 + 1 = 0 \text{ r } 1$; $1 + 1 + 1 = 1 \text{ r } 1$</p> <p>bit: b- One single binary digit 0 or 1. nibble - 4 bits of binary. 0000 to 1111. Byte: B - 8 bits of binary KiloByte: KB - 1024 Bytes MegaByte: MB - 1024 KiloBytes GigaByte: GB - 1024 MegaBytes TeraByte: TB - 1024 GigaBytes PetaByte: PB - 1024 TeraBytes</p> <p><u>Enquiry Task:</u> Black and Purple Book Questions on 1.2</p>
Week 10	Week 11 Revision & Test	Week 12 - Careers' Focus
<p>LAN - Small geographic area. All the hardware for the LAN is owned by the organisation using it. Wired with UTP cable, fibre optic cable or wireless using routers and Wi-Fi access points.</p> <p>WAN - Large geographic area. All the hardware for the WAN is not owned by the person using it. Wired connections are using coaxial cable, fibre optic cable, and satellite connections.</p> <p>Peer to peer - All computers are equal. Computers serve their own files to each other. Each computer is responsible for its own security and backup. Computers usually have their own printer.</p> <p><u>Enquiry Task:</u> Write two pseudocode loops – one which loops forever, one which outputs the numbers 1-100.</p>	<p style="text-align: center;">Assessment week</p> <p>You will need to check all keywords throughout this knowledge organiser.</p> <p>All teacher resources and lessons are in google classroom.</p>	<p>Please open this link and complete your careers focus homework on Computer Science</p> <div style="text-align: center;">  </div> <p style="text-align: center;">https://links.iscaexeter.co.uk/1cb</p>

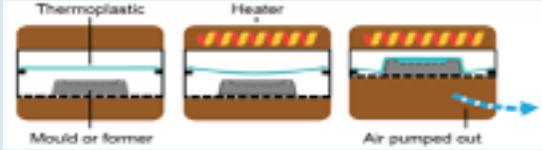
Dance

Week 1	Week 2	Week 3
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Practitioner: a person engaged in an artistic discipline or profession. In dance, this includes choreographers, dancers and designers ● Role: a practitioners main job ● Responsibility: tasks taken on by a practitioner as part of this job ● Skill: Attributes they need to be successful 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Choreographic Process: activities involved in creating and developing dance movement ● Stimulus: inspiration for a dance idea or movement ● Purpose: the reason for creating a dance ● Intention: the dance idea to be conveyed to the audience. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Style: a characteristic way of moving ● Movement Components: the action, space, dynamic and relationship content of a dance ● Choreographic Devices: methods used by choreographers to create movement
<p><u>Enquiry Task:</u> Choose a dance piece using the internet. Make notes on the dance company and choreographer that created the work. Find out about each of the practitioners involved and make notes on their roles.</p>	<p><u>Enquiry Task:</u> Find something that could be used as a stimulus in your home, community or on the internet. Create a list of possible dance intentions and dance styles that could be inspired by this stimulus.</p>	<p><u>Enquiry Task:</u> Use the internet to research different choreographic devices that are used by choreographers to create and develop movement. Choose one to describe in detail.</p>
Week 4	Week 5	Week 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Structure: The way a piece of choreography is laid out. Structuring devices include: sections, order, transitions, climax, highlights 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Aural setting: an audible accompaniment to the dance such as music, words, song and natural sound (or silence) ● Genre: a conventional category that identifies some pieces of music as belonging to a shared tradition 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Production Elements: The elements involved in creating a piece of dance for a professional performance in a theatre. ● Set: the staging design of a performance ● Lighting: the lighting design ● Props: Items used by the dancers
<p><u>Enquiry Task:</u> Watch a dance piece of your choice (5 minutes minimum). 1. Describe the structure using the terms above. 2. Explain why you think these structuring devices were chosen, and evaluate their success.</p>	<p><u>Enquiry Task:</u> Find a dance piece on the internet that uses a minimum of two different aural settings. Choose two of these aural settings to study. Write a list of similarities and differences between them.</p>	<p><u>Enquiry Task</u> Find a dance piece on the internet that uses a variety of production elements. Describe each production element in detail, and evaluate its success.</p>

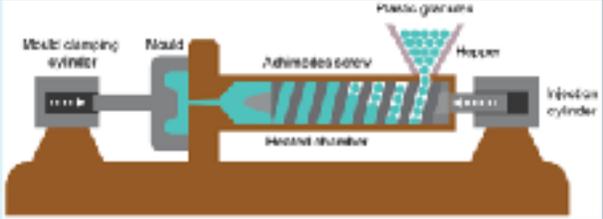
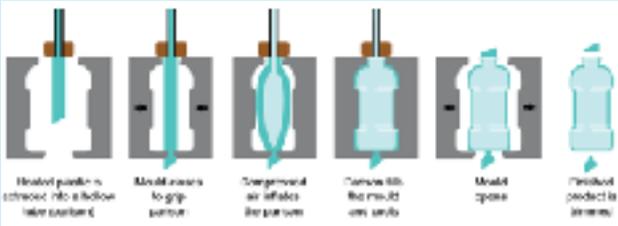
Dance

Week 7	Week 8	Week 9
<p>Recap: Stimulus, Intention, Purpose, Structure</p> <ul style="list-style-type: none"> ● Emancipation: Being set free from restrictions (such as political, social, personal, cultural etc) ● Expression: Making your thoughts and feelings known to others 	<p>Recap: Dance style, movement components</p> <ul style="list-style-type: none"> ● Hip Hop: a cultural movement associated especially with rap music, but that can also be characterised by its use of breakdance and graffiti. Hip hop dance can also include elements of locking, waacking, breaking, krumping and poping. 	<p>Recap: Choreographic Process</p> <ul style="list-style-type: none"> ● Signature Moves: The four dance moves that Boy Blue use in all their pieces ● Repetition: Performing the same movement or motif more than once ● Motif Development: Making changes to a movement or motif to make it different
<p><u>Enquiry Task:</u> Using the definitions above, explain why you think 'Emancipation of Expressionism' was chosen as the title of the dance we are studying.</p>	<p><u>Enquiry Task:</u> Using the internet, write a definition for each of the hip hop dance styles written in bold above.</p>	<p><u>Enquiry Task:</u> Write a definition of each of the following boy blue signature moves: Ninja Walk, Ninja Glide, Ninja Static, Chariots of Fire.</p>
Week 10	Week 11	Week 12
<p>Recap: Aural Setting</p> <ul style="list-style-type: none"> ● Music Visualisation: When the music dictates the dance. The dance is a moving representation of what is heard. ● Musicality: When a dancer interprets the qualities of the music in their performance, without changing the choreography. ● Music Notation: Noting down the qualities and structure of a piece of music on to paper, using a codified system 	<p>Recap: Production elements, set, lighting</p> <ul style="list-style-type: none"> ● Haze: a thin stage fog ● Sidelight: A light at the stage side, used to enhance the side of a dancer's body ● Blackout: The absence of stage and house lighting in a theatre ● Cyclorama: A cloth stretched tight at the back of a stage set, often used to project light or images onto 	<p><u>CAREERS</u></p>
<p><u>Enquiry Task:</u> Choose a piece of music. Have a go at creating your own notation system to note down its qualities and structure on paper. You could use symbols, letters and numbers. (Hint, research 'graphic scores')</p>	<p><u>Enquiry Task:</u> Choose two moments from the piece 'The Emancipation of Expressionism' (you can watch it on youtube). Draw, colour and label a diagram of the set and lighting used in each section</p>	<div data-bbox="1608 847 1899 1139" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

Design & Technology

Week 1 – Polymers	Week 2 – Polymers	Week 3 – Recycling & Sustainability
<p>Unit 5D.1 – Sources, Origins & Properties. The word plastic means ‘<i>easily shaped or moulded</i>’ and is derived from the Greek work ‘plastikos’ Plastics are made from polymers which is a Greek word meaning many: ‘poly’ - parts: ‘mer’. Plastics are semi-organic and always derived from oil or petroleum. Different polymers are derived from different sources. These can produce different types of plastics: Natural plastics made from rubber or latex. Bio-plastics made from vegetable starches or algae. Synthetic plastics made from petrochemical sources. Polymers are produced through a lengthy process called refining. Unprocessed (crude) oil is first extracted from underground, either at sea using an oil rig, or on land. It is then transported to a plant for conversion.</p>	<p>Unit 5D.1 – Sources, Origins & Properties. Natural Plastics - There are some naturally occurring plastics: Amber (fossilised tree resin) and Latex (a form of rubber). Natural latex is harvested from the Rubber tree (<i>Hevea Brasiliensis</i>). The bark is scored (tapped) to allow the milky sap to run out into a container Bio-plastics - These are commonly made from corn or vegetable starches. Fully biodegradable if composted. Bacteria in the soil breaks down the plastic quickly. Synthetic Plastics are made from polymers. These come from finite petrochemical resources; usually crude oil. Plastics can also be derived from natural gas and coal. Enquiry Task – Produce a PP detailing plastics.</p>	<p>Thermoplastics can be recycled. This reduces the disposal problems (landfill) and the amount of virgin crude oil used. The different types of polymers must be separated from each other first – how simple do you think this is? They can also be recovered through Energy from Waste incineration (EfW) to provide electricity Roads are now being made with recycled plastic instead of bitumen. They are much more durable, quicker to lay and allow for better drainage. Bio plastics are produced from vegetable starches such as corn. Biopol™ can be manufactured from plant sugars and glucose from soya, pea or potato starches Biopol is Non-toxic, insoluble in water and it has a high melting point.</p>
Week 4 – Working with Polymers	Week 5 – Line Bending Process	Week 6 – Vacuum Forming
<p>Unit 5D.2 – Sources, Origins & Properties. Plastics are available in a wide variety of standard shapes and sizes:</p> <ul style="list-style-type: none"> • Sheets • Rods • Tubes <p>Removing material can be carried out through a number of methods:</p> <ul style="list-style-type: none"> • Drilling • Cutting and sawing • Sanding • Shaping • Finishing <p>Enquiry Task – Describe with the aid of sketches how you would cut and finish a piece of 5mm sheet acrylic 25 x 25mm.</p>	<p>Steps involved in line bending plastics:</p> <ol style="list-style-type: none"> 1. Mark out bend lines. 2. Turn on the strip heater and allow it to reach working temperature. 3. Put on heat-proof gloves and have a tray of water ready to cool the workpiece. 4. Place the marked line of the workpiece across the heating strip. 5. Allow the plastic to heat through then test for flexibility. 6. Bend the workpiece to the required angle using a former or jig. 7. Once the workpiece has set it can be cooled. 	<p>Steps involved in line vacuum forming:</p> <ol style="list-style-type: none"> 1. Mould is placed on a platform (also known as a platen). 2. A sheet of thermoplastic is clamped and heated. 3. This now flexible sheet is pulled over a former (mould). 4. A vacuum sucks the air out. 5. The plastic takes on the shape of the mould, then cools and hardens in position before the mould is removed. 

Design & Technology

Week 7 - Properties	Week 8 – Injection Moulding	Week 9 – Blow Moulding
<p>Unit 5D.2 – Manufacturing and Finishing.</p> <p>Thermoplastics are the most commonly used type. They have long chains of molecules, tangled together with no fixed structure or pattern. They are generally soft and flexible with shape memory.</p> <p>Properties of Thermoplastics; Waterproof, Lightweight, Durable, Good strength to weight ratio, Easy to mould, Tough, Easily coloured, Scratch resistant, Corrosion resistant, Chemically resistant, Good flexibility.</p> <p>Thermosets are more brittle than thermoplastics and are best suited to stiffer mouldings. They have long chains of molecules, cross-linked that form a very rigid molecular structure. Very hard and waterproof when solid - ideal for adhesives.</p> <p>Properties of thermosets; Waterproof, Durable, Hard, Scratch resistant, Resists high temperatures, Elec. insulator.</p>	<p>High-volume production process</p> <ul style="list-style-type: none"> • Parts produced at a rapid rate • Tooling costs are high but once moulds are made the unit costs are relatively low  <p>Enquiry Task - Using examples, explain the following toughness, hardness, ductile and malleable.</p>	<p>A manufacturing process often used for bottles. An extruded tube (parison) is blown into a desired shape.</p> <p>A plastic parison is inserted into the mould top. Warm air inflates the parison to fill bottle mould</p> 
Week 10 – Laser cutting	Week 11	Week 12 - Careers
<p>Laser Cutting - This is one of the most accurate ways to cut different types of thermoforming polymer sheets. The laser can follow a design to a very fine tolerance. Laser cutters are a safe way to create objects if set up correctly. Extraction is used to remove and filter harmful fumes.</p> <p>Laser cutters must be set up correctly taking the following into consideration: Kerf allowance, Power and speed settings, Focusing the beam, Clean mirrors and lenses.</p>  <p>Enquiry Task - What advantages are there to laser cutting?</p>	<p>Keywords;</p> <p>Polymerisation - Polymers are chemically processed to join together.</p> <p>Plastic memory - When thermoplastics are reheated they try to return to their original shape.</p> <p>Thermosets - Plastics which soften when heated, harden when baked but won't change shape when reheated.</p> <p>Polymers - The name for monomers when joined together to form long chains of molecules.</p> <p>Fossil fuels - Finite resources such as oil, gas and coal which are used to make petrochemicals.</p> <p>Thermoplastics - Plastics which soften when heated, harden when cooled and can be softened again numerous times.</p> <p>Cracking - Large hydrocarbons are converted into smaller, more useful versions using heat and pressure.</p>	 <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4sw</p>

Drama

Week 1	Week 2	Week 3
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Professional repertoire: A drama or dance performance that earns an income for the people that create it. ● Practitioner: Someone who works on a piece of professional repertoire. ● Roles: The different jobs that have to be done in order to create a piece of professional repertoire. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Genre: The type of story that the play presents. ● Style: The way in which the practitioners present the performance. ● Key Features: The techniques and conventions that practitioners use to communicate to the audience. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Structure: The way in which a piece of drama is built, ordered or organised. ● Context: Relevant events that are taking place in the wider world at the time the play is written or staged. ● Contextual influences: The people or events in the wider world that inspire practitioners to create a piece of drama.
<p><u>Enquiry Task:</u> Make a list of all the different job roles within a piece of professional repertoire. Explain what the responsibility of these job roles are.</p>	<p><u>Enquiry Task:</u> Research and explore the style and genre of the play you are studying. What are the key features of this style?</p>	<p><u>Enquiry Task</u> What is the context for the play at the time it was written and first staged? What people outside the world of theatre inspired the creation of the play. Why is the play relevant to audiences today?</p>
Week 4	Week 5	Week 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Collaboration: When different practitioners work together in order to put on a piece of professional repertoire. ● Influences: Practitioners will often adopt ideas and key features from other practitioners, these are their influences. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Theme: What the play is about in general terms. An issue that feature heavily in the play. ● Narrative/plot: The story that the play communicates to the audience. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Purpose: The intended impact on the audience. ● Stylistic Qualities: How all of the key features fit together to create a style.
<p><u>Enquiry Task:</u> Pick two people who worked together on the play describe how they collaborated on a specific scene and explain what effect it had.</p>	<p><u>Enquiry Task:</u> Research and explore the Themes of the play. Write a synopsis of the narrative of the play.</p>	<p><u>Enquiry Task:</u> Describe the purpose of the play you are studying. Explain how the stylistic qualities intend to achieve this purpose. Evaluate how successful they are in achieving their purpose.</p>

