

ISCA ACADEMY



INSPIRATION FOR LIFE



KNOWLEDGE ORGANISER Autumn 2021

Year 9

Bullying Information

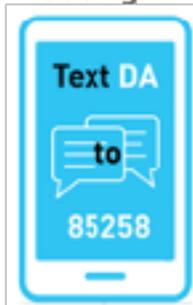


'Each of us deserves the freedom to pursue our own version of happiness. No one deserves to be bullied'
Barack Obama

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:

'Lord of the Flies' - William Golding: A group of boys marooned on an island descend into conflict and cruelty as they struggle between civilisation and savagery. Though fictional, its exploration of the idea of human evil is at least partly based on Golding's experience with the real-life violence of WWII.

'We Should All Be Feminists' - Chimamanda Ngozi Adichie: Drawing extensively on her own experiences —in the U.S., in her native Nigeria, and abroad — Adichie offers readers a definition of feminism rooted in inclusion and awareness.

'Anne Frank: The Diary Of a Young Girl' - Anne Frank: Anne tells of her and her family's 2 years in hiding during the German occupation of the Netherlands.

'The 57 Bus: A True story of Two Teenagers and the Crime That Changed Their Lives' - Dashker Slater: Two teens from very different areas and schools lives are changed when one sets the other's skirt on fire. The story follows the pair as they face the consequences of the incident and how it shapes their lives.

'The Day of the Triffids' - John Wyndham: Not just a simple tale of hostile creatures attacking humanity, the book is an exciting story of survival after a cataclysm, of separation and search, of how to rebuild society and what form it should take.

'The Curious Incident of the Dog in the Night-Time' - Mark Haddon: Fifteen-year-old Christopher values logic, rules and structure to help him cope with an illogical and often messy world of people whom he struggles to understand. But when he discovers his neighbour's dog dead one morning, he becomes determined to solve the mystery of who killed him.



Art and Design

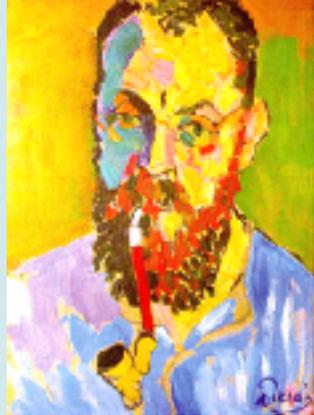
Basic Elements of the Visual Language and Principles of Art and Design

These tasks are compulsory to achieve 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: LINE and Contour Drawing	Week 3&4: SHAPE and Collage	Week 5&6: FORM & TONE - Still Life
<p>Enquiry task 1: I see: Make a list of 10 things that you see in the artwork. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Produce a series of 3 contour line hand drawings similar to Egin Schiele's – each drawing must be a different position. Think creatively about how you position them on your page.</p> <p style="text-align: center;">Key Words</p> <p>Line: a mark made in one stroke, it shows direction. Contour line: used to draw and define the visible edges – the shapes and forms of the subject. This can include inner structure/details.</p>  <p style="text-align: right; font-size: small;">Egon Schiele, Hands.</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the artwork. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: complete a cutout image like this one. You could either copy this one or develop one of your drawings in your sketchbook using the same technique.</p> <p style="text-align: center;">Key Words</p> <p>Shape: a flat, enclosed area of space. Shapes have height and width but not depth. Collage: sticking layering different materials such as paper or photos together to create an artwork Layer: a build-up of a surface – over the top of</p>  <p style="text-align: right; font-size: small;">Henri Matisse, Two Masks (The Tomato), 1947</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the artwork. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Set up your own still life and take 5 photos of it from different viewpoints. Send them to your school email</p> <p style="text-align: center;">Key Words</p> <p>Form: the 3D qualities of an item. Forms have height, width and depth. Background: what is behind the main item.. Contrast: amount of difference between light and dark tones, colours and textures.</p>  <p style="text-align: right; font-size: small;">Buddy McCue, Mandolin and Guitar</p>
Steps to success		
<p>Trace the contours and inner details (i.e. knuckle lines) with your eyes. Let your pen draw what your eyes are following – without taking your pen off the paper.</p>	<p>Cut slowly and carefully, looking closely at the shapes. Test out the layering and arrangement of each piece before you glue it down. Choose colours that create contrast.</p>	<p>Place the source of light at an angle, instead of frontally or behind the object, to achieve a stronger 3D effect and to create shadows for a more contrast.</p>

Art and Design

Week 7&8: TEXTURE and Frottage	Week 9&10: COLOUR and Mood	Week 11&12: COMPOSITION & Careers
<p>Enquiry task 1: I see: Make a list of 10 things that you see in the artwork. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Create a frottage image like this one – use one of your previous drawings or photos as a reference to develop from.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Texture: how something feels – this can be actual (physical texture) or implied (drawn/painted texture). Frottage: a technique used to produce a rubbing of a textured surface</p>  <p style="text-align: center;">Max Ernst, Le Start du châtaignier. 1925</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the artwork. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Choose your favourite drawing/photo and produce a development of it expressing a vibrant happy mood like in this image.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Hue: the colour (c) Saturation: between intense and desaturated (b+w) Brightness: light: tint (c + white) shade (c + black)</p>  <p style="text-align: center;">André Derain, 'Henri Matisse', 1905</p>	<p>Enquiry task 1: composition challenge - choose your favourite study and produce a variation of it. Adjust the composition and carefully select your dominant element and colour scheme.</p> <p>Enquiry task 2: research Art careers and careers that study the visual language.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Composition: a considered layout/arrangement of all the visual elements/parts of an art piece.</p>  <p style="text-align: center;">Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/36b453</p>
<p>Make sure your paper isn't too thick or rigid. Use the flat side of a crayon/pastel/pencil. Reduce or increase the pressure depending on the tone required.</p>	<p>Refer to the colour wheel. Place complementary colours next or near each other but do not blend/mix them together. Use cool colours for shadows, warm for highlights.</p>	<p>Decide on your point of interest. Choose an appropriate composition structure. Select a dominant element. Choose your colour scheme carefully.</p>

Computer Science

Week 1	Week 2	Week 3
<p>Searching - This is a technique of looking for specific data within a dataset.</p> <p>Linear Search – A search where every single item is in a list is checked in order. If the item is not in the list - it will still check every item.</p> <p>Binary Search – Data has to be organised for this. The middle value is checked and then the incorrect half of the data is removed.</p> <p>Indentation - Indenting makes it easy to see where structures begin and end. Conditions and iterations should be indented. Code inside procedures and functions should be indented</p> <p>Enquiry Task: Write pseudocode which would run a loop to count in 2s to 20.</p>	<p>Integer – whole numbers</p> <p>Float/real – decimal numbers</p> <p>Boolean – Used to store the logical conditions TRUE / FALSE. Often translated to On/Off, Yes/No etc</p> <p>Char – A single alphanumeric character or symbol</p> <p>String – A sequence of alphanumeric characters and or symbols.</p> <p>Bubble Sort – A highly ineffective algorithm which sorts data by swapping two pieces of data next to each other moving up through the list. Very slow with long lists.</p> <p>Enquiry Task: Write out the advantages and disadvantages of a bubble sort and an insertion sort</p>	<p>Insertion Sort – Start with the first piece of data then insert the second piece either in front or behind it, same with the 3rd one, until all the data is in its' correct place.</p> <p>Variable - A value that can change, depending on conditions or on information passed to the program.</p> <p>Constant - A value that cannot be altered by the program during normal execution, i.e., the value is constant.</p> <p>Assignment - Giving a variable or constant a value. e.g. counter = 0.</p> <p>Casting - Converting a variable from one data type to another.</p> <p>Enquiry Task: Write pseudocode which could calculate whether a given number is even or odd</p>
Week 4	Week 5	Week 6 Mid Cycle Assessment
<p>Naming conventions - Naming variable and functions using a set of rules.</p> <p>Count Controlled Loop – A loop which runs a set number of times: A FOR loop!</p> <pre>For i in range(0,10): print(i)</pre> <p>Condition Controlled Loop – A loop which could run indefinitely. A while loop!</p> <pre>a = 0 while a < 10: print(a)</pre> <p>If a is not incremented – this loop would run forever.</p> <p>Enquiry Task - Complete an ascending bubble sort on this data 4, 78, 89,12,11,10,9</p>	<p>Syntax Error - Rules of the language have been broken. The program will not run. Variables not being declared before use. Incompatibility of variable types.</p> <p>Logical Error - The program runs but does not give the expected output. Division by zero. Infinite loop. Memory full. File not found.</p> <p>Commenting - Used by a programmer to explain sections of code. Ignored by the compiler.</p> <p>Function - Reusable block of code which must return a value.</p> <p>Procedure - Reusable block of code which does not have to return a value.</p> <p>Enquiry Task - Write a block of code, and purposefully put a syntax error in it and a logic error.</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> <p>Iterative Testing - Each module of a program is tested as it is developed.</p> <p>Final / Terminal Testing - Testing that all the modules of a program work together as expected. Checking the program meets the expectations of the user with real data.</p> <p>File Handling – Open, read, write, close. Marks will be given for just opening and closing files.</p> <p>Enquiry Task: Write pseudocode including Selection which could work out your school year based on your age</p>

Computer Science

Week 7	Week 8	Week 9
<p>Functions & Procedures - Are used so that code can be reused.</p> <p>Parameters - Values passed to a functions and procedures inside the brackets.</p> <pre>def Total(cost, outgoing): cost = cost + 10 totalSpend = cost - outgoing return totalSpend</pre> <p>This is an example with two parameters - cost and outgoing. It is a function because it returns a value</p> <p>Casting - Converting a variable from one data type to another.</p> <p>Enquiry Task - Complete an ascending insertion sort on this data 4, 78, 89,12,11,10,9</p>	<p>Array / List - Unless stated otherwise will start with an index of 0.</p> <pre>myList = [13,12,46,43]</pre> <p>In this example myList[0] = 13, myList[1] = 12</p> <p>Abstraction – The process of removing unnecessary information. Using the London Tube Map is a good example of this.</p> <p>Decomposition – The process of breaking down a task into smaller tasks.</p> <p>MOD - MOD tells you the remainder when you divide two numbers. $10 \text{ MOD } 3 = 1$ because $10 / 3 = 3 \text{ r } 1$</p> <p>Enquiry Task - Complete an ascending merge sort on this data 4, 78, 89,12,11,10,9,14,67</p>	<p>Trace Table - A technique used to test algorithms, in order to make sure that no logical errors occur while the algorithm is being processed. The table usually has one column for each variable. Each row of the table shows how the various values held in variables change as the algorithm is running.</p> <p>Psuedocode - A language independent description of the steps of an algorithm. Intended for humans to express and design algorithms before coding.</p> <p>Adding comments to your code – Will be needed to make your code more readable.</p> <p>DIV - The opposite of MOD - and will provide you with the total number of times a number can be divided by another. $10 \text{ DIV } 3 = 3$ because $10 / 3 = 3 \text{ r } 1$</p> <p>Enquiry Task - Complete the Trace table questions in your black and purple book under section 2.1.</p>
Week 10	Week 11 Revision & Test	Week 12 - Careers' Focus
<p>Authentication - Verifying a user identity before they can use a program with username and password.</p> <p>Input Validation - Ensuring data input by the user meets specific criteria before processing. Range check.</p> <p>Maintainability - A selection of techniques and methods that make code easy to debug, update and maintain.</p> <p>Defensive design - Defensive design is the practice of planning for contingencies in the design stage of a project or undertaking</p> <p>Enquiry Task: Black and purple book section 2.1 exam questions</p>	<p>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>  <p>https://links.iscaexeter.co.uk/1cb</p>

Construction

Week 1	Week 2	Week 3
<p>Health & Safety legislation</p> <p>Any modern society acknowledges that its members have responsibilities to themselves and each other. The law that promotes health & safety in the construction industry is the 1974 Health & Safety at Work Act (HSWA).</p> <p>The employer is a person or organization who employs people under an employment contract. The employee works under an employment contract. A person may be an employee in employment law, but have a different status for tax purposes. Employers must work out each employee's status in both employment law & tax law.</p> <p>Compliant – an acceptable level of pre-agreed standards.</p>	<p>Employees' responsibilities</p> <ol style="list-style-type: none"> 1. Take reasonable care for the health & safety of themselves or others who may be affected by their acts or omissions. 2. Cooperate with their employer in all matters relating to health & safety. 3. Not intentionally or recklessly interfere with or misuse anything provided in the interests of health & safety. 4. Use anything provided by the employer in accordance with the instructions. 5. Report anything that is thought to be dangerous. <p>Enquiry Task 1 - visit this site to read more about the HSWA. https://www.hse.gov.uk/legislation/hswa.htm</p>	<p>Employers' responsibilities</p> <ol style="list-style-type: none"> 1. Assess & decide what could harm workers in their job and put precautions in place to prevent hazards causing issues. Risk assessment 2. Produce clear & easy to understand ways risks can be controlled in the workplace. 3. Consult & work with workers to ensure everyone is protected from harm when they are in work. 4. Provide workers with free training that is relevant to the job an employee is employed to do. 5. Provide workers with free equipment and personal protective equipment (PPE) & ensure workers maintain this equipment in a serviceable condition. 6. Provide workers with adequate toilets, washing facilities & clean fresh drinking water.
Week 4	Week 5	Week 6
<p>Legislation</p> <p>HSWA - Health & safety at work Act 1974</p> <p>RIDDOR - Reporting of Injuries, Diseases & Dangerous Occurrences Regulation 1995</p> <p>COSHH - Control of Substances Hazardous to Health Regulation 2002</p> <p>PUWER - Provision & Use of Work Equipment Regulations 1998.</p> <p>PPER – Protective Equipment at Work Regulations 1992</p> <p>Manual Handling Operations Regulations 1992.</p> <p>Working at Height Regulations 2005.</p> <p>The Control of Asbestos Regulations 2012.</p> <p>Enquiry Task 2 – Write out each piece of legislation and describe the key features.</p>	<p>Safety signs</p> <p>Red Circle – Prohibition sign (must not do) </p> <p>Yellow or Amber triangle – Warning (warn of hazard or danger) </p> <p>Blue circle – Mandatory sign (must do) </p> <p>Green rectangle – Emergency escape & first aid (information on routes & locations) </p> <p>Red rectangle – Fire-fighting sign (location of fire-fighting equipment) </p>	 <p>Enquiry Task 3 – Identify the meanings of these safety signs</p>

Construction

Week 7	Week 8	Week 9
<p>Fire safety - Fire is a chemical reaction between 3 factors: oxygen (usually in the atmosphere), a type of fuel (such as wood or paper) and ignition (such as a spark). If one or more of the 3 is removed or not present, then the likelihood of fire is reduced.</p>  <p>Construction sites tend to have all 3 factors in abundance, so fire prevention is essential. If a fire occurs, methods of extinguishing or slowing the spread of the fire allow time for workers to escape. Fire extinguishers are used to put out a fire, though they not all are the same. Learn the different colours of extinguisher & what they can be used on.</p>	 <p>Enquiry Task 4 - List as many different types of fuel and ignition that can be found on a construction site.</p>	<p>Risk assessment - It is the responsibility of both the employees and employer to assess potential risks to health and safety. By applying the SLAM principle we can proactively or reactively understand the measures that need to be used to minimize the risk:</p> <p>STOP – engage your mind before your hands. LOOK – at your workplace and find the hazards that may impact on you and your colleagues. Report your findings to your supervisor. ASSESS – the effects the hazards may have on you, work, procedures, pressures, colleagues and the environment. Do you have the knowledge, training and tools to do the task safely? MANAGE – if you don't feel safe then stop working, tell your supervisor what you think the issues are.</p>
Week 10	Week 11	Week 12
<p>Personal Protective Equipment – PPE</p>  <p>Employers must provide free PPE to their workforce, this will act as the first line of defence for the employee. Different jobs require different levels of PPE and each task should be assessed individually.</p> <p>Enquiry Task 5 – Watch the video on PPE https://www.youtube.com/watch?v=B3EDMc_yYWM</p>	<p>Keywords –</p> <p>Employer – A person or organization who employs people under an employment contract. Employee – Someone who works under an employment contract. Legislation - is a law or a set of laws that have been passed by Parliament. Prohibition – to prohibit an action Flammable – The ease by which something is set alight and the rate at which it burns. Risk – the likelihood that a person may be harmed if they are exposed to a hazard. Severity – the degree of harm that could occur or a measure of how bad an injury could become.</p>	 <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4sw</p>

Dance

Week 1	Week 2	Week 3
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Safe Dance Practice: The application of skills, techniques and knowledge to help a dancer prevent injury ● Safe Dress: Dance clothing that will prevent injury ● Safe Space: A dance environment that prevents injury 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Warm Up: A sequence of medium impact cardiovascular, joint isolating and stretching exercises done at the start of dance class to prepare the body for safer and more effective performance. ● Cool Down: A sequence of low impact exercises done at the end of dance class to prepare the body for resting. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Injury: Physical damage to a body part ● First Aid: Immediate assistance given to someone with an illness or injury. Remember to use P.R.I.C.E.D and avoid H.E.A.T ● Safe Execution: Carrying out dance actions safely
<p><u>Enquiry Task:</u> Draw and label a diagram of either: a) a safe dance outfit OR b) a safe dance space.</p>	<p><u>Enquiry Task:</u> Make a list of cardiovascular, joint isolating and stretching exercises that would be suitable for a) a warm up and b) a cool down</p>	<p><u>Enquiry Task:</u> Research a common dance injury using the internet. Create a poster that describes the injury and explains how to prevent and treat this injury</p>
Week 4	Week 5	Week 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Rehearsal Skills: Skills required for refining performance in rehearsal such as commitment, concentration and communication ● Rehearsal Techniques: Methods that can be used to refine performance such as repetition, use of mirror, and self assessment 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Performance Skills Skills needed to perform the work to its best. Includes: <ul style="list-style-type: none"> ○ physical (use of body) ○ technical (accuracy) ○ mental (use of mind) ○ and expressive (interpretation and communication) 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Performance Assessment: Determining a dancers level of achievement in a dance performance using self or peer observation ● Performance Evaluation: Commenting on the success of a dancer in performance using explanations and examples, and suggesting targets for improvement
<p><u>Enquiry Task:</u> Create a one hour rehearsal plan that you can use next lesson in order to improve your performance work so far. Include the skills and techniques needed.</p>	<p><u>Enquiry Task:</u> Choose a dance piece from the internet. Identify the performance skills that are being used and give examples from the video. Can you spot any that need to be improved? If so, set the dancers some targets.</p>	<p><u>Enquiry Task:</u> Evaluate your performance skills so far in class. 1. Identify the skills you are using successfully and give examples. 2. Identify the skills you need to improve and set yourself some targets for improvement.</p>