Drama

Week 7	Week 8	Week 9
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Director: The person with the overall vision for how the performance should look and feel. ● Designer: Someone who designs a technical element of a performance such as lighting, sound or costume. ● Choreographer: The person who creates movement sequences such as dances or fights and teaches them to the performers. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Audition: When actors try out for a role in front of a director and casting director. ● Casting: Choosing which actors are going to play which parts. ● Read-through: When the director gathers the cast and designers and the actors sit down and read the script aloud. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Devising: Creating a piece of drama without a script. ● Refining: Improving performance work by reflecting or receiving feedback on it. ● Character Development: Working on understanding your character and showing this through physicality and voice.
<p><u>Enquiry Task:</u> Write a fact file for the director of the play you are studying. Explain how they collaborate with the performers and one other practitioner. Evaluate how successful they are.</p>	<p><u>Enquiry Task:</u> Choose a specific character from the play you are studying. Describe what skills an actor would need in order to successfully play the part and explain why.</p>	<p><u>Enquiry Task:</u> Describe the process an actor and director go through in order to develop a character, ready for a piece of professional repertoire.</p>
Week 10	Week 11	Week 12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Rehearsal: The period in which performers, directors and other practitioners prepare for a performance of a piece of professional repertoire. ● Tech Rehearsal: A rehearsal in which the focus is lighting and sound cues. ● Dress Rehearsal: A rehearsal of the play with costume, props, lighting and sound. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Interrelationship of constituent parts: This is about how all of the different roles, skills and techniques you have studied go together to create a piece of professional repertoire. 	<p><u>CAREERS</u></p> 
<p><u>Enquiry Task:</u> Explain why it is important for actor's to practice in costume before the performance.</p>	<p><u>Enquiry Task</u> Pick a scene that you feel is effective. Describe, explain and evaluate how the different elements (acting, direction, lighting, sound, costume, set) worked together to create the scene.</p>	<p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

English Literature

Macbeth

Week 1	Week 2	Week 3
<p>TASK- Learn the following terms using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Jacobean Era- the era of King James I of England Tragedy- a play in which the hero meets their doom as a result of their own weaknesses or failures. The Divine Right of Kings – the belief that a king is God’s representative on earth. The Great Chain of Being – a Christian hierarchy The Gunpowder Plot – a failed Catholic attempt to blow up parliament and assassinate king James in November 1605. <p>Act 1 Scene 2</p> <ol style="list-style-type: none"> Sergeant: Brave Macbeth Sergeant: Dismaying Fortune, with his brandished steel/ Which smoked with bloody execution Sergeant: Valour’s minion Sergeant: Unseamed him from the nave to th’ chops Duncan: Oh Valiant Cousin! Worthy Gentleman! 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Tragedy- a play in which the hero meets their doom as a result of their own weaknesses or failures. The Divine Right of Kings – the belief that a king is God’s representative on earth. The Great Chain of Being – a Christian hierarchy The Gunpowder Plot – a failed Catholic attempt to blow up parliament and assassinate king James in November 1605. <p>Act 1 Scene 3</p> <ol style="list-style-type: none"> Macbeth: Stay you imperfect speakers Macbeth: Why hath it given me earnest of success? Macbeth: Why do I yield to that suggestion whose horrid image doth unfix my hair and make my seated heart knock at my ribs? Macbeth: function is smothered in surmise Banquo: oftentimes, to win us to our harm, The instruments of darkness tell us truths, Win us with honest trifles, to betray ’s In deepest consequence. <p>Act 1 Scene 4</p> <ol style="list-style-type: none"> Macbeth: Stars, hide your fires; Let not light see my black and deep desires. 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Patriarchy- a society dominated by men Socially conservative values- a system of traditional values that aims to resist change. Demonologie (1597) – a book written by King James I on the subject of witchcraft. Soliloquy- when a character speaks their thoughts out loud on stage. <p>Act 1 Scene 5</p> <ol style="list-style-type: none"> Lady M: Come you spirits that tend on mortal thoughts, unsex me here. Lady M: Make thick my blood and stop up the access and passage to remorse Lady M: Look like th’ innocent flower,. But be the serpent under ’t. <p>Act 1, Scene 7</p> <ol style="list-style-type: none"> Macbeth: I have no spur to prick the sides of my intent, but only Vaulting ambition, which o’erleaps itself And falls on th’ other. Lady Macbeth: Screw your courage to the sticking place and we’ll not fail. Macbeth: False face must hide what false heart doth know

English Literature

Week 4	Week 5	Week 6
<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Irony- when the significance of something is the opposite to what is said. <p>Act 2, Scene 1</p> <ol style="list-style-type: none"> Banquo: Who goes there?/ Macbeth: A friend Macbeth: Is this a dagger which I see before me, The handle toward my hand? Macbeth: A dagger of the mind, a false creation of the heat oppressed brain? Macbeth: It is done. The bell invites me. Hear it not, Duncan, for it is a knell That summons thee to heaven or to hell. <p>Act 2, Scene 2</p> <ol style="list-style-type: none"> Macbeth: Will all of great Neptune's oceans wash this blood clean from my hand? Lady Macbeth: A little water clears us of this deed Macbeth: Whence is that knocking?/ How is't with me, when every noise appals me? Macbeth: Wake Duncan with thy knocking. I would thou couldst. 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Kingship- the state or position of being a king Foil- a character who contrasts with another character <p>Act 2, Scene 3&4</p> <ol style="list-style-type: none"> Macduff: Most sacrilegious murder hath broke open The Lord's anointed temple Macbeth: Here lay Duncan, His silver skin laced with his golden blood, And his gashed stabs looked like a breach in nature. <p>Act 3, Scene 1</p> <ol style="list-style-type: none"> Macbeth: Our fears in Banquo stick deep Macbeth: Fruitless crown/ barren sceptre Macbeth: mine eternal jewel given to the common enemy of man to make the seed of Banquo kings! <p>Act 3, Scene 2</p> <ol style="list-style-type: none"> Lady M: Tis safer to be that which we destroy Than by destruction dwell in doubtful joy. Macbeth: Full of scorpions is my mind. 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Kingship- the state or position of being a king. Tyrant- a cruel and oppressive ruler. <p>Act 3, Scene 4</p> <ol style="list-style-type: none"> Macbeth: Thou canst not say I did it. Never shake Thy gory locks at me. Lady M: Are you a man? Lady M: What, quite unmanned in folly? <p>Act 4, Scene 1</p> <ol style="list-style-type: none"> Apparitions: Beware the Thane of Fife (Macduff)... none of woman born Shall harm Macbeth...Macbeth shall never vanquished be until Great Birnam Wood to high Dunsinane Hill Shall come against him. Macbeth: The very firstlings of my heart shall be The firstlings of my hand. <p>Act 5, Scene 1</p> <ol style="list-style-type: none"> Lady M: Out damned spot! Lady M: What, will these hands ne'er be clean? Lady M: All the perfumes of Arabia will not sweeten this little hand.

English Literature

Week 7	Week 8	Week 9
<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <ol style="list-style-type: none"> Tragedy- a play in which the hero meets their doom as a result of their own weaknesses or failures The Divine Right of Kings – the belief that a king is God’s representative on earth. The Great Chain of Being – a Christian hierarchy The Gunpowder Plot – a failed Catholic attempt to blow up parliament and assassinate king James in November 1605. Tyrant- a cruel and oppressive ruler <p>Act 5, Scene 5</p> <ol style="list-style-type: none"> Macbeth: She should have died hereafter. Macbeth: Life is a tale told by an idiot signifying nothing <p>Act 5, Scene 7</p> <ol style="list-style-type: none"> Macbeth: They have tied me to a stake; I cannot fly, But, bear-like, I must fight the course <p>Act 5, Scene 8</p> <ol style="list-style-type: none"> Malcolm: This dead butcher and his fiendlike queen Malcolm: By the grace of Grace, We will perform in measure, time, and place. 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <p>Act 1, Scene 2</p> <ol style="list-style-type: none"> Sergeant: Brave Macbeth Sergeant: Dismaying Fortune, with his brandished steel/ Which smoked with bloody execution Sergeant: Valour’s minion Sergeant: Unseamed him from the nave to th’ chops Duncan: Oh Valiant Cousin! Worthy Gentleman! <p>Act 1, Scene 3</p> <ol style="list-style-type: none"> Macbeth: Stay you imperfect speakers Macbeth: Why hath it given me earnest of success? Macbeth: Why do I yield to that suggestion whose horrid image doth unfix my hair and make my seated heart knock at my ribs? Macbeth: function is smothered in surmise Banquo: oftentimes, to win us to our harm, The instruments of darkness tell us truths, Win us with honest trifles, to betray ’s In deepest consequence. 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <p>Act 1 Scene 5</p> <ol style="list-style-type: none"> Lady M: Come you spirits that tend on mortal thoughts, unsex me here. Lady M: Make thick my blood and stop up the access and passage to remorse Lady M: Look like th’ innocent flower,. But be the serpent under ’t. <p>Act 1, Scene 7</p> <ol style="list-style-type: none"> Macbeth: I have no spur to prick the sides of my intent, but only Vaulting ambition, which o’erleaps itself And falls on th’ other. Lady Macbeth: Screw your courage to the sticking place and we’ll not fail. Macbeth: False face must hide what false heart doth know <p>Act 2, Scene 1</p> <ol style="list-style-type: none"> Banquo: Who goes there?/ Macbeth: A friend Macbeth: Is this a dagger which I see before me, The handle toward my hand? Macbeth: A dagger of the mind, a false creation of the heat oppressed brain?

English Literature

Week 10	Week 11	Week 12
<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <p>Act 2, Scene 2</p> <ol style="list-style-type: none"> 1. Macbeth: Will all of great Neptune's oceans wash this blood clean from my hand? 2. Lady Macbeth: A little water clears us of this deed 3. Macbeth: Whence is that knocking?/ How is't with me, when every noise appals me? 4. Macbeth: Wake Duncan with thy knocking. I would thou couldst. <p>Act 2, Scene 3&4</p> <ol style="list-style-type: none"> 5. Macduff: Most sacrilegious murder hath broke open 6. The Lord's anointed temple 7. Macbeth: Here lay Duncan, His silver skin laced with his golden blood, And his gashed stabs looked like a breach in nature. <p>Act 3, Scene 1</p> <ol style="list-style-type: none"> 8. Macbeth: Our fears in Banquo stick deep 9. Macbeth: Fruitless crown/ barren sceptre 10. Macbeth: mine eternal jewel given to the common enemy of man to make the seed of Banquo kings! 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <p>Act 3, Scene 2</p> <ol style="list-style-type: none"> 1. Lady M: Tis safer to be that which we destroy Than by destruction dwell in doubtful joy. 2. Macbeth: Full of scorpions is my mind. <p>Act 3, Scene 4</p> <ol style="list-style-type: none"> 3. Macbeth: Thou canst not say I did it. Never shake Thy gory locks at me. 4. Lady M: Are you a man? 5. Lady M: What, quite unmanned in folly? <p>Act 4, Scene 1</p> <ol style="list-style-type: none"> 6. Macbeth: The very firstlings of my heart shall beThe firstlings of my hand. <p>Act 5, Scene 1</p> <ol style="list-style-type: none"> 7. Lady M: Out damned spot! 8. Lady M: What, will these hands ne'er be clean? 9. Lady M: All the perfumes of Arabia will not sweeten this little hand. <p>Act 5, Scene 5</p> <ol style="list-style-type: none"> 10. Macbeth: Life is a tale told by an idiot signifying nothing 	<p>In this cycle, you have learnt to craft your critical and analytical writing.</p> <p>You have practised and improved your ability to:</p> <ul style="list-style-type: none"> - use academic phrasing and structure - assert academic points - support your points with judiciously chosen evidence - analyse a writer's use of language, structure and form. - link texts to their context and reflect upon how meaning is created for a reader. - consider the writer's intentions and how successfully they have done this. <div data-bbox="1599 775 1933 1114" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4my</p>

French

Week 6 Imperfect tense		Week 7 Perfect with avoir		Week 8 Perfect with être		Week 9 Imperfect tense		Week 10 Revision			
<p>The imperfect is used to say what you used to do regularly or over a period of time in the past. It can translate 'used to' or 'was/were' in English</p> <p>Use the nous form of the present tense minus the -ons + imperfect ending.</p>		<p>As the perfect tense is so important you are repeating week 2.</p> <p>Present tense of avoir + past participle</p> <p>-ER verbs → é -IR verbs → i -RE verbs → u</p>		<p>This week you are repeating week 3 - verbs that use être as their auxiliary + agreements of past participles.</p>		je visit ais	I used to visit	<p>Revise the key sentences and all vocabulary from this cycle ready for your assessment next week.</p> <p>Quizlet folder:</p> 			
						tu visit ais	you used to visit (s)				
il / elle habit ait	he / she used to live	il est entré	he entered	il / elle visit ait	he / she used to visit						
		tu es venu (e)	you came (s)								
j'habit ais	I used to live	j'ai joué	I played	elle est sortie e	she went out	nous visit ions	we used to visit				
						vous visit iez	you used to visit (pl)				
tu habit ais	you used to live (s)	tu as regardé	you watched	nous sommes parti (e)s	we left	ils / elles visit aient	they used to visit				
										il a fini	he finished
il / elle habit ait	he / she used to live	nous avons bu	we drank	vous êtes arrivé (e)(s)	you arrived (pl)	j'étais	I was				
		vous avez visité	you visited	ils sont tombé s	they fell (m)						
nous habit ions	we used to live	ils ont perdu	they lost	elles sont resté es	they stayed (f)	c'était	It was				
								Irregular past participles			
vous habit iez	you used to live (pl)	bu	ate	Other past participles that take être		<p>When describing an event (narrative) in the past you will often need to use both the perfect and imperfect tenses e.g.</p> <p>Quand je suis arrivé, mes cousins ouvraient leurs cadeaux. <i>When I arrived, my cousins were opening their presents.</i></p>					
		vu	saw								
ils / elles habit aient	they used to live	lu	read	mort	dead						
		fait	did	né	born						
The only irregular verb in the imperfect is être		mis	put	retourné	returned						
		dit	said	monté	went up						
j'étais	I was	eu	had	descendu	went down						
c'était	It was										
Enquiry tasks – complete in French											
Use the imperfect tense to describe past birthdays.		Make flashcards for the Perfect with avoir.		Write a paragraph to describe your last Christmas.				Review the vocabulary from weeks 6-9 on Quizlet.			
Week 11											
Assessment week											
Week 12											

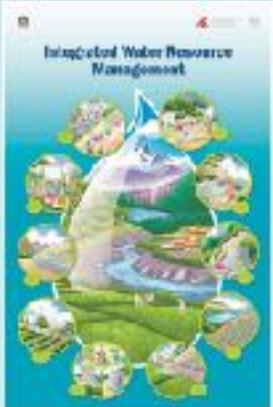
Geography

Week 1	Week 2
<p><u>Key vocabulary</u></p> <p>Embedded Water Water that has been used to grow and make our food.</p> <p>Water Abstraction refers to the process of taking or extracting water from a natural source (rivers, lakes, groundwater aquifers, etc).</p> <p>Water Surplus Having more water than a country needs</p> <p>Water Deficit Having less water than a country needs</p> <p>Water Security Having a reliable supply to keep the population watered and fed.</p> <p>Appropriate Technology small-scale technology. It is simple enough that people can manage it directly and on a local level.</p>	<p><u>Water Security</u></p> <p>Water security can be increased by making water use more sustainable. Ways to do this include:</p> <ul style="list-style-type: none"> • recycling water – using treated waste water to irrigate food • Using grey water – similar to recycling water in using • Reduce water leakage – UK pipes are old and leak – so fix them! • Plant drought resistant crops = needs less water to grow • Use irrigation methods • In HICs in summer months to encourage hosepipe bans  <p><u>Enquiry Task:</u> (Using the internet) Are there any other methods of making water usage more sustainable that are not mentioned above?</p>
Week 3	Week 4
<p><u>Water insecurity</u></p> <p>Disruption of education. Water insecurity means that many girls living in some rural areas of developing countries can spend hours walking to collect water rather than attending school.</p> <p>Waterborne disease. Drinking or using dirty water puts people at risk of waterborne diseases and illnesses, such as diarrhoea, malaria and schistosomiasis.</p> <p>Food production. Water insecurity can lead to lower levels of food production. Irrigation can increase crop yields by as much as 400%.</p> <p>Industrial output. Industry needs water for all stages of production. Areas that experience water insecurity are unable to operate factories and make products.</p> <p>Conflicts. Water is a source of conflict in some parts of the world. Seizing dams is a powerful way of controlling water and electricity supplies.</p> <p><u>Enquiry Task:</u>(Use the internet to research further) – Which of these impacts of water insecurity do you think is the most severe and why?</p>	<p><u>Water in the UK</u></p> <p>The amount of water used by the average household in the UK has increased by 70% since 1985. This extra water must be found somewhere...</p> <p>Causes include: population growth; more water-intensive appliances (eg. dishwashers); demand of out of season food needs irrigation; leisure use (esp. golf courses); power showers.~</p> <p>Distribution of water: It tends to rain in the North West (highland areas) where there is a surplus. Demand is highest in the South East due to population concentration, but in the SE rainfall is lower. Therefore the SE has a water deficit. This causes “water stress”. Water needs to be managed by transferring it to where demand is.</p> <p><u>Enquiry Task:</u> On a blank map of the UK, label areas that have a surplus and areas that have a deficit.</p>