Dance

Week 7	Week 8	Week 9
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Movement components: The movement elements of a piece of choreography (the action, space, dynamics and relationships) ● Action: The movement elements of a piece of choreography. E.g. elevation, rotation, gesture, stillness, travel, floor work, transfer of weight 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Space: The ways in which the choreography uses the dance space. e.g. <ul style="list-style-type: none"> ○ pathways, levels, directions, size, planes 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Dynamics: The quality of the choreography in terms of speed, weight and energy. e.g. fast/slow, sudden/ sustained, acceleration/deceleration, strong/ light, direct/indirect, flowing/abrupt
<p><u>Enquiry Task:</u> Watch a dance piece of your choice on the internet.</p> <ol style="list-style-type: none"> 1. Make a list of the actions that are used. 2. Explain why you think these actions were chosen. 3. Evaluate the success of these choices 	<p><u>Enquiry Task:</u> Watch a dance piece of your choice on the internet.</p> <ol style="list-style-type: none"> 1. Make a list of the spatial elements that are used. 2. Explain why you think these spatial elements were chosen. 3. Evaluate their success 	<p><u>Enquiry Task</u> Watch a dance piece of your choice on the internet.</p> <ol style="list-style-type: none"> 1. Make a list of the dynamics that are used. 2. Explain why you think these dynamics were chosen. 3. Evaluate the success of these choices
Week 10	Week 11	Week 12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Relationships: the ways the dancers movements relate to each other e.g. <ul style="list-style-type: none"> ○ In space: mirroring, formations, proximity contact, counterpoint, ○ In time: action and reaction, accumulation, unison, cannon ○ In action: complement, contrast 	<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>CAREERS</u></p> 
<p><u>Enquiry Task:</u> Watch a dance piece of your choice (with two or more dancers) on the internet.</p> <ol style="list-style-type: none"> 1. Make a list of the relationships that are used. 2. Explain why you think these relationships were chosen. 3. Evaluate the success of these choices 	<p><u>Enquiry Task</u> Watch a dance piece of your choice (2 minutes minimum) on the internet.</p> <ol style="list-style-type: none"> 1. Describe the structure that is used. 2. Explain why you think this structure was chosen. 3. Evaluate the success of these choices. 	<p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

Design and Technology

Week 1 – Hardwoods & Softwoods	Week 2 – Manufactured Boards	Week 3 – Timber faults.
<p>Unit 5B.1 – Sources & Origins</p> <p>Softwood comes from coniferous trees. Most coniferous trees have needles, are evergreen, and they keep their needles all year round. Softwood trees grow faster than hardwood trees making it relatively cheap and readily available. The grain is wider making it more absorbent.</p> <p>Hardwood is sourced from deciduous trees. Deciduous trees drop their leaves in the autumn and new leaves grow in spring. Hardwood is usually slower growing and is therefore more expensive. Sought after for its variety of colours and grains, it has good aesthetical and physical properties. It has a closer grain, making it more dense and hardwearing.</p>	<p>Unit 5B.1 – Sources & Origins</p> <p>Manufactured Boards can be made from sawmill scraps, recycled wood, low grade timbers and even sawdust. Wood pieces are bound together with adhesives to make man-made / manufactured board.</p> <p>Manufactured board can be susceptible to moisture. Boards are rigid, stable and supplied in large sheets.</p> <p>Laminated Boards - Lamination is the technique of layering materials using heat, pressure and adhesives.</p> <p>Veneers (thin layers) are layered with the grain direction of each layer at 90° to each other.</p> <p>Enquiry Task – Produce a PowerPoint detailing Hardwoods, Softwoods and Manufactured boards.</p>	<p>Faults can occur as timber dries. These include:</p> <ul style="list-style-type: none"> • Bowing • Splitting / cracking • Springing • Cupping • Twisting <p>Natural timbers can have natural defects. The most common natural defect is a knot. Softwoods such as pine, larch and cedar can also seep resin at the knot.</p> 
Week 4 – Working with Timbers	Week 5 – Working Properties	Week 6 – Commercial Manufacturing
<p>Unit 5B.2 – Working with Timbers</p> <p>Timber and board materials are widely used in the school workshop. They are readily available. They can be cut and shaped using common tools and machines in the workshop. They can be formed and bent using jigs and moulds. They can be joined using a variety of joints and fixings. Planks and boards are stocked with different finishes: planed all round, and rough sawn. If ordering PAR timber (planed all round), the standard size will be reduced.</p> <p>Enquiry Task -</p> <p>An architect has designed a house that is entirely clad in larch. State and justify one physical or working property of larch that make it suitable for exterior cladding.</p>	<p>Consider the different Working Properties of timber when selecting your material.</p> <p>Strength – the amount of load or compression it can withstand.</p> <p>Toughness – absorption of energy through shock before splitting.</p> <p>Elasticity - will it return to shape after being compressed?</p> <p>Hardness – how resistant is the surface? Will it survive scratches, knocks and abrasion?</p> 	<p>Unit 5B.3 – Commercial Manufacturing</p> <p>Manufactured or Engineered Wood has many advantages over solid wood. May be mixed with glues to give greater strength and stability. Ideal for use in construction, industrial and domestic use. Efficient in its use of mixed materials and utilising waste wood. It can be made in large sheets not limited by the diameter of a tree trunk. Mass produced timber components are produced using CNC machinery (Computer Numerical Control). This enables large quantities of equal-sized parts or products to be produced. Templates can be saved and reused to help minimise waste. Screw holes, slots and patterns can be cut in one process.</p> <p>Enquiry Task - Give two advantages flat-pack furniture offers the consumer.</p>

Design and Technology

Week 7 – Paper & Board	Week 8 – Paper & Board Production	Week 9 – Paper & Board
<p>Unit 5A.1 – Sources & Origins</p> <p>Cellulose fibres used to make papers and boards are usually derived from:</p> <ul style="list-style-type: none"> • Bamboo • Cotton • Flax • Hemp • Straw • Sugarcane • Wood  <p>Paper is made from fibrous materials. Theoretically, anything that is fibrous can be made into a form of paper – even elephant dung. An elephant eats 250kg of food each day. 50kg of dung results. This produces roughly 125 sheets of paper.</p>	<p>Generally wood gives the best results because it produces strong cellulose fibres.</p> <p>Both deciduous and coniferous trees can be used. Hardwood produces short fibres. Softwoods produce long cellulose fibres which are stronger. Fast growing trees such as spruce and fir are the most commonly used softwoods.</p> <p>The process of making papers and boards start with making pulp from debarked, chipped wood. Pulp is a mixture of cellulose fibres and water. Producing pulp involves adding a chemical solution to the cellulose fibres. The solution is cooked under pressure which produces a fibrous liquid, known as pulp. Bleach or dye can be added at this stage to whiten or to add colour to the pulp mixture</p>	<p>Unit 5A.2 – Working with Papers & Boards</p> <p>Papers and boards are available in three main formats; rolls, sheets and ply. Rolls are most commonly used within the printing industry. Sheet form is used for printing and consumer-based goods. Ply contains layers in either sheet or roll form</p> <p>A range of tools and processes are used to mark out, cut and shape papers and boards.</p> <p>Enquiry Task</p> <p>What tools or techniques can be used to perform the following processes?</p> <ol style="list-style-type: none"> a. Cut paper & board to size b. Score and crease c. Reform or deform d. Add perforations
Week 10 – Paper & Board	Week 11 – Assessment Week	Week 12 - Careers
<p>Unit 5A.3 – Commercial manufacturing, treatments & finishes.</p> <p>Lithography - The most common method for printing on papers and boards is a process called lithography. Lithography comes from Ancient Greek, <i>lithos</i> meaning 'stone' and <i>graphein</i> meaning 'to write'. Litho printing is used for high volume, commercial print runs. Litho printers can print on both sides of paper or card.</p> <p>Offset Lithographic Process - The process works by transferring the image to be printed from a metal plate onto a series of rollers. A mirror image is transferred onto a cylinder, which is then reversed or corrected as it is printed onto paper</p>	<p>Keywords;</p> <p>Paper – less than 200gsm (photocopy paper 80gsm)</p> <p>Card – more than 200gsm. Also known as card or cardboard.</p> <p>Typography – The art, style and arrangement of Typeface (fonts).</p> <p>Pictogram – A pictorial symbol for a word or phrase.</p> <p>Die Cutting – A process of cutting out and creasing paper or board to create nets packaging.</p> <p>Tessellation – An arrangement of shapes closely fitted together, without gaps or overlapping to reduce waste.</p> <p>GSM – paper measured weight – grams per square metre.</p> <p>Microns – card thickness is measured in microns, a micron is 1/1000 of a millimeter.</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"> ● Component 1: A research project that explores 3 pieces of professional repertoire. ● Component 2: Develops your skills and techniques in rehearsal and performance. ● Component 3: Responding to a brief set by the exam board to create, perform and evaluate a piece of drama. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Genre: A category or type of story ● Style: The way in which the story is presented to the audience. ● Melodrama: A style of drama that uses stock characters and heightened emotions. ● Naturalism: A style of theatre that attempts to replicate real life. ● Storytelling theatre: A style of drama that uses narration alongside a variety of innovative techniques. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Plot: The narrative of a play. ● Structure: The way in which the plot is ordered and presented to the audience. ● Episodic: When a play is structured in episodes that make sense on their own and can jump between different times and places. ● Review: One person's analysis and opinion of a piece of theatre they have seen.
<p><u>Enquiry Task:</u> Read the guide to the BTEC performing arts on Google classroom. Make a note of anything you are looking forward to and anything you do not understand.</p>	<p><u>Enquiry Task:</u> Write a detailed description of one style of drama and explain what impact you think it has on an audience.</p>	<p><u>Enquiry Task</u> Write a review of the piece of drama we have just watched. Include an outline of the genre, style, plot and structure as well as how it made you react.</p>
Week 4	Week 5	Week 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Epic Theatre: A style of theatre developed by Brecht that intends to challenge the audience to question their understanding of the world. ● Juxtaposition: Placing two contrasting ideas side by side to provoke thought from your audience. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Gestus: The gist of a character summed up in a gesture or posture. ● Verfrumdungseffekt/V-effect: Techniques that keep the audience at a critical distance from the performance, allowing them to think more than feel. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Fourth Wall: The fourth wall is the imaginary wall between the audience and performers. ● Direct Address: This is when the actors speak directly to the audience, breaking the fourth wall.
<p><u>Enquiry Task:</u> Brecht believed that drama/theatre should try to change the world for the better. Write two arguments agreeing with this statement and two disagreeing.</p>	<p><u>Enquiry Task:</u> Make a list of as many techniques as you can think of that help achieve the V-effect. Pick one technique and explain how it works.</p>	<p><u>Enquiry Task:</u> What do you feel or think when a performer breaks the fourth wall and talks to you as an audience member? What impact did Brecht think breaking the fourth wall would have on the audience?</p>