Geography

Week 5	Week 6
<p><u>Trans-boundary water issues e.g. River Nile</u> Nile runs through 11 different countries and is 6650km long. Each country relies on the Nile, but they do not all agree how it should be used. Egypt: Relies on the Nile for water for food. Most of Egypt's population are close to the river as they need water. Population is growing fast and more people = more water. Uganda: Relies on Lake Victoria for tourism to make money. The lake needs water to look nice to bring the tourists. Sudan: Water transport is more reliable due to poor quality roads but the river needs water in order to use the boats. Ethiopia: Built a dam to keep more water. This area suffers from regular drought. However, more water for them means less water downstream.</p>  <p><u>Enquiry Task:</u> Produce a short newspaper article (with a map) to show the impacts of trans-boundary water issues along the River Nile.</p>	<p><u>Are Dams the answer to water problems?</u></p>  <p>Dams are built all over the world to solve water issues. They can reduce flood risk (but this is debated by environmentalists), provide Hydro-Electric Power, and provide water for irrigating farmland and supplying industries. BUT – they change the ecosystem of that river completely, are expensive, displace people (e.g. 3 Gorges Dam in China forced 2 million to move) and don't always work e.g. in rainforest areas water hyacinth can grow and clog the HEP machinery; in hot areas the water can evaporate.</p> <p><u>Enquiry Task:</u> Produce a case study on a dam of your choosing (including the date it was built, reasons for this and pros and cons of it for: people, the economy and the environment).</p>
Week 7	Week 8
<p><u>Key terms (Extreme Weather: topic 2)</u> Coriolis effect The way in which the rotation of the Earth deflects the movement of objects such as hurricanes.</p>  <p>Cyclone: A low pressure weather system in the atmosphere associated with unsettled weather, wind and rain.</p> <p>Drought: A long period of time with little precipitation</p> <p>Short-term response: The immediate/ emergency response to a disaster.</p> <p>Long-term response: The response weeks, months and years after a disaster.</p>	<p><u>Extreme Weather in the UK</u> The UK is affected by both low and high pressure. It experiences extreme weather events caused by both types of pressure. Examples of extreme weather events in the UK:</p> <ul style="list-style-type: none"> • Drought - caused by a lack of rain. • Flash floods - caused by too much rain in a short period of time. • Strong winds and storms. • An extreme cold spell. • An extreme heat wave. <p>Winter Storms of 2014: Feb 2014, the UK suffered its stormiest period for 20 years. Storms, created by extreme low pressure. Damage to Devon & Cornwall.</p> <p><u>Enquiry Task:</u> (Using the internet) research the impacts of the 2014 storms. Which of the impacts do you think was the worst and why?</p>

Geography

Week 9	Week 10
<p>Tropical Storms Tropical storms are low pressure weather systems. They occur in low latitudes between 5 and 30 degrees north and south of equator. Ocean surface temperature needs to be above 27°C. This happens between summer and autumn.</p> <ol style="list-style-type: none"> 1. Air is heated above warm tropical oceans 2. Air rises under low pressure conditions 3. Strong winds form as rising air draws in more air and moisture causing torrential rain 4. Air spins due to Coriolis effect around a calm eye of the storm 5. Cold air sinks in the eye so it is clear and dry 6. Heat is given off as it cools powering the storm 7. On meeting land, it loses source of heat and moisture so loses power. <p>Enquiry Task: Including the steps from above, create a simple diagram to explain how a tropical storm is created. Optional task 2: On a map of the world, identify specific areas at risk.</p>	<p>Typhoon Haiyan Typhoon Haiyan hit the Philippines on 9/11/2013 with wind speeds of over 170mph and a storm surge of 15m high. Primary effects- 6,300 people killed, 90% of Tacloban City destroyed or damaged, 30,000 fishing boats destroyed, strong winds damaged power lines and destroyed crops. Secondary effects- 14 million people affected, 6 million lost their source of income, flooding and landslides blocked roads, shortages of water and food affected many people. Short-term responses- Aid agencies like the Red Cross responded quickly with food aid, water and temporary shelters. 1,200 evacuation centres set up to help the homeless. The French government provided field hospitals to assist. Long-term responses- The UN and UK donated money. Rebuilding scheme for roads and bridges. Cash for work set up, people paid to clear debris. Oxfam supported the replacement of fishing boats. Enquiry Task: Produce a short news report to highlight the worst impacts of Typhoon Haiyan.</p>
Week 11	Week 12
<p>Drought Droughts occur when there is abnormally low rainfall for an extended period of time. This means that a desert would not be considered in drought unless it had less rainfall than normal, for a long period of time. Droughts can last from weeks to months and even years.</p> <p>Effects</p> <ul style="list-style-type: none"> • Droughts endanger lives and livelihoods through thirst, hunger (due to crops dying from lack of water) and the spread of disease. • Millions of people died in the 20th century due to severe drought and famines. • Droughts and famines can have other geographical impacts. If drought forces people to migrate to a new home = more pressure on resources elsewhere. <p>Enquiry Task: Research one major drought that has taken place within recent years. Outline 3 key impacts of this upon affected populations.</p> 	<p>Careers linked to these topics:</p> <ul style="list-style-type: none"> Oceanographers Meteorologist Hydrologist Project manager (water management)   <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/of7</p>

History

Week 1	Week 2
<p><u>Key Terms:</u></p> <p>Anti-Semitism – To discriminate against someone because they are Jewish Holocaust – The systematic attempted extermination of all European Jews by the Nazi regime</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • Jews were blamed for the crucifixion of Christ. • Jews were blamed for the Black Death although many Jews were killed by the disease • Jews were driven out of many Western European countries in the Middle Ages. They were expelled from England in 1290, from France in 1306 and 1394 <p><u>This week's enquiry is...</u> <i>What was life like for Jews before the Holocaust?</i></p>	<p><u>Key Terms:</u></p> <p>Prejudice – To discriminate against somebody because of a quality or characteristic that they have Persecution – To continually punish or harass someone. Usually because of religious or political beliefs</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 9.5 million – Prior to the Holocaust Europe contained roughly 9.5m Jewish people. During the Holocaust roughly 6m were murdered • The extermination of the Jews was code named the 'final solution' by the Nazis <p><u>This week's enquiry is...</u> <i>How do we remember the Holocaust?</i></p>
Week 3	Week 4
<p><u>Key Terms:</u></p> <p>Factor – Something that affects something else Continuity – When something stays the same and does not change Classical – From the ancient world – usually Greece, Rome or Persia</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 1250-1500AD –_The period that we study for Medieval Medicine • Primitive –_Most medieval people lived a rather primitive life as peasants. 90% of all people worked as farm laborers. The majority of people were illiterate and uneducated. • Power –_The two main powers in the land were the Church and the Monarch. Both of which had a heavy influence on medical change and continuity. <p><u>This week's enquiry is...</u> <i>How can we characterise the medieval world?</i></p>	<p><u>Key Terms:</u></p> <p>Physician – A type of traditional doctor Remedy – A way of treating or curing a disease or ailment Diagnosis – When you decide what type of illness is affecting a person</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • Hippocrates and Galen – Ancient physicians whose ideas were still incredibly well respected in the Medieval period • Four Humours –_Hippocrates believed the body contained four humours that needed to be balanced – Blood, yellow bile, black bile and phlegm • Theory of opposites –_Galen believed that the humours could be balanced out with a treatment that was opposite e.g cucumber for an excess of blood as it cooled the patient down <p><u>This week's enquiry is...</u> <i>Why did Classical physicians have an impact on the Medieval world?</i></p>

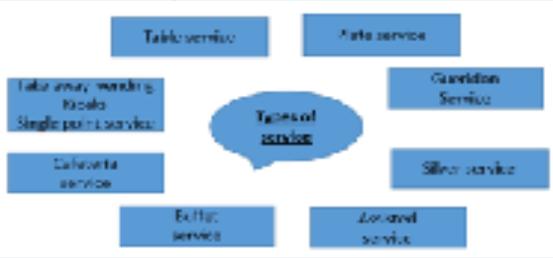
History

Week 5	Week 6
<p><u>Key Terms:</u></p> <p>Pestilence – A fatal type of epidemic e.g the bubonic plague Miasma theory – The incorrect idea that disease is caused by impure air and bad smells Vivisection – A type of medical examination whereby criminals sentenced to death would be cut open by physicians and medical students</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 1440AD – Printing press was invented by Johannes Gutenberg allowing for medical texts to be circulated more quickly and more cheaply • Roger of Salerno – The first surgical textbook produced in the 1100s but still being used after 1250 <p><u>This week's enquiry is...</u> <i>Why did medieval medicine stagnate?</i></p>	<p><u>Key Terms:</u></p> <p>Phlebotomy – Blood letting. A cut would be made to allow the impure blood to pour out. It was supposed to re-balance the humours Supernatural – Something beyond scientific understanding Flagellants – Extreme Christians who would whip themselves in order to purge their bodies of sin</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 1348 – The Black Death reaches England. During its first 4 years it killed roughly 50% of the European population • Yersinia Pestis – The official name of the disease • Buboes – Bubonic plague (the most common) caused apple-sized swellings to appear over a person's body filled with black pus <p><u>This week's enquiry is...</u> <i>Why was the Black Death so fatal?</i></p>
Week 7	Week 8
<p><u>Key Terms:</u></p> <p>Secular – Not religious Renaissance – A revival or renewal of something Alchemy – An early form of chemistry. Alchemists tried to turn one material into another</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • Thomas Sydenham – In the 1660s Thomas Sydenham begins using clinical observation to diagnose patients. Begins to treat symptoms collectively as opposed to individually • Vesalius – In 1543 published 'On the Fabric of the Human Body'. He corrected many of Galen's errors and provided detailed anatomical diagrams <p><u>This week's enquiry is...</u> <i>Why was the role of key individuals significant in this period?</i></p>	<p><u>Key Terms:</u></p> <p>Humanism – A philosophy that rejects divine intervention and instead looks to place responsibility on humans Clinical observation – Observing a patient objectively in order to try and make a diagnosis Royal Charter – When a monarch grants a person/company permission to do something</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 1662, Royal Society – Charles II grants a group of scientists, philosophers and thinkers a Royal Charter – they encouraged discussion and challenging of long-held ideas <p><u>This week's enquiry is...</u> <i>What was the Royal Society and why did it encourage medical progress?</i></p>

History

Week 9	Week 10
<p>Key Terms:</p> <p>Dissolution – When something is forced to disappear Institution – An organisation founded for a particular purpose e.g the church</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Dissolution of the Monasteries – In 1536, Henry VIII gets rid of all monasteries in England. This forces many hospitals to close down as they had been attached to the church. • Changes to hospitals – Hospitals during this period had begun to admit more people and were even forming contracts with physicians who would visit the sick while they were there. <p>This week's enquiry is... <i>In what ways were Renaissance hospitals different/similar to Medieval hospitals?</i></p>	<p>Key Terms:</p> <p>Dissection – Very detailed analysis of a body but removing parts of it via surgery Apothecary – A person who prepared and sold ointments and traditional medicines</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • William Harvey – Trained in Padua before returning to England to become the physician to James I • Valves and circulation – Proved that blood only flows in one direction and towards the heart. He also proved that blood must pass from arteries to veins through tiny passages – we now know these as capillaries <p>This week's enquiry is... <i>How significant were Harvey's discoveries?</i></p>
Week 11	Week 12
<p>Key Terms:</p> <p>Quack – Fake physicians who looked to take advantage of the sick during times of panic by selling them fake cures Quarantine – A period of isolation in order to try and prevent the spread of a contagious disease</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • 1665 – In 1665 there was another large outbreak of the bubonic plague • 100,000 – 100,000 Londoners died during the Great Plague – that equated to 1/5 people. • Eyam, Derbyshire – Whole village quarantined. Nobody allowed in, or out. 273 out of 350 villagers died. <p>This week's enquiry is... <i>Explain how reactions to the Great Plague differed to the Black Death</i></p>	<p>CAREERS Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/a0z</p> 

Hospitality and Catering

Week 1	Week 2	Week 3
<p>Hospitality - Hospitality is kindness in welcoming guests. Catering – sells food and/or drink Customer – a person who buys goods or services Establishment/Types of provider – a Hospitality and catering business providing food, drink, accommodation. eg hotel, café, pub, B&B</p> <ul style="list-style-type: none"> Accommodation e.g. hotels and guest houses Food and drink e.g. cafes and restaurants Meetings and events e.g. hotels and conference centres . Entertainment and leisure e.g. spa , leisure centres and golf clubs. Travel and tourism e.g. aeroplanes , cruise ships and hotels 	<p>Practical Baseline assessment – Scones Type of provider: Café – serves drinks and cakes/savoury items. Type of food service style: Table or counter service. Relaxed Cream Tea – scones, jam and cream Food Preparation – rubbing in (butter to flour with finger tips – light texture/crumby), baking powder – helps to rise cakes. Dough – flour and butter mixture, knead – lightly to bring together into a ball. Shape – use cutters. Glaze: egg wash to give golden colour and shine. Whisk – cream to add air, Cooking techniques: baking (in oven no oil to brown and rise)</p> <p>ENQUIRY TASK 1: Research type of hospitality and Catering provider, what services do they offer – print out if you can</p>	<p>Services provided by Hospitality and Catering Establishments – accommodation, drinks, snacks, wifi, spa, swimming pool, parking Types of service - table(waiter service to table), counter, (guest go up and order) gueridon - cooked at your table), transport/tray – eg aeroplane meal, buffet (help yourself). Vending machine cheap, convenient</p> 
Week 4	Week 5	Week 6
<p>Practical – Gourmet Burger Bar - Burger, chips, salad and mayo Type of Provider: Restaurant – food and drink Style of food service: Table service, waiter High Risk – beef – ecoli food poisoning Brioche – enriched dough bap. Mayonnaise – emulsion – whisk to bring together fat and liquid. Eggs – salmonella Food preparation skills – kneading (stretch out gluten), prove – leave at room temperature for 1 hour to let off carbon dioxide (yeast) stretches dough for it to rise. Bind – bring together using egg, burgers. Fry – frying pan using oil to brown, sear, make golden</p>	<p>Star Ratings/awards – Tripadvisor/reviews</p> <ul style="list-style-type: none"> Hotels are judged on quality using a star system 5* is best (AA) or Diamond rating (Europe/worldwide) Food in restaurants is judged in quality and can be awarded Michelin stars if very good or rosettes  <p>ENQUIRY TASK 2: Find out what a 5* and 2* hotels Offer - compare</p>	<p>Assessment Practical: Chip Shop – Fish & Chips frozen</p> <p>Type of establishment: takeaway restaurant Type of food service: Counter Food preparation techniques: batter – egg and flour to coat food, peel, baton, puree (vegetables or fruit blend to a smooth paste) Cooking techniques: shallow frying 1cm of oil crisp in a frying pan – batter, boil, simmering</p>

Hospitality and Catering

Week 7 - Jobs	Week 8	Week 9
<p>Catering – Head Chef, Sous Chef (2nd chef), Chef de partie (chef of a section eg pastry), Commis (trainee chef), porter (dishes) Front of House – Waiter, restaurant manager, hotel manager, receptionist, bar manager, sommelier (wine waiter), housekeeper, Caretaker/maintenance manager. EHO – Environmental Health Officer – checks kitchens for food poisoning – scores on the door rating 1-4. Types of contract: full time 38-40 hours, part-time 16-20 hours per week, seasonal (holidays times eg Christmas), zero contract – call as and when needed – no holiday pay/sickness etc) Hourly Rates of pay – minimum wage, apprentice wage. Restaurants shift work morning/day/evening – weekends/holidays ENQUIRY TASK 3: Research a job www.caterer.com. What are the responsibilities/ hours/pay</p>	<p>Practical: Kitchen Brigade – Team – Indian Restaurant – Curry Multi-cultural: food from different countries – Indian Rice – Bacillus cereus food poisoning Spices – hot and flavoured seasoning Curry, naan bread, chutney (fruity/spicy dip), coriander herbs, rice. Food Preparation: Kneading (stretching out the gluten to help rise bread), Proving – leaving room temperature for 1 hour double in size carbon dioxide – gives light airy texture. Cooking: Frying – brown with oil in a frying pan, boil – 100oc rice and simmering lower heat to continue cooking.</p>	<p>Skills and attributes – good communication, team player, organised for hospitality and catering Kitchen staff: Knowledgeable about the dished served. Skilled on how to prepare food Have food hygiene and safety knowledge Organised. Have the ability to work efficiently under pressure. Front of House (staff who see customers) – good at dealing with customer, friendly, professional, polite, knowledgeable Managers: Knowledgeable about the dished served. Skilled on how to prepare food and manage staff. Have food hygiene and safety knowledge. Organised . Ability to work efficiently under pressure . ENQUIRY TASK 4: Find out what qualification you need to be a Chef and what food hygiene exam</p>
Week 10	Week 11	Week 12
<p>Practical – Patisserie - Raspberry moussecake Type of Provider – Patisserie Style of service – table/waiter Gelatine – thicken agent from animal bones to set desserts – jelly/mousse Genoise sponge – very light sponge lots of air – whisking, mousse – creamy/fruity set dessert with gelatin. Food Preparation skills – Whisking – electric whisk to aerate (add air) to cream, creaming cake making method (cream butter and sugar – adds more air), all in one method – all in together whisk Coulis – fruit puree to drizzle on plate, piping – decorate finish using cream or icing to decorate cakes/desserts. ENQUIRY TASK 5: Revise key words/skills from week 1 – 10 for formal theory assessment next week.</p>	<p>Formative Theory Assessment and Practical Assessment - Pie - Chicken Type of provider: Fine Dining Style of Food Service: Table service, silver service. Shortcrust pastry – crumbly texture, short gluten strands – no kneading). Food Preparation skills: Rubbing in method (butter and flour) food processor (can use to rub in the butter to flour), roll – pastry with a rolling pin (line – tins with pastry), fluting – decorative edge to pastry) roux – (butter and flour to make a paste to thicken the sauce for the pie), veloute sauce – white sauce made with roux and chicken stock), julienne (match sticks for carrots), mash (boil, simmer and mash with butter until smooth), glaze (with wash for golden colour) quenelle (barrel shape – presentation)</p>	<div data-bbox="1601 885 1944 1232" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4sw</p>

iLife - PSHE

We would always encourage you to speak to the people you live with or someone in school if you have a worry or a problem. If you can't, or you want to read more about an issue affecting you or someone you know, here are some useful websites and phone numbers. They offer free, confidential advice and support.



General

Childline—www.childline.org
0800 1111

Offers information and advice, 1-2-1 confidential chat (text, email, phone) and support from message boards on a wide range of issues.

This website is one of the most useful you will find and can direct you to help or information about all the other topics mentioned here, and more...

Safety, bullying and abuse

Child Exploitation and Online Protection (CEOP) - www.ceop.police.uk

Report inappropriate online contact, any unlawful misuse of social media, or a child protection concern to a trained police officer. You can also click this button on your platform:



NSPCC—www.nspcc.org.uk 0800 1111
Information and help about on- and offline abuse

National Bullying Helpline—www.nationalbullyinghelpline.co.uk
0845 22 55 787



Health

School nurse—07520 631722
Text only for confidential advice

National Health Service—www.nhs.uk
Research and useful information on health issues

Walk-In Centre, RD&E Hospital—01392 411611
Non-urgent and sexual health needs

Walk-In Centre, 31 Sidwell Street—01392 276892
Sexual health



Healthy relationships

Thinkuknow—www.thinkuknow.co.uk
Age-related help and advice about on- and offline relationships, and consent.



Drugs and alcohol

YSmart—ysmart.org.uk 01271 388162
Information about substance misuse, advice, recovery and treatment

Homeless, skills, advice, getting your voice heard

Young Devon—www.youngdevon.org
01392 331 666

Local support for young people facing a crisis



Health and well-being

Samaritans—www.samaritans.org
Call 116 123 for emergency help
Email jo@samaritans.org (response within 24 hours)

Papyrus—papyrus-uk.org 0800 068 41 41
Urgent help for you or someone you know

YoungMinds—youngminds.org.uk
Text YM to 85258 for urgent help

Happy Maps—www.happymaps.co.uk
Advice on everything from sleep problems to anxiety, bullying, self-harm, coping with divorce, autism, ADHD, gender dysphoria and more

Kooth—www.kooth.com
Mental health advice and support, live chat support



LGBTQ+

X-PLORE—www.lgbtqyouthdevon.org.uk
Local support and groups for LGBTQ+ young people

If someone's life is at risk, you should dial 999

iMedia

Your homework is not to copy this out! Your homework is to spend your allocated homework time on each LO

Week 1 – 3 See Mark Scheme on Next Page	Week 4 - 6 See Mark Scheme on Next Page	
<p>Task 1 – Understanding comic strips and their creation LO1</p> <p>You need to investigate comic strip:</p> <ul style="list-style-type: none"> • Genres • Origins • History • Target audiences • characters and their physical and non-physical characteristics. <p>Ensure to include</p> <ul style="list-style-type: none"> • Investigate the various software choices and tools that are available to create a multi page comic strip • Explain how panel placement and layout can create the flow of the story of the comic strip. 	<p>Task 2 - Planning your creation of the comic strip LO2</p> <p>You will need to generate the ideas for the multi page comic strip</p> <ul style="list-style-type: none"> • Interpret your client’s requirements for the multi page comic strip • Identify the characteristics of the target audience. <p>Creating a plan You need to:</p> <ul style="list-style-type: none"> • Create an original script and storyline • Create a storyboard. <p>Resources and assets You need to:</p> <ul style="list-style-type: none"> • Identify assets that are needed to create the multi page comic strip and explain how you will use them • Identify any resources you will need to create your multi page comic strip and explain how you will use them. <p>Legal restrictions</p> <p>The multi page comic strip will be used in a commercial context. You need to:</p> <ul style="list-style-type: none"> • explain any legal issues and restrictions that need to be considered when creating the multi page comic strip. 	
Week 7 – 9 See Mark Scheme on Next Page	Week 10 - 11 See Mark Scheme on Next Page	Week 12 - Careers’ Focus
<p>Task 3 - Building your comic strip LO3</p> <p>Obtaining assets for use in the multi page comic strip</p> <ul style="list-style-type: none"> • obtain and store the assets required for the multi page comic strip. <p>Create the multi page comic strip</p> <ul style="list-style-type: none"> • Lay out the panels as appropriate to enable the story to flow • Insert assets into the panel layout and establish focal points within the panels • Incorporate the planned script into the visual storyline • Save the multi page comic strip in a format appropriate to the software, using version control throughout and using appropriate file and folder names and structures • Export the multi page comic strip in a file format appropriate to the client requirements 	<p>Task 4 - Reviewing your Comic Strip LO4</p> <p>Now the multi page comic strip has been produced, you need to consider whether you have met all the requirements of your client’s initial brief. You will also need to review the overall quality of the product and identify any improvements that could be made to it.</p> <p>Your review must include</p> <ul style="list-style-type: none"> • Review how well the multi page comic strip meets the client’s requirements • Identify how the multi page comic strip could be improved • Describe areas for further development, giving reasons for your choices 	<p>Please open this link and complete your careers focus homework on iMedia</p>  <p>https://links.iscaexeter.co.uk/1cb</p>

iMedia

Week 1 – 3 Mark Scheme

LO1: Understand comic strips and their creation		
MB1: 1-3 marks	MB2: 4-6 marks	MB3: 7-9 marks
Demonstrates a limited understanding of the origins and history of multipage comic strips, which shows a limited awareness of their target audiences.	Demonstrates a sound understanding of the origins and history of multipage comic strips and shows some awareness of their target audiences.	Demonstrates a thorough understanding of the origins and history of multipage comic strips and shows a clear awareness of their target audiences.
Demonstrates a basic understanding of comic strip characters and limited knowledge of their respective physical and non-physical characteristics.	Demonstrates a sound understanding of comic strip characters and some knowledge of their respective physical and non-physical characteristics.	Demonstrates a thorough understanding of comic strip characters and detailed knowledge of their respective physical and non-physical characteristics.
MB1: 1-2 marks	MB2: 3-4 marks	MB3: 5-6 marks
Identifies software that can be used to create a comic strip and some of the tools that can be used in its creation.	Identifies software that can be used to create a comic strip and a range of tools that can be used in its creation.	Describes software that can be used to create a comic book, accurately describing a range of tools that can be used and explains how these relate to the layout and features of the pages.
Demonstrates a basic understanding of panel placement and story flow.	Demonstrates a sound understanding of panel placement and story flow.	Demonstrates a thorough understanding of panel placement and story flow.

Week 4 - 6 Mark Scheme

LO2: Be able to plan a multipage comic strip		
MB1: 1-4 marks	MB2: 5-7 marks	MB3: 8-9 marks
Produces an interpretation from the client brief for a multipage comic strip which meets few of the client requirements.	Produces an interpretation from the client brief for a multipage comic strip which meets most of the client requirements.	Produces an interpretation from the client brief for a multipage comic strip which fully meets the client requirements.
Produces a limited identification of target audience requirements.	Produces a clear identification of target audience requirements.	Produces a clear and detailed identification of target audience requirements.
Creates a script and storyline with some elements of originality.	Creates a script and storyline which is mostly original.	Creates a script and storyline which is fully original and appropriate for use in a multipage comic strip.
Draws upon limited skills/knowledge/understanding from other units in the specification.	Draws upon some relevant skills/knowledge/understanding from other units in the specification.	Clearly draws upon relevant skills/knowledge/understanding from other units in the specification.

Week 7 – 9 Mark Scheme

LO3: Be able to produce a multipage comic strip		
MB1: 1-4 marks	MB2: 5-7 marks	MB3: 8-9 marks
Sources and stores a limited range of assets for use, occasionally using methods which are appropriate.	Sources and stores a range of assets for use, mostly using methods which are appropriate.	Sources and stores a wide range of assets for use, consistently using methods which are appropriate.
Prepares the page layout for the comic strip with panels, not all of which are complete.	Prepares the page layout for the comic strip with panels which are mostly complete.	Prepares the page layout for the comic strip with complete and detailed panels.
MB1: 1-3 marks	MB2: 6-8 marks	MB3: 10-12 marks
Inserts some basic assets into the comic strip panels, sometimes establishing appropriate focal points.	Places assets into the prepared panels to produce an illustrated story over several pages, establishing some key focal points.	Places assets into the prepared panels to produce an illustrated story over several pages, consistently establishing key focal points for the story.
Creates a story and narrative within the strip of limited coherence, which is occasionally in line with the plan.	Integrates the story with the visual storyline to produce a mostly coherent comic strip storyline, which mostly follows the plan.	Integrates the story with the visual storyline to produce a fully coherent comic strip storyline, which closely follows the plan.
Saves and exports the comic strip occasionally using appropriate formats.	Saves and exports the comic strip mostly using appropriate formats.	Saves and exports the comic strip consistently using appropriate formats.
Occasionally saves electronic		

Week 10 - 12 Mark Scheme

LO4: Be able to review a multipage comic strip		
MB1: 1-2 marks	MB2: 3-4 marks	MB3: 5-6 marks
Produces a review of the finished comic strip which demonstrates a limited understanding of what worked and what did not, making few references back to the brief.	Produces a review of the finished comic strip which demonstrates a reasonable understanding of what worked and what did not, mostly referencing back to the brief.	Produces a review of the finished comic strip which demonstrates a thorough understanding of what worked and what did not, fully referencing back to the brief.
Review identifies areas for improvement and further development of the finished comic strip, some of which are appropriate and sometimes explained .	Review identifies areas for improvement and further development of the finished comic strip, which are mostly appropriate and explained well.	Review identifies areas for improvement and further development of the finished comic strip, which are wholly appropriate and justified .

Mathematics

- 1) Go to sparxmaths.uk
- 2) Login using your username and password
- 3) Complete your compulsory homework as follows:
 - Write the bookwork code
 - Write the question, your working and your answer
 - Mark your answer in a different colour
 - If you are struggling, watch the video
 - Your homework is only complete when you have answered **every** question correctly.
 - If you are really struggling with one question, complete the other one and ask your maths teacher for help the next day.