Drama

Week 7	Week 8	Week 9
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Spass: Fun or silliness put into a play that deals with serious issues. It is there to entertain the audience but also to help achieve the v-effect and comment on the issue. ● Grammelot: A nonsense language taken from 'commedia d'elle arte'. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Gestic Song: A song that captures the social message of the piece of drama, usually using comedy. ● Social Commentary: When a play has a message about the way society is organized. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Rehearsal: Practicing all the elements of a play ready for performance. ● Blocking: Working out where the performers will be positioned on stage. ● Refining: Improving your work based on reflection and feedback.
<p><u>Enquiry Task:</u> Do you think it is OK to joke about serious issues? Explain why or why not. Is there anything that it is not acceptable to joke about? Explain why or why not.</p>	<p><u>Enquiry Task:</u> Write song or rap lyrics that comment (in an amusing way) on something that irritates you.</p>	<p><u>Enquiry Task:</u> Learn your lines, cues and blocking in preparation for next lessons performance.</p>
Week 10	Week 11	Week 12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Character Development: Working on understanding your character and showing this through physicality and voice. ● Performance: Sharing your work with an audience. ● Audience Awareness: Taking the position of the audience in consideration when you rehearse and perform. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Describe: Write a detailed account, usually of a performance, workshop or style of drama. ● Explain: Analyze why the performance, workshop was done in the way it was. ● Evaluate: Write about how successful the performance workshop or style is at achieving it's aims. 	<p><u>CAREERS</u></p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>
<p><u>Enquiry Task:</u> Reflect on your performance by completing the self-evaluation form on google classroom.</p>	<p><u>Enquiry Task</u> Choose one of the lessons we have looked at over the course of this cycle. Describe, explain and evaluate the lesson.</p>	

English

A Christmas Carol

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"> 1. Status Quo: The way things are 2. Diatribes: a forceful attack against something. 3. Stratified Society: a society divided into layers 4. Misanthropic: unsociable 5. Miserly: mean 6. Avaricious: greedy 7. Caricature: an exaggerated version of something 8. Foil: a character who contrasts with another character 9. Idealised: presenting something as better than in reality 10. Physiognomy: the belief that a person's appearance can tell us something about their personal characteristics. 	<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"> 1. Caricature: an exaggerated version of something 2. Foil: a character who contrasts with another character 3. Idealised: presenting something as better than in reality 4. Physiognomy: the belief that a person's appearance can tell us something about their personal characteristics. <p>Scrooge:</p> <ol style="list-style-type: none"> 5. "Oh! He was a tight-fisted hand at the grindstone" 6. "a squeezing wrenching, grasping, scraping, covetous old sinner" 7. "hard and sharp as flint" 8. "The cold within him froze his old features... made his eyes red, his thin lips blue" <p>Fred</p> <ol style="list-style-type: none"> 9. "He was all in a glow;" 10. "his eyes sparkled," 	<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"> 1. Malthusian Economic Theory: the belief that the population would grow so fast that food would run out. 2. Divine Intervention: direct action taken by a God to improve a situation 3. The Poor Law Amendment Act 1834: an act of parliament that set up the workhouse system 4. Stratified Society: a society divided into layers <p>Scrooge:</p> <ol style="list-style-type: none"> 5. "Are there no prisons?" asked Scrooge... "And the Union workhouses?" 6. "If they would rather die," said Scrooge, "they had better do it, and decrease the surplus population." <p>Marley</p> <ol style="list-style-type: none"> 7. "I wear the chain I forged in life" 8. "The common welfare was my business" 9. "Marley's face...like the ancient prophet's rod" <p>Fred</p> <ol style="list-style-type: none"> 10. fellow-passengers to the grave, and not another race of creatures"

English

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"> Foil: a character who contrasts with another character Idealised: when something is presented as better than in reality Philanthropy: the desire to promote the welfare of others The Second Report of the Children's Employment Commission (1842): the report detailing the mistreatment of children in Victorian society that inspired Dickens to write A Christmas Carol. <p>GOC Past</p> <ol style="list-style-type: none"> "It wore a tunic of the purest white" from the crown of its head there sprung a bright clear jet of light <p>Scrooge</p> <ol style="list-style-type: none"> "A solitary child, neglected by his friends" <p>Little Fan</p> <ol style="list-style-type: none"> "Always a delicate creature, whom a breath might have withered" <p>Fezziwig</p> <ol style="list-style-type: none"> "A positive light appeared to issue from Fezziwig's calves" "The happiness he gives, is quite as great as if it cost a fortune" 	<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"> Idol: an object of worship Deification: to transform a thing into an object of worship. The Hungry Forties: a period of economic hardship in the 1840s Divine Intervention: direct action taken by a god to improve a situation <p>Belle</p> <ol style="list-style-type: none"> "Another idol has displaced me- a golden one" "I have seen your nobler aspirations fall off, until the master passion, Gain engrosses you." <p>GOC Past</p> <ol style="list-style-type: none"> Scrooge: "Show me no more! Conduct me home. Why do you delight to torture me?" <p>GOC Present</p> <ol style="list-style-type: none"> "On its head it wore no other covering than a holly wreath" "[It] bore a glowing torch, in shape not unlike Plenty's horn" "Spirit," said Scrooge submissively, "Tonight, if you have aught to teach me, let me profit by it." 	<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"> Idealised: when something is presented as better than in reality Contrast: to show a clear difference between two things for effect Irony: when the significance of something is the opposite to what is said. <p>The Cratchits</p> <ol style="list-style-type: none"> "a feathered phenomenon..." "There never was such a goose." "Eked out by apple-sauce and mashed potatoes, it was a sufficient dinner for the whole family." Tiny Tim: "Bob held his withered hand in his" Irony: "I give you Mr Scrooge, the founder of the feast!" <p>GOC Present</p> <ol style="list-style-type: none"> Irony: "If he be like to die, he had better do it, and decrease the surplus population." <p>Fred</p> <ol style="list-style-type: none"> About Scrooge: "rather a disagreeable animal, a savage animal"

English

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"> Ignorance: lack of knowledge or information. Psychopomp: A spiritual guide for a person's soul. Prognostication: a vision of the future. A prophecy Divine Intervention: direct action taken by a god to improve a situation <p>Ignorance & Want</p> <ol style="list-style-type: none"> “wretched, abject, frightful, hideous, miserable” “Yellow, meagre, ragged, scowling, wolfish” “Where angels might have sat enthroned, devils lurked, and glared out menacing.” “a stale and shrivelled hand, like that of age, had pinched, and twisted them, and pulled them into shreds” “most of all beware this boy, for on his brow I see that written which is Doom” <p>GOC Present</p> <ol style="list-style-type: none"> Irony: “Are there no prisons?” “Are there no workhouses?” 	<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"> Prognostication: a vision of the future. A prophecy Redemption: the action of saving or being saved from sin, error, or evil Pathetic Fallacy: When the weather or surroundings are described with human emotions to reflect the mood of a character or create a tone <p>Pathetic Fallacy</p> <ol style="list-style-type: none"> Stave 1: It was cold, bleak, biting weather: foggy withal... Stave 5: “No fog, no mist; clear, bright, jovial, stirring, cold...Golden sunlight; Heavenly sky; sweet fresh air; merry bells”. <p>Scrooge:</p> <ol style="list-style-type: none"> “Oh, tell me I may sponge away the writing on this stone!” “I’m as light as a feather, I’m as happy as an angel, I’m as merry as a schoolboy” “I’ll raise your salary and endeavour to assist your struggling family” “To Tiny Tim, who did NOT die, he [Scrooge] was a second father” “God bless Us, every one!” 	<p>TASK- Learn the following terms and quotations using say, look, cover, write, check in your homework book.</p> <p>Light</p> <ol style="list-style-type: none"> Stave 1: it had not been light all day Stave 2: from the crown of its head there sprung a bright clear jet of light Stave 3: a glowing torch, and held it up, high up, to shed its light on Scrooge Stave 4: The room was very dark, too dark Stave 5: No fog, no mist; clear, bright, jovial, stirring Golden sunlight; Heavenly sky <p>Time:</p> <ol style="list-style-type: none"> Stave 1- Once upon a time... Stave 2- “Rise! And walk with me!” “My time grows short...Quick!” Stave 3- “My time upon this Globe is very brief” Stave 4- Ghost appears before the end of Stave 3 and “relentlessly” points.

English

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> <ol style="list-style-type: none"> 1. Misanthropic: unsociable 2. Miserly: mean 3. Avaricious: greedy 4. Caricature: an exaggerated version of something <p>Scrooge in Stave 1</p> <ol style="list-style-type: none"> 5. “a squeezing wrenching, grasping, scraping, covetous old sinner” 6. “The cold within him froze his old features... made his eyes red, his thin lips blue” <p>Scrooge’s Attitudes to Poverty:</p> <ol style="list-style-type: none"> 7. “Are there no prisons?” asked Scrooge... “And the Union workhouses?” 8. “If they would rather die,” said Scrooge, “they had better do it, and decrease the surplus population.” <p>Scrooge’s Redemption:</p> <ol style="list-style-type: none"> 9. “Oh, tell me I may sponge away the writing on this stone!” 10. “I’m as light as a feather, I’m as happy as an angel, I’m as merry as a schoolboy” 	<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"> 1. Divine Intervention: direct action taken by a God to improve a situation 2. The Poor Law Amendment Act 1834: an act of parliament that set up the workhouse system <p>Marley’s Ghost</p> <ol style="list-style-type: none"> 3. “I wear the chain I forged in life” 4. The face of Marley...like the ancient prophet’s rod <p>GOC Past</p> <ol style="list-style-type: none"> 5. “It wore a tunic of the purest white” 6. “From the crown of its head there sprung a bright clear jet of light” <p>GOC Present:</p> <ol style="list-style-type: none"> 7. “On its head it wore no other covering than a holly wreath” 8. “[It] bore a glowing torch, in shape not unlike Plenty’s horn” <p>GOC Yet to Come:</p> <ol style="list-style-type: none"> 9. “It was shrouded in a deep black garment” 10. “The kind hand trembled” 	<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="1554 767 1973 1187" 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 1 Present Tense		Week 2 Avoir + Etre		Week 3 Descriptions		Week 4 Reflexive verbs		Week 5 Relationships	
Parler	To speak	Avoir	To have	généreux	generous	se fâcher	to get angry	mon père	my father
je parle	I speak	j'ai	I have	gentil	kind	je me fâche	I get angry	ma mère	my mother
tu parles	you speak (s)	tu as	you have	sympa	nice, kind	tu te fâches	you get angry	mon frère	my brother
il / elle parle	he/she speaks	il / elle a	he / she has	casse-pieds	annoying	il / elle se fâche	he / she gets angry	ma soeur	my sister
nous parlons	we speak	nous avons	we have	égoïste	selfish			ma belle-mère	my step-mother
vous parlez	you speak (pl)	vous avez	you have	désagréable	unpleasant	nous nous fâchons	we get angry	mon beau-père	my step-father
ils parlent	they speak	ils / elles ont	they have	jaloux	jealous			mon demi-frère	my step/half brother
Finir	To finish	Être	To be	méchant	naughty, mean	vous vous fâchez	you get angry (pl)	ma demi-soeur	my step/half sister
je finis	I finish	je suis	I am	amusant	funny			ils / elles se fâchent	they get angry
tu finis	you finish (s)	tu es	you are (s)	drôle	funny	Reflexive verbs need a reflexive pronoun before the conjugated form of the verb.		une famille monoparentale	a single parent family
il/elle finit	he/she finishes	il / elle est	he/she is	têtu	stubborn			ils / elles se fâchent	they get angry
nous finissons	we finish	nous sommes	we are	impoli	rude			ils / elles se fâchent	they get angry
vous finissez	you finish (pl)	vous êtes	you are (pl)	heureux	happy	Reflexive verbs need a reflexive pronoun before the conjugated form of the verb.		une famille monoparentale	a single parent family
ils finissent	they finish	ils / elles sont	they are	ambitieux	ambitious			ils / elles se fâchent	they get angry
Vendre	To sell	Possessive adjectives		compréhensif	understanding			s'entendre	to get on with
je vends	I sell	mon, ma mes	my	sévère	strict	se disputer	to argue	un homme	a man
tu vends	you sell (s)	ton, ta, tes	your (s)	paresseux	lazy	s'occuper	to look after	un mari	a husband
il / elle vend	he/she sells	son, sa, ses	his / her / its	timide	shy	s'ennuyer	to get bored	une femme	woman/wife
nous vendons	we sell	notre, nos	our	Remember that adjectives need to agree in French.		s'amuser	to have fun	un fils	a son
vous vendez	you sell (pl)	votre, vos	your (pl)			s'appeler	to be called	une fille	a daughter
ils vendent	they sell	leur, leurs	their			se marier	to marry		
Enquiry tasks – to be done in French									
Create flashcards for the regular present tense verbs.		Create flashcards for the irregular present tense verbs.		Write 90 words to describe your friend in detail.		Write 90 words to describe your family relationships.		Review the vocabulary from weeks 1-5 on Quizlet.	

French

Week 6		Week 7 Immediate future		Week 8 Future		Week 9 Opinions		Week 10
je voudrais...	I would like...	This is used to say what you are going to do present tense of aller + infinitive		What you will do infinitive of -er / -ir verbs or infinitive minus e of -re verbs + future ending		je pense que	I think that	Revise the key sentences and all vocabulary from this cycle ready for your assessment next week. Quizlet folder: 
j'aimerais...	I would like...					Aller	To go	
j'ai envie de...	I want (feel like)...	je vais	I am going	tu jouer as	you will play	à mon avis	in my opinion	
être	to be	tu vas	you are going	il/elle jouer a	he/she will play	selon mes parents	according to my parents	
se marier	to marry	il / elle va	he/she is going	nous jouer ons	we will play	selon mon père	according to my dad	
travailler	to work	nous allons	we are going	vous jouer ez	you will play (pl)	je sais que	I know that	
vivre	to live	vous allez	you are going (pl)	ils/elles jouer ont	they will play	je trouve que	I find that	
habiter	to live	ils/elles vont	they are going	j'aurai	I will have	j'ai l'impression que	I get the impression that	
partager	to share	adopter	to adopt	je serai	I will be	pour moi	for me	
élever	to raise	se divorcer	to divorce	j'irai	I will go	j'adore	I love	
faire confiance à	to trust	se séparer	to separate	je ferai	I will do	je n'aime pas	I don't like	Week 11
avoir	to have	choisir	to choose	je pourrai	I will be able	j'aime	I like	Assessment Week
un enfant	a child	rester célibataire	to stay single	j'irai	I will go	je préfère	I prefer	
un partenaire	a partner	épouser	to marry	je ferai	I will do	je déteste	I hate	Week 12 
un bébé	a baby			je pourrai	I will be able	parce que	because	
un petit copain	boyfriend			je viendrai	I will come	car	because, as	
une petite copine	girlfriend			je verrai	I will see	cependant	however	
Enquiry tasks – to be done in French								
Use a dictionary to create a list of important verbs.		Write a paragraph about your future plans.		Make flashcards for the future tense.		Review the vocabulary for weeks 1-9 on Quizlet.		
KEY:	verbs	masculine nouns	feminine nouns	adjectives	connectives			

Geography - Option

Climate Change and Global Cities

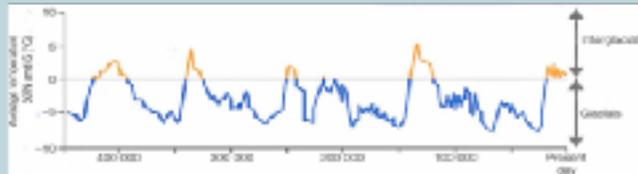
Week 1

The world's climate has changed naturally over time, but that change has recently been accelerated by human activities.

Climate definition = typical long-term patterns of weather over time.

There have been 6 glacial periods (colder - permanent ice sheets across the world) and 6 inter-glacial periods (warmer - permanent ice sheets are only at the north and south poles) in the last 450,000 years.

There have been 60 periods of each during the last 2.6 million years (the 'Quaternary period').