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Homework *Thursday 1st June 2021*

Task 1

D40 $12 + 13 = 25$ ✓

E50 $4 \times 3 + 2 \times 5 =$
 $12 + 10 = 22$ ✓

F60 $\frac{12}{5} \div \frac{18}{3} =$
 $\frac{12}{5} \times \frac{3}{18} =$
 $\frac{36}{90} = \frac{2}{5}$ ✓

H50 $\frac{1}{19} + \frac{1}{7} = \frac{1}{21}$ ✗

J90 $\frac{1}{8} + \frac{1}{4} = \frac{1}{8} + \frac{2}{8}$
 $= \frac{3}{8}$ ✓

K01 $\frac{475}{152} = \frac{55}{19}$ ✓

B11 Area = 3×14
 $= 42$ Area = 42 cm^2 ✓

C21 $\frac{1}{53} + \frac{1}{77} = \frac{1}{37} + \frac{2}{33}$
 $= \frac{4}{33}$ ✓

D31 $3^2 = 3 \times 3$
 $= 9$ ✓

E41 $P(\text{yellow}) = \frac{3}{6}$ ✗

F51 $P(\text{black}) = \frac{4}{8}$
 $= \frac{1}{2}$ ✓

Task 2

G61 All the marbles are green.
The probability of
choosing a purple marble
is impossible ✓

H71 $P(\text{odd}) = \frac{5}{8}$ ✓

Task 3

J21 $\frac{1}{2}$ ✓

K32 $\frac{1}{2}$ ✓

L41 B, A, C ✓

C03 4 white blue balls ✓

D13 4 black, 2 red, 2 blue
The probability of picking
black is $\frac{2}{5}$: Bag F ✓

E13 $\frac{1}{5}$ ✓



**WEEK 12
CAREERS WEEK**

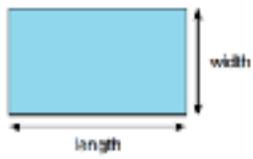
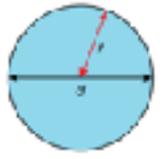
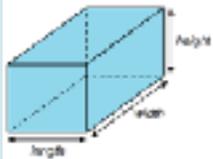
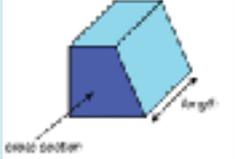
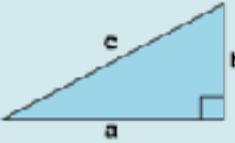
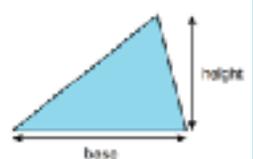
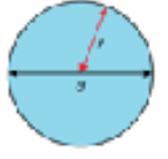
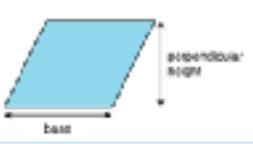
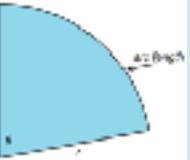
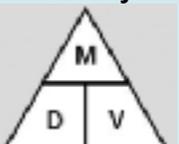
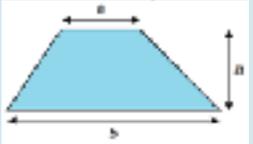
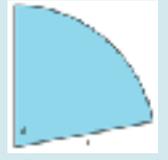
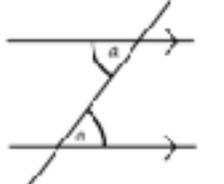
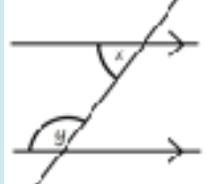
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[https://
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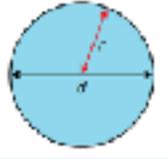
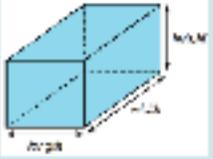
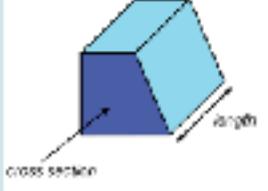
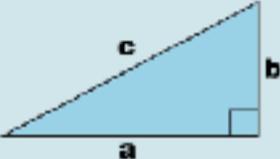
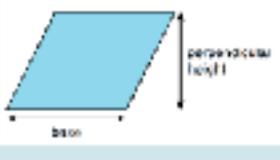
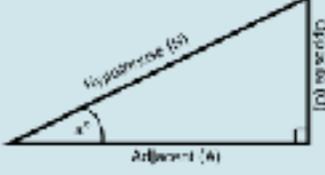
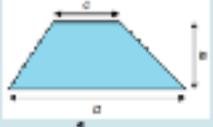
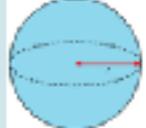
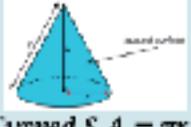
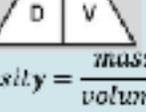
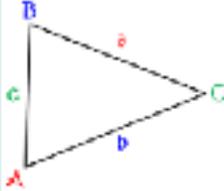


Mathematics – Core

Your Maths Teacher will specify which formulae you must learn.

<p>Area of a Rectangle</p>  <p>$length \times width = l \times w$</p>	<p>Circumference of a circle</p>  <p>$C = \pi \times d$</p>	<p>Volume of a Cuboid</p>  <p>$Length \times width \times height$ $V = l \times w \times h$</p>	<p>Volume of a Prism</p>  <p>$Area\ of\ a\ cross\ section \times length$</p>	<p>Pythagoras Theorem</p>  <p>$a^2 + b^2 + c^2$</p>																								
<p>Area of a Triangle</p>  <p>$\frac{1}{2} \times base \times height = \frac{bh}{2}$</p>	<p>Area of a circle</p>  <p>$A = \pi \times r^2$</p>	<p>Speed</p>  <p>$speed = \frac{distance}{time}$</p>	<p>Compound Interest</p> <p>P = principal amount r = Interest rate n = number of years/months/day</p> <p>$Total\ Accrued = P \left(1 + \frac{r}{100}\right)^n$</p>	<p>Trigonometric Formulae</p> <p>$\sin x = \frac{opp}{hyp}$ $\cos x = \frac{adj}{hyp}$ $\tan x = \frac{opp}{adj}$</p>																								
<p>Area of Parallelogram</p>  <p>$base \times perp.\ height$</p>	<p>Arc Length</p>  <p>$\frac{\theta}{360} \times \pi \times d$</p>	<p>Density</p>  <p>$density = \frac{mass}{volume}$</p>	<p>Index Laws</p> <p>$a^n \times a^m = a^{n+m}$ $a^n \div a^m = a^{n-m}$ $(a^n)^m = a^{n \times m}$</p>	<p>Exact Values of Trigonometry Functions</p> <table border="1" data-bbox="1576 826 1980 1054"> <thead> <tr> <th></th> <th>0°</th> <th>30°</th> <th>45°</th> <th>60°</th> <th>90°</th> </tr> </thead> <tbody> <tr> <td>sin θ</td> <td>0</td> <td>$\frac{1}{2}$</td> <td>$\frac{\sqrt{2}}{2}$</td> <td>$\frac{\sqrt{3}}{2}$</td> <td>1</td> </tr> <tr> <td>cos θ</td> <td>1</td> <td>$\frac{\sqrt{3}}{2}$</td> <td>$\frac{\sqrt{2}}{2}$</td> <td>$\frac{1}{2}$</td> <td>0</td> </tr> <tr> <td>tan θ</td> <td>0</td> <td>$\frac{\sqrt{3}}{3}$</td> <td>1</td> <td>$\sqrt{3}$</td> <td>Not defined</td> </tr> </tbody> </table>		0°	30°	45°	60°	90°	sin θ	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	cos θ	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	tan θ	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Not defined
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<p>Area of Trapezium</p>  <p>$\frac{1}{2}(a + b)h$</p>	<p>Area of a Sector</p>  <p>$\frac{\theta}{360} \times \pi \times r^2$</p>	<p>Pressure</p>  <p>$pressure = \frac{force}{area}$</p>	<p>Corresponding angles are equal</p> 	<p>Alternate Angles are equal</p> 	<p>Co-interior angles add to 180</p> 																							

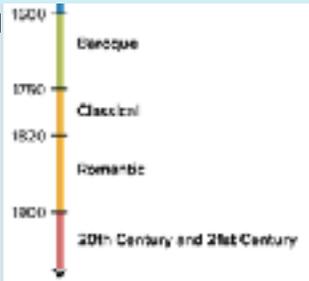
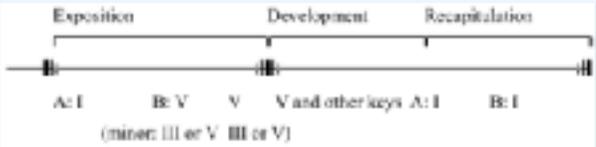
Mathematics - Higher

<p>Area of a Rectangle</p>  <p>$A = \text{length} \times \text{width} = l \times w$</p>	<p>Circles</p>  <p>Circumference: $C = \pi \times d$ Area: $A = \pi \times r^2$</p>	<p>Volume of a Cuboid</p>  <p>$\text{Length} \times \text{width} \times \text{height}$ $V = l \times w \times h$</p>	<p>Volume of a Prism</p>  <p>$\text{Vol} = \text{Area of a cross section} \times \text{length}$</p>	<p>Pythagoras Theorem</p>  <p>$a^2 + b^2 = c^2$</p>																								
<p>Area of Parallelogram</p>  <p>$A = \text{base} \times \text{perp. height}$</p>	<p>Sectors</p>  <p>Arc Length: $\frac{\theta}{360} \times \pi \times d$ Area Sector: $\frac{\theta}{360} \times \pi \times r^2$</p>	<p>Speed</p>  <p>$\text{speed} = \frac{\text{distance}}{\text{time}}$</p>	<p>Compound Interest $P = \text{principal amount}$ $r = \text{Interest rate}$ $n = \text{number of years/months/day}$</p> <p>$\text{Total Accrued} = P \left(1 + \frac{r}{100}\right)^n$</p>	<p>Trigonometric Formulae</p>  <p>$\sin x = \frac{\text{opp}}{\text{hyp}}$ $\cos x = \frac{\text{adj}}{\text{hyp}}$ $\tan x = \frac{\text{opp}}{\text{adj}}$</p>																								
<p>Area of a Triangle</p>  <p>$A = \frac{b \times h}{2}$</p> <p>Area of Trapezium</p>  <p>$A = \frac{1}{2} (a + b)h$</p>	<p>Sphere</p>  <p>S. A. = $4\pi r^2$ $V = \frac{4}{3} \pi r^3$</p> <p>Cone</p>  <p>Curved S. A. = $\pi r l$ $V = \frac{1}{3} \pi r^2 h$</p>	<p>Density</p>  <p>$\text{density} = \frac{\text{mass}}{\text{volume}}$</p> <p>Pressure</p>  <p>$\text{pressure} = \frac{\text{force}}{\text{area}}$</p>	<p>Quadratic Formula</p> <p>To solve $ax^2 + bx + c = 0$</p> <p>$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$</p> 	<p>Exact Values of Trigonometry Functions</p> <table border="1" data-bbox="1624 933 1960 1093"> <thead> <tr> <th></th> <th>0°</th> <th>30°</th> <th>45°</th> <th>60°</th> <th>90°</th> </tr> </thead> <tbody> <tr> <td>$\sin \theta$</td> <td>0</td> <td>$\frac{1}{2}$</td> <td>$\frac{\sqrt{2}}{2}$</td> <td>$\frac{\sqrt{3}}{2}$</td> <td>1</td> </tr> <tr> <td>$\cos \theta$</td> <td>1</td> <td>$\frac{\sqrt{3}}{2}$</td> <td>$\frac{\sqrt{2}}{2}$</td> <td>$\frac{1}{2}$</td> <td>0</td> </tr> <tr> <td>$\tan \theta$</td> <td>0</td> <td>$\frac{1}{\sqrt{3}}$</td> <td>1</td> <td>$\sqrt{3}$</td> <td>Not defined</td> </tr> </tbody> </table> <p>Area of a Triangle : $A = \frac{1}{2} ab \sin C$</p> <p>Sine Rule: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$</p> <p>Cosine Rule: $a^2 = b^2 + c^2 - 2bc \cos A$</p>		0°	30°	45°	60°	90°	$\sin \theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$\tan \theta$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	Not defined
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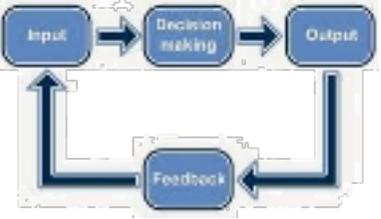
Music

Week 1	Week 2	Week 3
<p>Orchestra – A large group of instrumental players typically used in the Classical or Film music genres.</p> <p>Leitmotif – a small cell of music used to represent a character or place.</p> <p>Underscore – the music in the background of a scene to create mood.</p> <p>Mickey Mousing – when the music mirrors the action.</p>	<p>Diagetic Music – Music that is inside the sound world (e.g characters can hear it)</p> <p>Non-diatgetic music – Music that is not in the soundworld. The characters cannot hear it. Such as the underscore.</p> <p>Augment – to stretch something</p> <p>Diminish – to shrink something.</p> <p>Invert – to put something inside out of upside down.</p>	<p>Soundscape – a pallet of sounds to create a mood and/or location.</p> <p>Sound world – the selection of sounds used by a a composer.</p> <p>Composers of interest – John Williams, Hans Zimmer, Danny Elfman, Ennio Morricone.</p>
<p><u>Enquiry task:</u> Pick an instrument in the orchestra and investigate its sounds, origins and pieces specifically for it. Write your findings in your book.</p>	<p><u>Enquiry task:</u> Watch a film of your choice and sit with a notebook. Make notes about the music in it. The mood, diatgetic and non-diatgetics sounds. Leitmotifs? Etc. Be prepared to talk about them in class.</p>	<p><u>Enquiry Task:</u> Using the following YouTube channel – The Musicologist – Watch the 60 second videos on the composers in the box above. How do they differ? Write your thoughts in your book.</p>
Week 4	Week 5	Week 6
<p>Dissonance – When notes / music clashes.</p> <p>Consonance – When music sounds nice together.</p> <p>Major – happy and bright sounding chords</p> <p>Minor – Sad and spooky sounding chords.</p> <p>Extended chords – chords with added notes or that span many octaves.</p>	<p>Arrangement markers – places to mark your scene on your DAW</p> <p>Project management – using time in seconds and bars (measures) and beats</p> <p>Tracks – the layers to your work</p> <p>Orchestration – the art of using Orchestral Instruments to create sound worlds.</p>	<p>Types of transitions:</p> <p>Camera change – from one camera angle to the next</p> <p>Angle change – as above</p> <p>Key change – when the music changes musical key</p> <p>Dynamic change – when the music changes volume dramatically</p> <p>Character change – using leitmotifs to signal a change in character focus.</p>
<p><u>Enquiry task:</u> Using Musictheory.net explore the chords within a musical key. Which ones are major and which are minor? Do any not fit into this category? Write your findings in your book.</p>	<p><u>Enquiry Task:</u> 1 orchestra, 30 film themes: https://www.youtube.com/watch?v=bUL8NQy-3gw Watch the first 5 soundtracks in the video and comment on the devices above in each.</p>	<p><u>Enquiry Task:</u> Pick a video from Guy Michalmore’s YouTube channel (it should be about film scoring or composing for films). Make a set of flashcards about the things he talks about.</p>

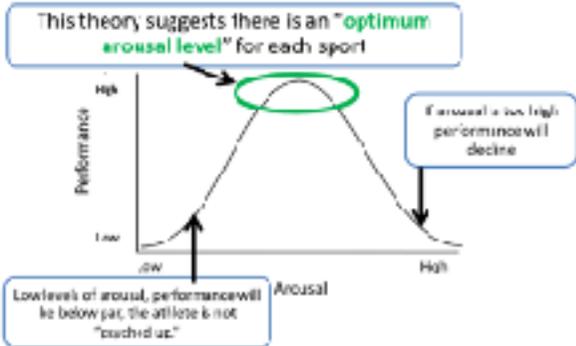
Music

Week 7	Week 8	Week 9
<p>We split Western Classical Music History into defined 'eras'. They are in this picture here.</p>  <p>Learn the dates and titles of them.</p>	<p>Primary Chords</p>  <p>Chords 1, 4, and 5 in any key. Above are these chords in C major.</p>	<p>Ways to develop a motif: Repeat it Augmentation – Stretch the duration or the intervals between notes Diminution – Shrink the duration or intervals Modulate – change the key (from major to minor or to the dominant) Invert – change its direction (if up make it down etc.)</p>
<p><u>Enquiry Task:</u> Continue your research from the lesson into the era you were given and one that interests you. Find notable composers and recordings.</p>	<p><u>Enquiry Task:</u> Copy the primary chords out in C. Can you find the Primary chords in a different key/s? Remember to use the correct # and b notes.</p>	<p><u>Enquiry Task:</u> Looking at the Beethoven Sonata Pathetique – count the ways in which he manipulates the original motifs. Highlight them on your score and/or write about them.</p>
Week 10	Week 11	Week 12
<p>Please make sure you are really familiar with this diagram – particularly the use of I (Tonic) and V (Dominant) keys.</p> 	<p>Symphony Orchestra – larger orchestra Pianoforte – the official name for piano Extended chord – when you add more than the roots notes to a chord Modulation – when the music changes key part way through Sustain pedal – the far right pedal on a piano that makes the notes ring out</p>	<p>Careers:</p> 
<p><u>Enquiry Task:</u> (Listening) Pick a sonata (Mozart, Schubert, Haydn, Clementi) and try to identify the times when the sections change from Exposition, repeated, development to recapitulation etc.</p>	<p><u>Enquiry Task:</u> Draw up a table that has Film Music on one side and Classical on the other. List the characteristics of both with notable composers and pieces. Are there any similarities / crossovers?</p>	<p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

PE GCSE

Week 1 – Classification of Skill	Week 2 – Goal Setting	Week 3 – Information Processing
<p>Skill is “A learned action/behaviour with the intention of bringing about predetermined results, with maximum certainty and minimum outlay of time and energy”</p> <p>Ability is “Inherited, traits that determine an individual’s potential to learn or acquire a skill”</p> <p>Skills are classified into 4 different continua:</p> <p>Basic - skills have a limited amount of information to process.</p> <p>Complex - skill involves a high level of decision-making and has a large cognitive or thinking element to it and co-ordination</p> <p>Self-paced skills are at the control of the performer. The rate of execution is decided before execution.</p> <p>Externally paced skills are controlled by factors out of the control of the performer, who may have to react to external conditions. i.e. games activities.</p> <p>Open skills are ones that is affected by the sporting environment. The performer has to make decisions in response to their surroundings.</p> <p>Closed skills involves less decision making because it has a predictable environment. The performer can take their time to execute the skill.</p> <p>Fine skills have small, delicate muscle movements.</p> <p>Gross skill uses large muscle group movements.</p> <p>Question: For each of the above, identify 3 skills</p>	<p>There are two types of Goals:</p> <ol style="list-style-type: none"> Outcome Goals focus on <u>end result</u>/winning. i.e. Winning a fencing competition Performance Goals focus on <u>personal</u> standards to be achieved. Performers are concerned with previous personal bests with <u>no comparison to others</u>. i.e. To make more tackles this game than last game. <p>When setting goals we use the SMART process:</p> <div style="display: flex; flex-direction: column; gap: 10px;"> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e0f0ff;"> <p>S Specific – targets must to the point and specific to the performers sports/ needs.</p> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e0f0ff;"> <p>M Measurable – can it be measured & compared.</p> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e0f0ff;"> <p>A Accepted – targets are accepted by performer & coach.</p> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e0f0ff;"> <p>R Realistic – matched to the performers skill level.</p> </div> <div style="border: 1px solid #ccc; padding: 5px; background-color: #e0f0ff;"> <p>T Time bound – Set for a particular time to be completed.</p> </div> </div> <p>Question: Set yourself a goal, either outcome or performance. Show how you have applied the SMART process</p>	<div style="text-align: center;">  </div> <p>Input: Performer takes in information from the environment/ display (senses – sight, hearing or feel). They choose which sense (cue/ stimulus) is the most important to them at that time. This is called selective attention - the filtering process whereby they pick out the most relevant part</p> <p>Decision Making An appropriate response is chosen (movement/skill) from memory. Perhaps one they have used in this situation before. If a memory or past experience is relevant to what is required, it is compared to the information in the Short Term Memory so that a suitable decision can be made.</p> <p>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.</p> <p>Feedback. Information is received by the performer via: Intrinsic Feedback - Self thoughts/emotions and or kinaesthetic feedback physical sensation of movement felt by the performer Extrinsic Feedback - Outside coach/spectators/ videos</p>

PE GCSE

Week 4 – Guidance	Week 5 – 6 Types of Feedback	Week 6 – Arousal Theory
<p>There are 4 different types of guidance:</p> <p>Visual This is guidance that 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. Used for all levels of performer but especially useful for beginners who do not know what the skill should look like and need to see it to replicate.</p> <p>Verbal Verbal guidance is provided by another person speaking to you. This could be your coach/teacher talking to highlight technique This is used to give quick feedback, usually to a higher level performer who understands the terminology</p> <p>Manual Guidance Manual guidance is the physical moving of the performer. E.g. coach supporting the movement through physical touch. This is used when skills are new and the athlete may not know how it should feel. Also, when skills are dangerous such as a somersault</p> <p>Mechanical Guidance Mechanical guidance is using mechanical aids to assist a performer. E.g. using a float in swimming or a harness in trampolining. The main reason for this is to be safe</p>	<p>Positive feedback Informs athlete what was correct about movement. Performer knows if movement is correct and are provided with a reference point for future attempts. Motivates athletes</p> <p>Negative feedback Inform athlete what was incorrect about movement. Must include information on the action(s). Required for performer to achieve correct movement.</p> <p>Knowledge of results (KR) Given by coach/ teacher. (can sometimes see it yourself. E.g. how far you have jumped in long jump) Beginners may need this to understand if what they did was successful or not e.g. Free throw: score or miss</p> <p>Knowledge of performance (KP) Provides more detail about how well performer did, regardless of result. May relate to specific technique or movement produced. Deals with quality of performance e.g. Free throw: excellent elbow extension</p> <p>Extrinsic Feedback Feedback from an external source is received from an outside source via vision (seeing a score) or hearing (coach/ teacher). Beginners need and rely heavily on feedback from others (extrinsic).</p> <p>Intrinsic Feedback Feedback from within (kinaesthetic feel) comes from the performer them self. How something feels based on information from senses or muscles. Performers ‘feel’ if a skill has been performed well This feeling from the muscles and joints is called kinaesthetic feedback feel’ of a golf swing if a good shot</p>	<p>Arousal is a physical and mental (physiological and psychological) state of alertness/readiness, varying from deep sleep to intense excitement/alertness.</p> <p>The ‘inverted-U theory’ Optimal performance occurs when a performer reaches an optimal level of arousal.</p>  <p>Gross movement skills require higher levels of arousal</p> <p>Fine movement skills require lower levels of arousal as movements are precise</p> <p>Stress management techniques:</p> <ul style="list-style-type: none"> • deep breathing (Slow, deep breaths whilst relaxed) • mental rehearsal/visualisation/imagery (Cognitive relaxation techniques involving control of mental thoughts and imagining positive outcomes. • positive self-talk (Developing cognitive positive thoughts about your own performance)

PE GCSE

Week 7 – Aggression	Week 8 – Personality	Week 9 – Motivation
<p>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.</p> <p>Direct Aggression An aggressive act that involves physical contact with another person/player. Eg. Rugby, Boxing</p> <p>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</p> <p>Questions:</p> <ol style="list-style-type: none"> List 5 different examples in sport where direct aggression may be used to gain an advantage over your opponent List 5 different examples in sport where indirect aggression may be used to gain an advantage over your opponent 	<p>There are 2 different types of personality:</p> <p>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).</p> <p>Introverts tend to like sports which require:</p> <ul style="list-style-type: none"> • Concentration • Precision • Self-motivation • Intricate closed skills • Low arousal levels • Individual performances/routines <p>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</p> <p>Extroverts prefer sports which are:</p> <ul style="list-style-type: none"> • Exciting • Team sports • Fast paced • High arousal levels • Large, simple motor skills • Low concentration 	<p>Motivation is thought to be a combination of the drive within us to achieve our aims and the outside factors, which affect it.</p> <p>There are 2 types of motivation:</p> <p>Intrinsic (Internal) Is from within ourselves – having a sense of pride about completing a task and gaining a sense of personal achievement</p> <p>Extrinsic (External) Is for another source/person. To gain something externally</p> <p>External rewards are split into two categories:</p> <p>Tangible: Certificates/Medals/Money </p> <p>Intangible: Praise/Feedback/Applause </p> <p>Questions:</p> <ol style="list-style-type: none"> List as many tangible and intangible rewards that you can think of from different sports Outline the advantages and disadvantages of using Intrinsic or Extrinsic motivations when taking part in sport.

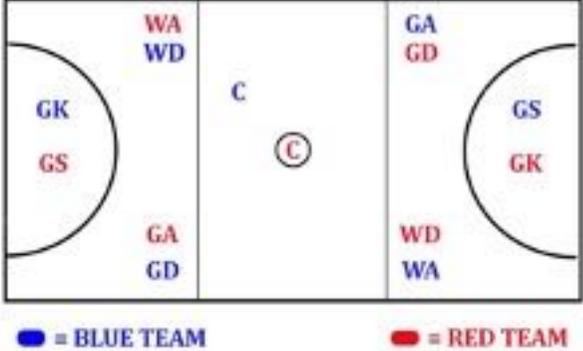
PE GCSE

Week 10 – Factors that Effect Participation	Week 11 – Interleaving Topic	Week 12 – Careers
<p>There are 5 user groups of people who participate in sport. Each groups has their own factors that affect their participation in sport.</p> <ol style="list-style-type: none"> 1. Gender 2. Disability 3. Age 4. Friends/Family/Peers 5. Race/Religion/Culture <p>There are many factors that can affect the rates of participation for each group including:</p> <p>Questions:</p> <p>For each of the above 5 groups, can you list the potential barriers to participation. For each of the barriers you have listed, explain potential solutions.</p>	<p>Types of bones:</p> <ul style="list-style-type: none"> - Long Bone - Long bones are longer than they are wide. E.g. Femur, humerus - Short Bone - Short bones are small, cube-shaped bones. E.g. Carpals, Tarsals - Flat Bone - Flat bones are thin, flattened and slightly curved. E.g. Rib, Cranium - Irregular Bone - Irregular bones have complex shapes that fit none of the other categories of bones. E.g. Vertebrae <p><i>Articulating bones are where two or more bones meet to form a joint.</i></p> <p>Synovial Joints:</p> <ul style="list-style-type: none"> - Hinge - Hinge joints only allow two types of movement. E.g. Flexion and extension - Ball and socket - joints allow much more movement to occur. E.g Circumduction and Rotation <p>Questions:</p> <ol style="list-style-type: none"> 1. Identify the correct type of joint for the following locations: Elbow, hip, and ankle. 2. Define the term articulating bones. Use an example to help explain your answer (2 marks). <p>Identify two synovial joints found in our body. For each identified joint, explain the function of one structure found in a synovial joint (4 marks)</p>	<p>5 Careers to research from this cycle:</p> <ol style="list-style-type: none"> 1. Sport Psychologist 2. Performance Analyst 3. Sports Event Organiser 4. Sports Official 5. Sports Coach <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/m6p</p> 

Sports Studies

Week 1 - LO1: Individual sport	Week 2 - LO2: Team Sport	Week 3 - LO1: Individual sport						
<p>Badminton – <u>Skills</u></p> <p><u>Serving</u> – underarm high serve or backhand flick serve. This shot is used to start the point.</p> <p><u>Clear shot</u> – overhead clear or underarm clear shot. This shot is used to hit the shuttle to the back of the court.</p> <p><u>Drop shot</u> – overhead drop shot or underarm drop shot. This shot is played from mid court to allow the shuttle to drop just over the net.</p> <p><u>Smash Shot</u> – forehand smash and jump smash shot. This shot is an attacking shot to win the point.</p> <p><u>Net shot</u> – forehand and backhand net shot. This shot is used at the front of the court to keep shuttle low to net and force opponent to run into net.</p> <p>Enquiry Task: Can you draw a diagram of the court showing each shot above clearly labeled?</p> 	<p>Netball – <u>Skills</u></p> <p><u>Passing</u> – Types of passes in netball include chest pass, shoulder pass and bounce pass.</p> <p><u>Footwork</u> – Footwork includes landing correctly and using your back foot to pivot.</p> <p><u>Shooting</u> – GA and GS may shoot inside the attacking 'D'.</p> <p><u>Interception</u> – When defending, players may use their arms to intercept the ball and win possession of the ball.</p> <p><u>Marking</u> – This is where players stay close (mark) their opposing player but without obstructing or causing contact.</p> <p>Enquiry Task: Select a team sport of your choice and make a list of the main skills you would require to be successful? Give yourself a rating out of 10 for each skill and explain why?</p> <p><u>Football</u></p> <table border="0"> <thead> <tr> <th>Skill</th> <th>Rating /10</th> <th>Justify why?</th> </tr> </thead> <tbody> <tr> <td>e.g. Passing</td> <td>8</td> <td>My passing is always accurate and consistent.</td> </tr> </tbody> </table>	Skill	Rating /10	Justify why?	e.g. Passing	8	My passing is always accurate and consistent.	<p>Select an individual sport (Tennis, Table tennis or Badminton) and make a list of the following:</p> <ul style="list-style-type: none"> Research and write down the main skills involved in your selected sport and the correct technique for each skill e.g. Backhand flick serve in badminton. Explain the teaching points for each skill. Research and write down the main tactics in your selected sport e.g. playing a net shot to draw opponent to the net in badminton. Give an example of decision making in your selected sport e.g. serving high to push opponent to back of court in badminton. <p>http://news.bbc.co.uk/sport1/hi/tennis/skills/4230728.stm</p> 
Skill	Rating /10	Justify why?						
e.g. Passing	8	My passing is always accurate and consistent.						

Sports Studies

Week 4 - LO2: Team Sport	Week 5 - LO3: Be able to officiate	Week 6 - LO3: Be able to officiate
<p>Select a team sport (Football, Netball, Basketball, Handball or Rugby) and make a list of the following:</p> <ul style="list-style-type: none"> • Research and write down the main skills involved in your selected sport and the correct technique for each skill e.g. tackling in rugby. • Research and write down the main tactics in your selected sport e.g. a set play planned for the line out to outwit opposing team in rugby. • Give an example of decision making in your selected sport e.g. whether to kick and chase the ball or pass and maintain possession. <p>http://news.bbc.co.uk/sport1/hi/football/skills/4189008.stm</p> 	<p>The four key hand signals you will need to display for your assessment are:</p> <p>Each game is played until a player reaches 21, unless it is 20-20, then the player must win by two clear points.</p> <p>First service is from the right (even number), and then you must alternate after each service.</p> <p>Shuttlecock lands inside the line </p> <p>Shuttlecock lands outside the line </p> <p>Foot on service line or off the ground </p> <p>Racket too high on service (above waist) </p>	<p><u>Netball officiating</u></p> <p>Key rules – footwork, contact, obstruction, ball over 1/3, replayed ball, penalty pass, out of court, and not received within 'C' third.</p> <p>Enquiry task – Research netball rules and write a description of each rule identified above. Watch officiating video below demonstrating key hand signals.</p> <p>Learn the hand signals for an umpire: https://www.youtube.com/watch?v=Vcsd7EmceCg</p> <p>NETBALL POSITIONS</p> 

Sports Studies

Week 7- LO4: Identify areas of improvement	Week 8 - LO4: Types of Skills	Week 9 - LO4: Types of Practice
<p>Select an individual sport that you may be assessed in for R052 (e.g. Badminton, table tennis or Tennis). Answer the following questions for your selected sport:</p> <ul style="list-style-type: none"> • What are the key skills in the activity? • Which key skills are your strengths? • Can you explain why for each strength? • Which key skills are your weaknesses? • Can you explain why for each weakness? <p>Select a team sport that you may be assessed in for R052 (e.g. Football, Netball, Handball or Basketball). Answer the following questions for your selected sport:</p> <ul style="list-style-type: none"> • What are the key skills in the activity? • Which key skills are your strengths? • Can you explain why for each strength? • Which key skills are your weaknesses? • Can you explain why for each weakness? 	<p>Open skills Skills that are adaptable depending on the environment.</p> <p>For example, there are many factors that could affect a pass in football</p> <p>Closed skills Skills that are performed in a stable environment.</p> <p>For example, a free throw in basketball.</p> <p>Simple skills Skills that are transferable across multiple sports and do not require a large amount of coordination, timing and thought process.</p> <p>For example, running.</p> <p>Complex skills Skills that do require large amounts of coordination, timing, quick thought processing and tend to be specific to a certain sport.</p> <p>For example, a serve in tennis.</p> <p>Applying your knowledge:</p> <ol style="list-style-type: none"> 1. Within your chosen team sport, can you identify three examples for each skill and justify why it is this type of skill? 2. Within your chosen individual sport, can you identify three examples for each skill and justify why it is this type of skill? 	<p>Whole Practice This is when the whole skill is performed a once.</p> <p>For example, completing the triple jump in one motion.</p> <p>Part Practice This is when the skill is broken down in different sections, which are then practiced individually.</p> <p>For example, practicing the 'hop' phase in the triple jump.</p> <p>Variable Practice This is when the skills is practiced in a range of different scenarios that a performer could experience.</p> <p>For example, adding defenders into a passing practice and allowing them to pressurise the player.</p> <p>Fixed Practice This is when a specific skill or technique is repeatedly practiced in the same way.</p> <p>For example, throwing the ball into a lineout.</p> <p>Applying your knowledge:</p> <ol style="list-style-type: none"> 1. Can identify the most appropriate type of practice to improve a type of skill? 2. Can you 'Part Practice' and explain how you would separate and improve a certain skill?