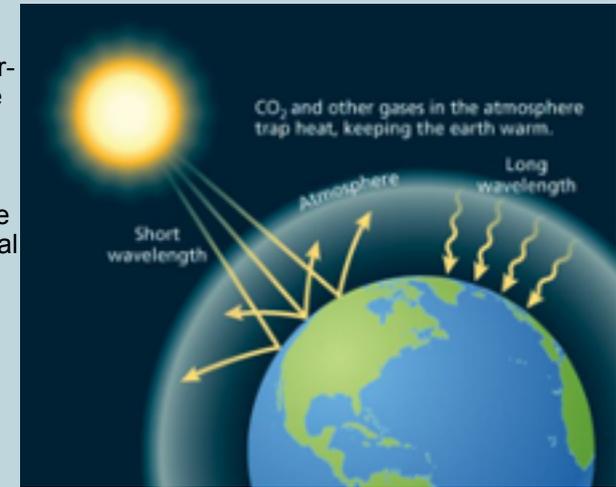
Enquiry: Using information from lessons & the graph above, come up with two predictions for the future climate (what do you think will happen?).

Week 2

Global Warming

We are currently in an inter-glacial period therefore the warming of the globe is partly natural. But how is there more heat trapped around the earth than there was previously? The natural 'Greenhouse Effect'!

Enquiry: Create an alternative diagram to show how the natural 'Greenhouse effect' works.



Week 3

Are Humans to Blame?

Earth's average temperature has increased 1 degree Celsius in the last 100 years. Humans are causing an "enhanced greenhouse effect" by adding more and more greenhouse gases into the atmosphere, trapping more and more heat and increasing temperatures at an unsustainable rate.

The "Greenhouse" Gases are:

CARBON DIOXIDE (CO₂) – is increasing because of deforestation (trees absorb CO₂), car exhausts and burning fossil fuels (coal, gas, oil) to make electricity.

METHANE – is increasing due to landfill sites and farm animals, especially cows, which emit methane from both ends.

HALOCARBONS – in Air Conditioning units, fridges and some aerosols.

NITROUS OXIDE – from farm fertilisers and car exhausts

Enquiry: Create a table to show the advantages & disadvantages of human actions that contribute to the 'enhanced greenhouse effect.'

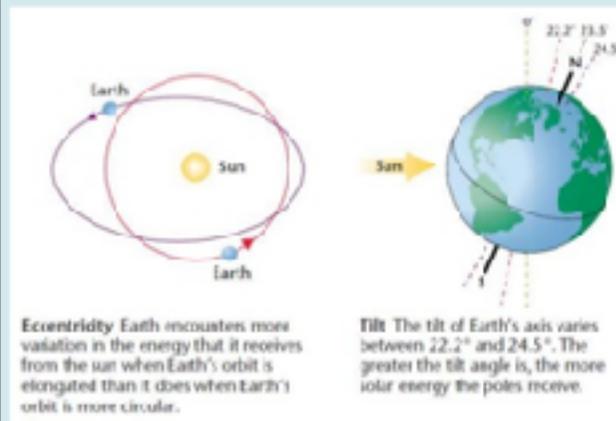
Week 4

Natural causes of climate change:

Other natural causes of climate change: The Milankovitch Cycles – the changing orbit shape and tilt of the earth.

Enquiry:

In one paragraph, explain whether you think 'climate change is mostly natural or not.



Geography - Option

Week 5	Week 6
<p>The IMPACTS of global warming</p> <ul style="list-style-type: none"> • The coast, tourism and population movement: although rising temperatures are arguably good for tourism, especially in UK, rising sea levels and extreme weather are threatening coastal lands. Increased erosion of beaches, flooding, and movement of populations further inland. • Wildlife and habitats: Loss of habitats and species e.g. polar bears under threat due to diminishing polar ice caps. • Water and water supplies: decline in quality and quantity of drinking water due to saltwater intrusion from coastal flooding, overflowing of sewer systems during extreme rainfall events, and increasing drought in some parts of the world. <p>Enquiry: Use books/newspaper articles/ the internet to find more information of the impacts of global warming. Create an informative poster/leaflet to raise awareness of these amongst teenagers.</p>	<p>What has been done to reduce global warming? Global level –</p> <ol style="list-style-type: none"> 1) Kyoto Protocol 1997 – developed countries promised to limit their greenhouse gas emissions. FAILED: USA did not agree to sign up, so China also did not sign. Without these two biggest players on the world stage, the agreement was not worth the paper it was written on. 2) Copenhagen Accord 2009 was an abject failure as it was not adhered to by most countries 3) Paris Agreement 2015 – all countries and many big businesses signed up to limit greenhouse gases and change to renewable energy sources, not fossil fuels. However, Donald Trump has withdrawn the USA from the Agreement, and nine other countries of the 197 who attended have also not signed. <p>Enquiry: You are a delegate at the latest climate conference. Use the information you have gathered to create 3 climate ‘goals’ you wish to achieve. (These should be 3 things that would have the biggest impact)</p>
Week 7	Week 8
<p>What has been done to reduce global warming?</p> <p>National level - Governments are increasingly urging people to limit their electricity use, e.g. switching to energy efficient lightbulbs, using electric cars etc. But this is COSTLY, and most people cannot afford a new car very often if at all, so change will be slow.</p>  <p>Enquiry: Write a letter to your local MP to persuade them of the benefits of supporting one ‘environmentally friendly’ scheme near you (e.g. investment in a solar/wind farm).</p>	<p>The Arguments: Man-made or natural?</p> <p>Low Income Countries (LICs) who rely on agriculture or tourism (especially on the coast which they don’t want to flood!) are more likely to argue that climate change is MAN-MADE and so something needs to be done to reduce global warming! – E.g. The Maldives</p> <p>Newly Industrialised Countries (NICs) like India (and to an extent Donald Trump’s USA) whose economy relies on environmentally harmful industry for their economic development, are more likely to argue that climate change has always happened and is just NATURAL!</p> <p>Enquiry: Pretend you are the leader of an LIC/NIC and are at a conference with a number of other countries. Using research from online, create a speech to persuade them that climate change is / isn’t manmade.</p>

Geography - Option

Week 9

What are Global Cities?

“Global Cities” are cities that are well connected by the process of globalisation. There are currently over 300 global cities, the UK has 13. For example, London has a global “reach” with university students from all over the world, multinational company HQs, global stock exchange.

See top 5 global cities in graph above.



Enquiry: Use the internet and produce one fact-file on one of the ‘global cities’ within the UK. Then create another on a global city from abroad.

Week 10

Functions of Global Cities

While all cities have a regional influence, global cities have a much greater influence. They are connected to other parts of the world through:

- Migration
- Governance and decision making
- Finance/trade
- Transport hubs
- Ideas/Info
- Education centres
- Cultural and sporting hubs



Enquiry: Write a ‘newspaper style’ article on how one UK global city is connected to other parts of the world. Link in at least 2 of the above bullet points.

Week 11

An HIC Global City - Sydney, Australia

Sydney is the largest city in Australia. It has a population of 4.5 million (2015) so is not (yet) a “mega-city”.

An LIC Global City - Mumbai, India

Mumbai is India’s largest city with a population of 18.4 million (2015). The city of Greater Mumbai is built on a low-lying island in the Arabian Sea. As the city has grown, it has sprawled northwards and eastwards across Thane Creek



Enquiry: Research one business that is now based/has a base in Mumbai. Produce a small leaflet or poster advertising this business

Week 12

Careers linked to these topics:

- Environmental scientist
- Environmental engineer
- Sustainability consultant
- Conservationist
- Town/city planner

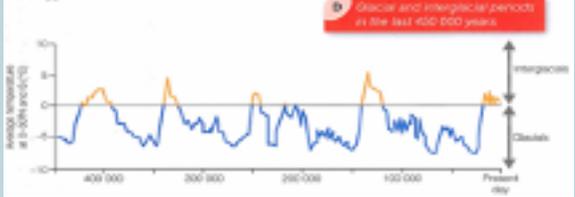
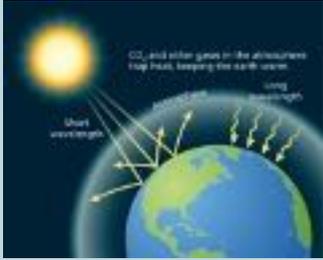
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<https://links.iscaexeter.co.uk/of7>