Sports Studies

Week 10 - LO4: Methods to improve own performance	Week 11 - LO4: How to measure improvement	Week 12 – Careers in Sport												
<p>Methods to improve performance</p> <ul style="list-style-type: none"> - Identify most appropriate type of practice - Adapting the environment of performance (For example, playing with/against better players can challenge the performer and help them improve) - Use of tools to aid evaluation (For example. Match analysis. Video analysis etc.) <p>Video analysis of technique is very useful for identifying and correcting problems with an athlete's technique. Things that can be measured and identified using video analysis include the following:</p> <ul style="list-style-type: none"> • Angle of release of thrown implements • Ball release velocity and the arc of travel. • Head and body position during technique. • Joint and segment angles and velocities. <p>Applying your knowledge:</p> <ol style="list-style-type: none"> 1. Can you identify two areas of improvements for your sport and explain how you could improve these? 2. Select an elite performer and analyse their performance within a game. Using this data, can you identify areas of improvement and create methods to improve? 	<p>How to measure improvement in skills, techniques and strategies:</p> <ol style="list-style-type: none"> 1. Completion of proficiency awards 2. Keeping individual logs of performance 3. Keeping video diaries 4. Peer observation 5. Monitoring competition results over time. <p>Applying your knowledge:</p> <ol style="list-style-type: none"> 1. Can you explain how you would monitor your improvement and measure the amount of improvement made? 2. Select an elite performer and analyse their performance within a game. Using this data, can you identify areas of improvement and create methods to improve?  <table border="1"> <caption>Touches in the opposition box Premier League 2020/21</caption> <thead> <tr> <th>Player</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Mohammed Salah</td> <td>85</td> </tr> <tr> <td>Jack Grealish</td> <td>70</td> </tr> <tr> <td>Raheem Sterling</td> <td>60</td> </tr> <tr> <td>Sadio Mane</td> <td>57</td> </tr> <tr> <td>Wilfried Zaha</td> <td>49</td> </tr> </tbody> </table>	Player	Total	Mohammed Salah	85	Jack Grealish	70	Raheem Sterling	60	Sadio Mane	57	Wilfried Zaha	49	<p>Top 5 careers linked to R051 unit:</p> <ol style="list-style-type: none"> 1. Sports Development Manager 2. Sports Coach 3. Sports Manager 4. Sports Analyst 5. Official or Referee <p>Research careers in sport:</p> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/m6p</p> 
Player	Total													
Mohammed Salah	85													
Jack Grealish	70													
Raheem Sterling	60													
Sadio Mane	57													
Wilfried Zaha	49													

Photography

Project 2: HUMAN IDENTITY

First finish all work started in your last lesson and, then, do these tasks. Complete one task per week to achieve a grade 4 or above. For grade 6 or above please make sure to complete these tasks with flare and dedication, talking regularly to your teacher.

Week 1&2: David Hockney joiners	Week 3&4: Dada photomontage	Week 5&6: Pop photomontage
<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: conduct a photoshoot and edit one of the portraits using this “joiner” effect. Use Pixlr or PhotoShop.</p>  <p style="text-align: right; font-size: small;">David Hockney, My Mother 1982</p> <p>Key Words Select: to choose an area from an image. Overlap: lay an item on top of another, covering it.</p>	<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: conduct a photoshoot and edit one of the portraits using this “Dada” effect. Use Pixlr or PhotoShop.</p>  <p style="text-align: right; font-size: small;">Raoul Hausmann, 1920</p> <p>Key Words Photo montage: a digital collage or composite. Layer: an imaginary, see-through, level of depth.</p>	<p>Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.</p> <p>Enquiry task 2: conduct a photoshoot and edit one of the portraits using this “Stencil” effect. Use Pixlr or PhotoShop.</p>  <p style="text-align: right; font-size: small;">Ian Keltie, 2000</p> <p>Key Words Stencil: extremely contrasted cut-out. Visual Code: a system of symbols or signals for visual communication.</p>
<p>Steps to success</p>		
<p>Use repetition, change the size of the different selections, Keep the square or rectangular format of the cut out selections.</p>	<p>Use cut outs from magazines or packaging, text, numbers, objects and other random visual information.</p>	<p>Draw your own doodles on a piece of paper, take a photo and use it as part of your design. Wear a top with a design on it.</p>

Photography

Week 7&8: Warhol photomontage.

Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.

Enquiry task 2: conduct a photoshoot and edit one of the portraits using this “Screen print” effect. Use Pixlr or PhotoShop.



Andy Warhol, 1960s

Key Words

Hue: another word for colour.

Brightness: amount of light or darkness in a colour.

Saturation: Intensity of a colour. Desaturation is black and white.

Week 9&10: Scanography- in my pockets.

Enquiry task 1: Draw an analytical diagram and do an “I see, I think, I wonder” analysis.

Enquiry task 2: conduct a photoshoot using a flatbed scanner instead of a camera. Use personal objects to add more visual information.



Lauren Alexis Creative

Scanography: scanner photography, is the process of capturing digitized images of objects for the purpose of creating printable art using a flatbed “photo” scanner with a computer.

Week 11&12: Refine and careers

Enquiry task 1: Complete and improve all the studies in this project, ready to choose your final piece.

Enquiry task 2: research careers.

Key Words

Final piece: masterpiece displayed in a gallery or exhibition.



Follow the QR code or type in the link into your browser
<https://links.iscaexeter.co.uk/36b453>

Steps to success

Experiment with filters and adjustments. Check google classroom for a step by step tutorial.

Choose interesting objects and personal possessions. For health and safety reasons, keep your eyes closed.

Make alternative solutions to the same study or test piece. Always do the same idea several times using different combinations of visual elements.

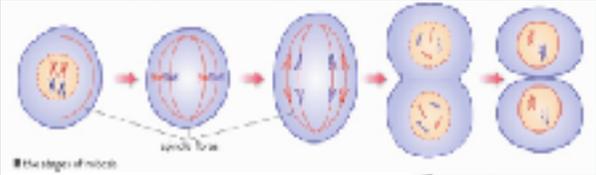
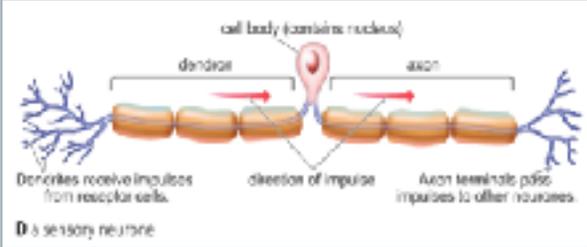
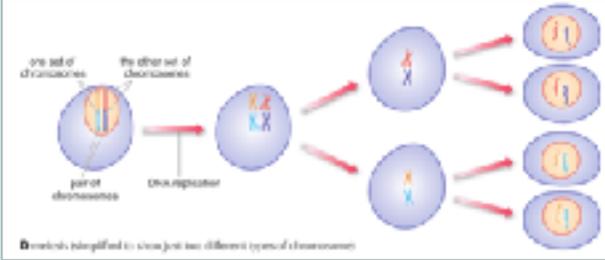
Religious Education

Week 1 - Pre Teach / Nature of God / Creation	Week 2 - Jesus' Incarnation and Crucifixion	Week 3 - The Afterlife
<ul style="list-style-type: none"> - Omnipotent: God is all powerful. - Omnibenevolent: God is all loving. - Omniscient: God is all knowing. - Transcendent: God is out of the world. - Imminent: God is within the world (spiritually). - Trinity: God has three main characteristics; son, father and holy spirit. - Liberal: The Bible is read as a metaphor. - Literal: The Bible is read word for word. <ul style="list-style-type: none"> - Christians believe that God made the world in 6 days, on purpose (didn't happen by chance). - Some Christians will believe that God made the world in 6 time periods, not days. - The 'word' was present in creation (Jesus). <p>Enquiry Task: Write out and define all of the key words, and then dual code.</p>	<ul style="list-style-type: none"> - The incarnation is God becoming human in the form of Jesus. - The incarnation is Jesus' birth (25th December). - An angel came to Mary, mother of Jesus, and told her she was going to give birth to a son who would be the son of God. - Crucifixion is the Roman method of execution, where a person is nailed to a cross. - Jesus was put on the cross because people believed he was committing blasphemy (using God's name in vain). - Jesus also wanted to die because he wanted to sacrifice himself due to humanities sins (atonement). <p>Enquiry Task: Follow the link and add more detail about Jesus' incarnation https://www.bbc.co.uk/bitesize/guides/zbj48mn/revision/7</p>	<ul style="list-style-type: none"> - Christians believe in an afterlife. - You need to behave well in this world, for example by helping others, giving to charity, following the rules like the 10 commandments. - If you sin and don't repent your sins, you may go to Hell. - Some Christians believe we will be risen as a physical body, like Jesus, others believe it will be our soul that rises - Some Christians believe that we will go to heaven / hell or purgatory as soon as we die, others believe it won't be until we are judged on judgement day. - Christians believe we will be judged at the end of the world by God / Jesus. Some believe this is when we will enter the afterlife. <p>Enquiry Task: Explain what you think happens to us when we die? Why?</p>
Week 4 - Heaven and Hell	Week 5 - Sin and Salvation	Week 6 - Revision
<ul style="list-style-type: none"> - Christians believe we will either go to heaven or hell when we die. - Heaven is where we are reunited with God and Jesus, and we will live in eternal peace. - Hell is where people will experience torture and torment with the devil. - We will go to heaven if we behave well and follow Christian rules, such as the 10 commandments. - We will go to hell if we sin and disobey both God and his rules. - Catholics believe in 'purgatory' which is a waiting room. <p>Enquiry Task: What can you add to your notes; https://www.bbc.co.uk/bitesize/guides/zwvymsg/revision/4</p>	<ul style="list-style-type: none"> - Sins are actions that are bad, and go against religious teaching, for example stealing. - Salvation is the concept of Jesus dying on the cross in order for us to still achieve heaven. - All humans have the chance of reaching heaven due to Jesus dying on the cross for atonement. - Humans need to repent their sins (say sorry). - Humans need to grant people forgiveness if they have been told sorry. <p>Enquiry Task: Add more detail to your notes by using the following link: https://www.bbc.co.uk/bitesize/guides/zv93rwx/revision/3</p>	<ul style="list-style-type: none"> - God created the world, on purpose, however Christians interpret the creation story differently. - Jesus was born through immaculate conception. - Jesus is the son of God, but also the human version of God (incarnation). - Christians believe we need to live well in this life, in order to have a good afterlife - Most Christians believe the afterlife is more important than this world. - Sin are actions that are bad, they need to be repented and Christians need to seek forgiveness. <p>Enquiry Task: Create a mind map or bullet pointed list for each topic, adding detail from your lessons.</p>

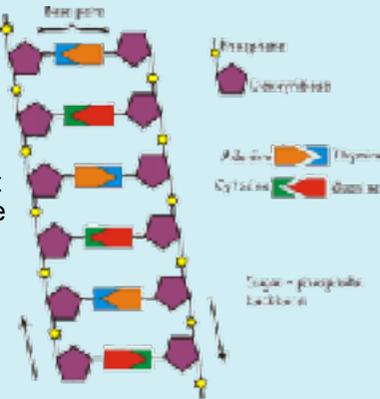
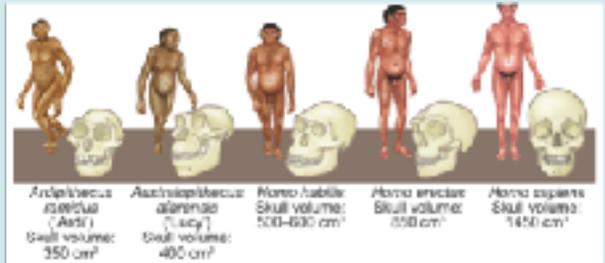
Religious Education

Week 7 - Prayer, Worship and Sacraments	Week 8 - Pilgrimage and Festivals	Week 9 - The Local Community and Mission
<p>- Liturgical: Prayer that is very set and structured.</p> <p>- Informal: Prayer that is spontaneous, there is no structure.</p> <p>- Private: When a person worships on their own.</p> <p>- The Lord's Prayer is an example of a set prayer.</p> <p>- During informal worship, people often believe that the Holy Spirit is present and allows them to carry out God's wishes, so the services can be quite spontaneous.</p> <p>- Quakers' worship is different as they hold meetings, rather than services, in meeting houses. These meetings last about an hour and have no set hymns, prayers or sermons.</p> <p>- There are 7 sacraments in Christianity (blessings to God). Two are baptism and the eucharist.</p> <p>Enquiry Task: Add more detail to your notes; https://www.bbc.co.uk/bitesize/guides/znqck2p/revision/1</p>	<p>- A pilgrimage is a religious journey to a holy place.</p> <p>- Lourdes is a pilgrimage to France. It is where people believe they are going to be healed with the holy water.</p> <p>- Iona is a pilgrimage to Scotland where Christians go on walks and visit historical sites.</p> <p>- Christmas is celebrated once a year on the 25th December.</p> <p>- Christmas remembers Jesus' incarnation (his birth).</p> <p>- Presents are exchanged due to the three wise men.</p> <p>- Easter remembers Jesus' death and resurrection.</p> <p>Enquiry Task: Which Christian festival do you think is the most important? Why?</p>	<p>- Many Christians work to help their communities become better places to live. They see this as putting their Christian faith into action.</p> <p>- Christian churches are often open all day for quiet reflection, and services are regularly held with all being made welcome. In this way, churches can help those who are lonely and provide support.</p> <p>- Many churches and Christians run food banks from their church halls.</p> <p>- Some Christians volunteer as street pastors, going out onto the streets at night to care for those in need and those who are at risk of harm.</p> <p>- The Salvation Army helps in the local community.</p> <p>- Mission is the idea that Christians need to convert people to the Christian religion.</p> <p>Enquiry Task: Make a list of ways the Church works in the local community, for example as a soup kitchen.</p>
Week 10 - Church Growth and Persecution	Week 11 - Assessment Week	Week 12 - Super Teach Week / Careers
<ul style="list-style-type: none"> • Church growth happens through: <ul style="list-style-type: none"> • Charity such as CAFOD or Christian Aid. • Mission - A calling to go out and spread religion. • Evangelicalism - Spreading the Christian gospel. • Throughout history, Christians have faced persecution. Christian guidance teaches Christians to trust God and forgive people, rather than hold on to hatred towards others. • Reconciliation is very important for Christians, who believe that it is something everybody should aim for. <p>Enquiry Task: Which perfection do you think is the most important and why?</p>	<ul style="list-style-type: none"> • Create revision cards for each week, ensuring that there is a question on one side and a short, simple answer, on the other. • Create revision posters for each week, ensuring that lots of colour and dual coding (images) are used. • Summarise each week into 20 words, using images to also help you. • Create a 'quizziz' or kahoot on the information that you have learnt. 	<p>In this cycle, you have learnt about core beliefs and practices within Christianity. This has included looking at the life of Jesus, the afterlife, sacraments, pilgrimage and the worldwide Church. There are many jobs or career areas related to Christianity/ Religion.</p> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/8bw</p> 

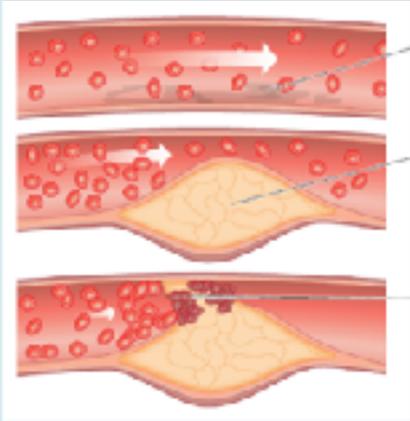
Science

Week 1	Week 2	Week 3
<p>1. Mitosis:</p> <p>a) A type of cell division which produces two genetically identical daughter cells.</p> <p>b) The daughter cells are diploid (2 sets of chromosomes) and the process is asexual.</p> <p>c) Produces body cells for growth and repair</p> <p>2. Interphase: DNA is replicated, happens first. The stages of mitosis are:</p> <p>a. Prophase: nucleus starts to break down, spindle fibres appear</p> <p>b. Metaphase: chromosomes line up at the centre of cell</p> <p>c. Anaphase: spindle fibres contract and chromosomes separate</p> <p>d. Telophase: a membrane forms around each set of chromosomes to form nuclei</p> <p>e. Cytokinesis: cell surface membrane forms (cell wall forms in plant cells)</p>  <p>Enquiry task: name each stage of the diagram above and write descriptive labels of what each stage shows.</p>	<p>1. Stem cells: cells that divide repeatedly and can then differentiate;</p> <p>a. Embryonic: early embryo cells that can produce any cell type</p> <p>b. Adult: can only produce one type of cell, allow tissues to grow and replace damaged cells</p> <p>c. Reflex arc: a neurone pathway consisting of a sensory neurone passing impulses to a motor neurone often via a relay neurone.</p> <p>2. Reflexes are not processed by the brain and are therefore faster responses. Often used in dangerous situations.</p> <p>3. Sensory neurone: a neurone that sends impulses from receptor cells to the central nervous system.</p> <p>4. Relay neurone: a short type of neurone found in the spinal cord and brain.</p> <p>5. Motor neurone: a neurone that sends impulses to effectors (muscles or glands).</p>  <p>Enquiry task: describe the myelin sheath found on sensory and motor neurons and explain its function.</p>	<p>1. Meiosis: a form of cell division in which one parent cell produces 4 non-identical haploid daughter cells.</p> <p>2. The zygote cell inherits different genetic information from each parent, which produces genetic variation between individuals.</p> <p>3. There are 2 types of species variation:</p> <p>a. Environmental variation - differences in organisms caused by the surroundings (acquired characteristics) e.g. scars, spoken language.</p> <p>b. Genetic variation: differences in organisms caused mutation and sexual reproduction, e.g eye colour, natural hair colour.</p> <p>4. DNA (Deoxyribonucleic acid): a polymer made of 2 sugar-phosphate backbones joined to bases forming a double helix shape.</p>  <p>Enquiry task: write descriptive labels for each stage of the diagram above.</p>

Science

Week 4	Week 5	Week 6					
<ol style="list-style-type: none"> DNA Bases: made up of nitrogen <ol style="list-style-type: none"> Joined by hydrogen bonds Complementary base pairs: <ul style="list-style-type: none"> Adenine with thymine (A-T) Guanine with cytosine (C-G) Alleles: different forms of the same gene, each organism has 2 for each gene (e.g. bb are the alleles for blue eyes). Inherited characteristics can have dominant or recessive alleles. Dominant: an allele that is always expressed in the phenotype (capital letter) Recessive: an allele that will only be expressed if both alleles are recessive (bb). Male sex chromosomes: XY. Female sex chromosomes: XX. Genotype: the alleles present (AA, Aa, aa). Phenotype: the expression of the genotype (physical appearance) <p>This is a diagram of a DNA double helix</p>  <p>Enquiry task: Produce a Punnett square to show the inheritance of sex in humans.</p>	<ol style="list-style-type: none"> Heterozygous: when the alleles for a gene are different in an organism (e.g. Rr). Homozygous: when the alleles for a gene are the same in an organism (e.g. RR, rr). Punnett squares are used to work out the probability of offspring inheriting certain genotypes and phenotypes. Mutation: change to a gene caused by a mistake in copying the DNA base pairs during cell division, or by the effects of radiation or a certain chemical. Human Genome project produced a map of base pairs in 1 set of human chromosomes. Evidence for evolution is found in fossils. Human evolution is explained with the discovery of human-like fossils: Ardi- 4.4 million years old. Lucy, 3.2 million years old, Homo habilis & Homo erectus found by Leakeys. <p>Enquiry task: describe the difference in skull volume shown in the diagram and explain how this provides evidence of increasing intelligence.</p>  <table border="1" data-bbox="817 1197 1422 1284"> <tr> <td>Ardipithecus aethiopicus (Ardi) Skull volume: 350 cm³</td> <td>Australopithecus africanus (Lucy) Skull volume: 400 cm³</td> <td>Homo habilis Skull volume: 500-600 cm³</td> <td>Homo erectus Skull volume: 650 cm³</td> <td>Homo sapiens Skull volume: 1450 cm³</td> </tr> </table>	Ardipithecus aethiopicus (Ardi) Skull volume: 350 cm ³	Australopithecus africanus (Lucy) Skull volume: 400 cm ³	Homo habilis Skull volume: 500-600 cm ³	Homo erectus Skull volume: 650 cm ³	Homo sapiens Skull volume: 1450 cm ³	<ol style="list-style-type: none"> Alfred Russel Wallace and Charles Darwin both independently developed theories to explain how evolution happens. Darwin's theory of evolution states that simple life forms gradually evolved into more complex forms. The main steps in natural selection are: <ol style="list-style-type: none"> Individual organisms within a particular species Individuals with characteristics most suited to the changing environment are more likely to survive called 'survival of the fittest'. The characteristics (genes) that have enabled these individuals to survive are then passed on.  <p>Enquiry task: Explain why Charles Darwin's theory of evolution is important.</p>
Ardipithecus aethiopicus (Ardi) Skull volume: 350 cm ³	Australopithecus africanus (Lucy) Skull volume: 400 cm ³	Homo habilis Skull volume: 500-600 cm ³	Homo erectus Skull volume: 650 cm ³	Homo sapiens Skull volume: 1450 cm ³			

Science

Week 7	Week 8	Week 9
<ol style="list-style-type: none"> Carl Linnaeus, 1735, published his classification where he divided organisms into hierarchical groups: kingdom, genus and species. Technology advances allowed Carl Woese, 1990, to classify organisms into three domains based on their DNA: bacteria, archaea and eukarya. Artificial selection is when humans choose organisms with useful characteristics to breed together. Plants and animals are often selectively bred for: disease resistance, yield, environmental robustness, fast growth and flavour. Selective breeding reduces variation in a species, this may cause them to be at a higher risk of extinction if the environment changes. Genetic engineering involves changing the DNA of one organism, often by inserting genes from another, creating genetically modified organisms (GMOs).  <p>Enquiry task: describe the method that a farmer would have used to selectively breed cauliflower from the original wild cabbage.</p>	<ol style="list-style-type: none"> Health is “the state of complete physical, mental and social well-being”. Non - communicable: a disease that cannot spread from person to person, e.g. cancer There are several types of these: <ol style="list-style-type: none"> Genetic disorders caused by faulty alleles passed to offspring. Malnutrition when you eat too little of too much which can develop into a deficiency disease Influenced by lifestyle factors (diet, smoking, exercise, alcohol consumption, drugs) e.g. obesity, cirrhosis, CVD. Cardiovascular disease is a result of a poorly functioning circulatory system. The fat mostly linked with CVD is the abdominal fat and the method used to measure it is waist-to-hip ratio. Treated with stents, bypass operations and medicines.  <p>Enquiry task: add descriptive labels to each stage of the diagram above to explain how smoking tobacco could lead to a stroke.</p>	<ol style="list-style-type: none"> Communicable disease: a disease that can spread from person to person, e.g. flu. Pathogens (disease causing microorganisms) cause communicable diseases: viruses, bacteria, fungi, protists Cholera is caused by bacteria and spreads in water and causes diarrhoea. Tuberculosis is caused by bacteria and spreads in the air and causes lung damage. Malaria is caused by protists and is spread by animal vectors (mosquitoes). Malaria causes damage to blood and liver. Chalara ash dieback causes leaf loss and bark lesions in trees, is caused by fungi and spreads in the air. HIV and Chlamydia are sexually transmitted infections (STI) and are spread during unprotected sex with an infected person. <p>Enquiry task: Compare and contrast chemical and physical contraceptives (e.g. the combined pill, the contraceptive injection, the male condom).</p>

Science

Week 10	Week 11	Week 12
<ol style="list-style-type: none"> The human body prevents the entry of pathogens via physical barriers (mucus, cilia, skin) and chemical defences (lysozymes, hydrochloric acid). This is how the body responds when a pathogen enters the body: <ol style="list-style-type: none"> Exposure to a pathogen Antigens trigger an immune response Antibodies produced by lymphocytes Antibodies lock onto pathogen's antigens Lymphocytes destroy the pathogen. Memory lymphocytes remain in case there is a secondary infection Secondary response to the pathogen is much faster as the antibodies can be produced more quickly by memory lymphocytes. Antibiotics: used to treat bacterial infections, work by inhibiting the cell processes of the bacterium. Antibiotic resistance: the ability of a bacteria to survive exposure to an antibiotic. It is caused by mutation in their genes and is an example of natural selection. <p>Enquiry task: produce a cartoon strip to show how MRSA became resistant to several antibiotics.</p>	<p>Key vocabulary revision.</p> <ol style="list-style-type: none"> Asexual: producing new organisms with one parent only. These organisms are genetically identical to their parent Chemical defence: the use of chemical compounds by organisms to defend against pathogens Communicable disease: any disease that can spread from person to person Diploid: a cell or nucleus that has 2 sets of chromosomes Genome: the complete set of genes present in a cell or organism. Genotype: alleles for a certain characteristic that are found in an organism Haploid: cells or nuclei with only 1 set of chromosomes (sex cells) Immunisation: making someone immune Meiosis: a form of cell division where one parent produces 4 haploid cells Mitosis: a form of cell division where one parent produces 2 diploid cells Monohybrid inheritance: the study of how the alleles of just one gene are passed from parents to offspring Non-communicable: when a disease cannot spread from animal to animal, or person to person Pedigree charts show how genotypes are inherited in families through generations Phenotype: the characteristics produced by certain sets of alleles Physical barrier: a barrier that makes it difficult for pathogens to get into the body Zygote: a fertilised egg cell 	<p>CAREERS</p> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/549</p> 

Spanish

Week 1 Leisure		Week 2 Present tense		Week 3 Key infinitives		Week 4 Food		Week 5 Key verbs + adverbs	
la actuación	performance, role	-AR verbs		Puedo...	I can	desayunar	to breakfast	salgo	I go out
		hablo	I speak	Espero...	I hope to	comer	to eat (lunch)	hago	I do / make
al aire libre	outdoors	hablas	you speak (s)	Quiero...	I want	almorzar	to have lunch	veo	I see / watch
la canción	song	habla	he/she speaks	Pienso...	I'm thinking of	cenar	to have dinner	doy	I give
la carrera	race, career	hablamos	we speak	Tengo que...	I have to	el jamón	ham	doy un paseo	I go for a walk
los deportes de riesgo	adventure sports	habláis	you speak (pl)	Me gusta...	I like...	el chorizo	chorizo	voy	I go
		hablan	they speak	andar	to walk	un bocadillo de atún	tuna sandwich	soy	I am
la entrada	ticket	-ER verbs		bailar	to dance			estoy	I am
el equipo	team	como	I eat	beber	to drink	las gambas	prawns	tengo	I have
el juego	game	comes	you eat (s)	cantar	to sing	los calamares	squid	pienso que	I think that
el partido	match	come	he/she eats	cocinar	to cook	las sardinas	sardines	creo que	I believe that
la película	film	comemos	we eat	correr	to run	champiñones	mushrooms	me parece	It seems to me
me encanta	I love	coméis	you eat (pl)	ganar	to win	la tortilla	omelette	diría que	I would say that
me gusta	I like	comen	they eat	jugar	to play	el queso	cheese		
me chifla	I love	-IR verbs		perder	to lose	la sangria	sangria	Adverbs	
disfruto	I enjoy	vivo	I live	probar	to try	la cerveza	beer	Feminine form of the adjective + mente	
odio / detesto	I hate	vives	you live (s)	ser aficionado a / de	to be a fan of (sport / team)	el vino tinto / blanco	red / white wine	lentamente	slowly
no me gusta	I don't like	vive	he/she lives			la limonada	lemonade	posiblemente	possibly
prefiero	I prefer	vivimos	we live	tocar	to play (instrument)	el zumo de naranja	orange juice	especialmente	especially
Always give reasons for your opinions!		vivís	you live (pl)	tomar	to have / take			recientemente	recently
		viven	they live						
Enquiry tasks – complete in Spanish									
Write a paragraph to describe what you do in your free time.		Complete the grammar task on Google Classroom.		Using a dictionary to make a list of other verbs you need.		Learn the additional food and drink vocabulary on Quizlet.		Review the vocabulary from weeks 1-5 on Quizlet.	
KEY:	verbs	masculine nouns		feminine nouns		adjectives / adverbs		connectives	



Spanish

Week 6 Immediate Future		Week 7 Future tense		Week 8 Preterite tense		Week 9 Key festivals		Week 10 Imperfect tense	
voy a	I am going	All verb groups		-AR verbs		el Año Nuevo	New Year	-AR verbs	-ER -IR verbs
vas a	you're going	hablaré	I will speak	hablé	I spoke	la corrida	bullfight	hablaba	comía
va a	he/she is going	hablarás	you will speak (s)	hablaste	you spoke (s)	Día de los Muertos	Day of the Dead	hablabas	comías
vamos a	we are going			habló	he/she spoke	hablabas	comías		
vais a	you are going (pl)	hablará	he/she will speak	hablamos	we spoke	el día de Reyes	Epiphany, 6 th January	hablabamos	comíamos
van a	they're going	hablarán	they will speak	hablasteis	you spoke (pl)	el encierro	bull running	hablabais	comíais
The Immediate Future This talks about what you are going to do. To form of it use: present tense of Ir (to go) + a + an infinitive		hablaremos	we will speak	-ER & -IR verbs		Navidad	Christmas	The imperfect is used to say what you used to do regularly or over a period of time in the past. It can translate ' used to ' or ' was/were ' in English e.g. hablaba = I used to speak or I was speaking	
		hablaréis	you will speak (pl)	comí	I ate	Nochebuena	Christmas Eve		
		hablarán	they will speak	comiste	you ate (s)	Nochevieja	New Year's Eve		
		The future tense is used to say what you will do in the future. It uses the infinitive form of the verb + future ending.		comió	he/she ate	la Pascua	Easter		
				comimos	we ate	Semana Santa	Easter week		
comisteis	you ate (pl)			la Tomatina	Tomato festival				
celebrar	to celebrate	Irregular verbs		comieron	they ate	horroroso	horrifying	Week 11	
visitar	to visit			The preterite is used for single completed actions in the past.		impresionante	impressive	Assessment week	
cenar	to have dinner			fui	I went / was	peligroso	dangerous		
cocinar	to cook	saldré	I will go out	hice	I did	raro	strange		
salir	to go out	haré	I will do	tuve	I had	religioso	religious		
hacer	to do / make	tendré	I will have	fue	it as	(in)seguro	(un)safe		
ir	to go	habrá	there will be	hizo sol	it was sunny	sucio	dirty		
probar	to try					único	unique, only	Week 12	
Enquiry tasks – complete in Spanish									
Write a paragraph to say what you're going to do next week.		Make flashcards for the future tense.		Research a Hispanic festival and give your opinion about it.		Review the vocabulary from weeks 6-9 on Quizlet.			