Geography - Core

Climate Change and Global Cities

Week 1	Week 2	Week 3
<p><u>Climate Change Causes</u> Climate = average weather over 30 years or more. The world's climate has changed naturally over time, but recent changes to Earth's climate have been accelerated (sped up) by human activities.</p>  <p>Enquiry: Carefully copy the graph using this link: https://dc3306.fims.uwo.ca/lswaffie/myth-buster/climate-always-changes/ Use a ruler, give your graph a title and labels. Next, write a paragraph to explain what the graph shows.</p>	<p><u>Greenhouse Effect</u> We are currently in an inter-glacial period and the warming of the globe is partly natural. So why is there more heat trapped around the earth than there was previously?</p>  <p>Enquiry: Write a short newspaper article explaining the Greenhouse Effect. Add a diagram to aid your readers understanding and make sure you include information about the Enhanced Greenhouse Effect. Link: https://www.environment.gov.au/climate-change/climate-science-data/climate-science/greenhouse-effect</p>	<p><u>Evidence for Climate Change</u> Earth's average temperature has increased by 1 degree Celsius in the last 100 years. Humans are causing an "enhanced greenhouse effect" by adding more and more greenhouse gases into the atmosphere, trapping more and more heat and increasing temperatures at an unsustainable rate. The "Greenhouse" Gases are: Carbon Dioxide (CO₂), Methane, Halocarbons, and Nitrous Oxide.</p> <p>Enquiry: Create an A4 poster to explain how human use of certain resources is causing more greenhouse gases to be added to Earth's atmosphere.</p>  <p>Link: https://unfccc.int/cop3/fccc/climate/fact22.htm</p>
Week 4	Week 5	Week 6
<p><u>Reducing Climate Change</u></p> <p>Global level – countries have tried to agree to limit greenhouse gas emissions via the Kyoto Protocol 1997, the Copenhagen Accord 2009, and the Paris Agreement 2015, but countries like the USA and China often did not sign/adhere to these accords.</p> <p>National level – Governments are urging people to limit energy use, e.g. switching to energy efficient lightbulbs, using solar panels and buying electric cars. This is COSTLY and so change will be slow.</p> <p>Enquiry: Create a leaflet to explain to people, three ways in which they could reduce their use of energy and/or use more renewable sources of energy.</p> 	<p><u>Climate Change Protests</u></p> <p>Climate Change protesters like Extinction Rebellion have made high-profile attempts to complain that Governments are not acting fast enough to stop what is now known as a "Climate Emergency". Greta Thunberg, a 16 year-old school girl from Sweden, has sparked a worldwide "climate strike" campaign by refusing to go to school on Fridays and sitting outside the Swedish Parliament in Stockholm.</p> <p>Enquiry: Write a short blog post about Greta Thunberg and the climate change protests. Do you think these protests could pressure governments to do more to reduce climate change? Say why.</p> 	<p><u>Desertification</u></p> <p>Desertification is the way land turns into desert as the quality of the soil declines over time. The main causes are: climate change, removal of wood, overgrazing, soil erosion and population growth. Strategies to reduce desertification include: planting trees, improving soil quality and water management.</p> <p>Enquiry: Write one paragraph to explain desertification. Then choose one strategy to reduce desertification. Explain how this could help to prevent soil quality from declining and give an example of a place where it is being used.</p> 

Geography - Core

Week 7	Week 8	Week 9
<p>What are Global Cities? “Global Cities” are cities that are well connected by the process of globalisation. There are currently over 300 global cities, the UK has 13. For example, London has a global “reach” with university students from all over the world, multinational company HQs, global stock exchange. See top 5 global cities in graph above.</p>  <p>Enquiry: Use the internet and produce one fact-file on one of the ‘global cities’ within the UK. Then create another on a global city from abroad.</p>	<p>Functions of Global Cities While all cities have a regional influence, global cities have a much greater influence. They are connected to other parts of the world through:</p> <ul style="list-style-type: none"> • Migration • Governance and decision making • Finance/trade • Transport hubs • Ideas/Info • Education centres • Cultural and sporting hubs  <p>Enquiry: Write a ‘newspaper style’ article on how one UK global city is connected to other parts of the world. Link in at least 2 of the above bullet points.</p>	<p>An HIC Global City - Sydney, Australia Sydney is the largest city in Australia. It has a population of 4.5 million (2015) so is not (yet) a “mega-city”. Sydney is built on either side of a large natural harbour. Sydney is a relatively modern city. It grew rapidly during the second half of the 20th century, largely as a result of international migration.</p> <p>Enquiry: Using newspaper/online articles. What do you think was the biggest factor that contributed to the growth of Sydney and why? Try to include evidence in your answer.</p> 
<p>Week 10</p> <p>Sydney: Migration and Wealth Sydney is one of the world’s most multicultural cities. People of different nationalities share ideas, culture, languages and food. It is very well connected to the rest of the world, especially the Pacific and South East Asian regions. Sydney has HQs of 76% of Australia’s domestic and foreign owned banks, attracts 2.8 million foreign visitors a year and generates 20% of Australia’s wealth.</p>  <p>Enquiry: Draw out a table (with advantages in the left column and disadvantages in the right). Fill these columns in with the good and bad effects of migration (for Sydney).</p>	<p>Week 11</p> <p>An LIC Global City - Mumbai, India Mumbai is India’s largest city with a population of 18.4 million (2015). The city of Greater Mumbai is built on a low-lying island in the Arabian Sea. As the city has grown, it has sprawled northwards and eastwards across Thane Creek to form a large metropolitan region. Mumbai’s economy is well connected to other locations both within India and abroad.</p>  <p>Enquiry: Research one business that is now based/has a base in Mumbai. Produce a small leaflet or poster advertising this business.</p>	<p>Week 12</p> <p>CAREERS:</p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/of7</p>

Health and Social Care

Week 1 and 2	Week 3 and 4	Week 5 and 6				
<p><u>Growth and development across life stages</u></p> <p>Life stages</p> <ol style="list-style-type: none"> 1. Infancy (0 – 2 years) Dependant on parents, rapid physical growth 2. Early childhood (3 – 8 years) Developing physical skills, becoming independent 3. Adolescence (9 – 18 years) Physiological and emotional changes, puberty 4. Early adulthood (19 – 45 years) Reach full physical maturity 5. Middle adulthood (46 – 65 years) Aging process begins, menopause 6. Later adulthood (65+ years) Aging process continues, decline in strength and memory <p>Enquiry tasks:</p> <ol style="list-style-type: none"> Research how life expectancy has changed since 1930's to the present day. Display this information as a time line. Suggest reasons for the changes in life expectancy 	<p><u>Growth and development across life stages</u></p> <p>Holistic Development</p> <ol style="list-style-type: none"> 1. Physical development Physical growth and physiological change 2. Intellectual development Developing thinking and language skills and common activities that promote learning and development 3. Emotional development Developing feelings about self and others <p>Social development – Forming relationships with friends and family</p> <p>Enquiry task:</p> <p>Describe the milestones an infant would be expected to reach by the age of 1 month. Display this information in a table</p> <table border="1" data-bbox="826 1126 1364 1323"> <thead> <tr> <th>Milestone</th> <th>Type of development</th> </tr> </thead> <tbody> <tr> <td>Recognise some sounds including parents voice</td> <td>Intellectual development</td> </tr> </tbody> </table>	Milestone	Type of development	Recognise some sounds including parents voice	Intellectual development	<p><u>Factors affecting growth and development</u></p> <p>Physical factors</p> <ol style="list-style-type: none"> Genetic inheritance – hair and eye colour Diet and lifestyle choices – drinking / smoking Experience of illness and disease – cancer/ arthritis Appearance <p>Economic factors</p> <ol style="list-style-type: none"> Income/ wealth/ social class/ poverty Material possessions – property or belongings that are tangible <p>Social, Cultural and emotional factors</p> <ol style="list-style-type: none"> Educational experiences, e.g. school, college, university Culture, e.g. community involvement, religion, gender Influence of role models Influence of social isolation Personal relationship with friends and family <p>Enquiry task: Explain how a mother smoking tobacco may affect the physical growth and development of a fetus (unborn baby)</p>
Milestone	Type of development					
Recognise some sounds including parents voice	Intellectual development					

Health and Social Care

Week 7 and 8	Week 9 and 10	Week 11
<p><u>Different types of life event</u></p> <ol style="list-style-type: none"> Expected life event - predictable life events that the individual is sure will happen, they are planned e.g. leaving school Unexpected life event – something that takes a person completely by surprise e.g. losing their job <p>Physical events</p> <ul style="list-style-type: none"> Accident/ injury/ Ill health <p>Life circumstances</p> <ul style="list-style-type: none"> Moving house, school or job/ exclusion from education/ redundancy/ imprisonment/ retirement <p>Relationship changes</p> <ul style="list-style-type: none"> Entering a relationship/ marriage/ divorce/ parenthood/ bereavement <p>Enquiry task:</p> <p>Morgan has recently lost their job due to the company no longer being in business. Discuss how having a wide network of friends can affect their emotional and social development</p>	<p><u>Coping with change caused by life events</u></p> <p>Types of support</p> <ol style="list-style-type: none"> Formal support – provided by trained professionals such as counsellors, doctors, trained carers Informal support- provided by family, friends partners Voluntary support- Given by community groups, voluntary and faith based organisations <p>Sources of support: School / Doctor/ Counselling/ Family/ Friends/ Support groups/ Helplines/ Religious groups</p> <p>Benefits of support: emotional support/ advice/ practical help</p> <p>Enquiry task:</p> <p>Dot is 83. She has difficulty walking and completing everyday tasks; like cooking a meal and having a bath. Explain how different types of support could help Dot.</p>	<ul style="list-style-type: none"> P = Physical development, gross motor skills and fine motor skills I = Intellectual development, language development, egocentric view of the world E = Emotional development, bonding with others S = Social development Interaction with others. Gross Motor Skill: move and co-ordinate the large limbs of the body, e.g. crawling, walking, and climbing, running. Fine Motor Skills: move and coordinate the hands and fingers, e.g. writing, tying shoe laces, holding a spoon. Egocentric: seeing things from only your own perspective or viewpoint. <hr/> <p style="text-align: center;">Week 12</p> <p>CAREERS Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/lr2</p> 

History - Core and Option

Week 1	Week 2
<p><u>Key Terms:</u></p> <p>Suffrage - The right to vote in political elections Activism – When a person campaigns for social or political change</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • The Suffragists were created in 1897 by Millicent Fawcett – their aim was to be peaceful, not confrontational • The Suffragettes were created in 1903 by Emmeline Pankhurst and followed a more violent, confrontational path. Their slogan was ‘deeds not words’ • NUWSS - Suffragists • WSPU - Suffragettes <p><u>This week’s enquiry is...</u> <i>What did the suffrage movement look like?</i></p>	<p><u>Key Terms:</u></p> <p>Militant – Using confrontational or violent methods Reform – The act of trying to change something for the better</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • October, 1908 – Suffragettes order 60,000 people to attempt to ‘rush’ parliament. Suffragettes chain themselves to railings and overrun the police • 1912 – Arson and bombing campaign led by Christabel Pankhurst • May 1913 – 52 Suffragette attacks – 29 bombings, 15 arson attacks. Included an attack on David Lloyd-George’s (the Prime Minister) home <p><u>This week’s enquiry is...</u> <i>How did the Suffragettes and Suffragists differ?</i></p>
Week 3	Week 4
<p><u>Key Terms:</u></p> <p>Electorate – Anyone who is allowed to vote in political elections Democracy – A country or state in which the government is elected by the electorate</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • Cat and Mouse Act – Passed in 1913 – Allowed prisoners to be released from prison to recuperate after going on hunger strike due to attempted force feeding <p><u>This week’s enquiry is...</u> <i>Did Emily Davison try to kill herself?</i></p>	<p><u>Key Terms:</u></p> <p>Act of Parliament – A law created by parliament</p> <p><u>Key Knowledge:</u></p> <ul style="list-style-type: none"> • 1918 – The first Representation of the People Act allowed women to vote if they were over the age of 30 and either owned property or were married to someone who did. • 1928 – Second Representation of the People Act allowed all women over the age of 21 to vote <p><u>This week’s enquiry is...</u> <i>Was equality achieved in 1918?</i></p>

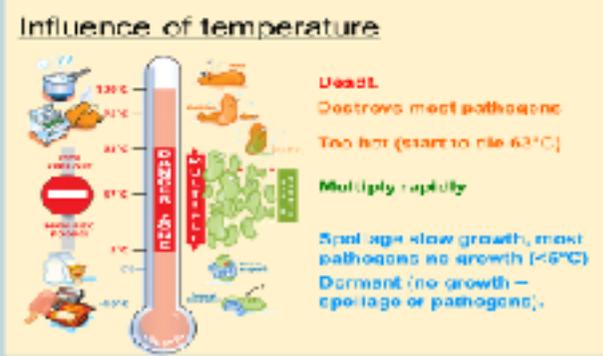
History - Core and Option

Week 5	Week 6
<p>Key Terms:</p> <p>Rhetoric – The art of persuasive speaking Institutionalised – To establish something as normal in an organisation or culture</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • August, 1920 – 19th Amendment signed into the American constitution guaranteeing equal rights for women • November, 1920 – More than 8 million American women cast their vote in a political election for the first time <p>This week's enquiry is... <i>How successful were other suffrage movements?</i></p>	<p>Key Terms:</p> <p>Equality – The state of being equal Liberty - Freedom</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • April, 2017 – Statue to Millicent Fawcett erected in Parliament Square, London • Suffragette, The Movie – 2015, Hollywood movie following the story of the Suffragette movement is released <p>This week's enquiry is... <i>How is the suffrage movement remembered?</i></p>
Week 7	Week 8
<p>Key Terms:</p> <p>Treaty – A formal agreement between two or more people or countries Abdicate – To give up something – usually a crown</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • November, 1918 – Abdication of Kaiser Wilhelm II and armistice bringing the Great War to an informal close. • Weimar, Germany – The new German constitution was formally signed in a town called Weimar officially creating the new Weimar Republic. <p>This week's enquiry is... <i>Why did Kaiser Wilhelm II have to abdicate?</i></p>	<p>Key Terms:</p> <p>Constitution – The laws and rules which govern a country Reparation – A financial repayment that is meant to repair damage caused – usually as a result of war</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Friedrich Ebert – Leader of the SPD elected the first President of the new Weimar Republic • June 28th, 1919 – Treaty of Versailles is signed in Paris, France bringing the Great War to a formal end. • Article 231 – Guilt clause of the Treaty forces Germany to take the blame for the Great War <p>This week's enquiry is... <i>Why was the Treaty of Versailles so hard for Germans to accept?</i></p>

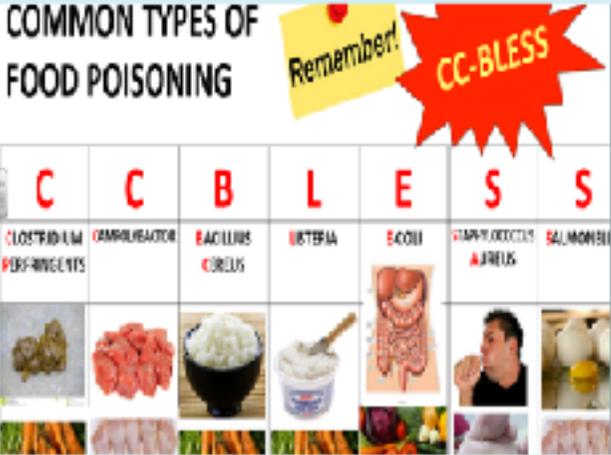
History - Core and Option

Week 9	Week 10
<p>Key Terms:</p> <p>Putsch – An attempted political revolution Reichswehr – The German army</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • February, 1919 – Spartacist Uprising - Communists rally behind the Spartacists as they force a 100,000 workers to rebel against the Weimar government and President Ebert. They wanted a Communist government. • March, 1920 – Kapp Putsch – 400 Reichswehr officers and Freikorps members rebel against the Weimar government. <p>This week's enquiry is... <i>Was the Spartacist Uprising a serious threat to the Weimar government?</i></p>	<p>Key Terms:</p> <p>Passive Resistance – When workers go on strike and refuse to work without any violence Hyperinflation – When the cost of products continues to rise uncontrollably</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Invasion of the Ruhr Valley, January 1923 – French and Belgium troops enter the Ruhr Valley (Germany's industrial heartland) and occupy the mines and factories. • Hyperinflation crisis – German government prints more money in response. Bread costs 200m marks by November, 1923 <p>This week's enquiry is... <i>Why was 1923 considered a crisis year for the Weimar Republic?</i></p>
Week 11	Week 12
<p>Key Terms:</p> <p>Foreign Policy - The strategy that a government has in dealing with other countries. Sometimes peaceful, sometimes aggressive. De-militarised – When a country or area is not allowed to have a military</p> <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Dawes Plan, 1924 – 800m mark loan from American banks for German industry • Locarno Pact, 1925 – Rhineland to stay de-militarised. Germany confirms Treaty of Versailles territorial losses. Discussions about Germany joining League of Nations <p>This week's enquiry is... <i>How did Stresemann aid German recovery in the 1920s?</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>L04/4.1 Know how food can cause ill health Microbes- tiny micro-organisms that can contaminate food and spoil it, causing ill health. Eg bacteria, yeasts and moulds</p> <ul style="list-style-type: none"> Bacteria are single-celled micro-organisms. They can be found everywhere around you; on your skin, in food, in soil, in water and in the air. Most are harmless, but some are pathogenic and can cause food poisoning. General food poisoning symptoms are vomiting (sick) and diarrhoea, temperature, nausea, stomach cramps Other types of bacteria cause food to decay; these are called food spoilage bacteria, which cause food to smell and lose its texture and flavour. Eg mould. Bacteria need 4 things to grow: food (protein), time, warmth, moisture 	<p>Practical Baseline assessment – Knife skills – carrot and coriander soup</p>  <p>Claw – for slicing and dicing. Bridge – cutting in half Vegetable cuts: baton (chip shape), Julienne (Match stick), dice (cube) Mise en place (things in their place) – organisation – equipment, weighing, preparation before cooking</p> <p>Enquiry Task 1: Complete one section of the food hygiene course . login into https://www.creativelearninglms.co.uk/</p>	<p>Influence of temperature</p>  <p>High risk foods- A high risk food is usually high in protein and moisture. Examples include; meat, fish, poultry, eggs, cooked rice, gravies, shellfish.</p>
Week 4	Week 5	Week 6
<p>Practical – High risk food – Chicken Kiev</p> <p>Types of Food poisoning bacteria are salmonella, campylobacter. Handling chicken – red chopping board, wash hands to avoid cross contamination (transfer of bacteria). Probe – above 75°C core temperature to kill bacteria</p> <p>Food preparation skills: jointing (separate chicken into parts (chicken breast, leg, thigh), stuff (fill with an ingredients) panè (coating of flour, egg, breadcrumbs), baton (chip shape), dressing (vinegar and oil with herbs or spices) for salad</p> <p>Cooking Skills: Bake (browns in oven with no oil),</p>	<p>Poisoning in rare cases can cause death, especially to the high risk groups:-</p> <ul style="list-style-type: none"> The very young – body developing. The elderly - weaker. People who are already ill <p>Causes of food poisoning:</p> <ul style="list-style-type: none"> Toxin – poison in the food eg salmonella Viruses – micro-organisms that live on and in people and animals Moulds –micro-organisms that cause food spoilage over time Poisonous plants- berries and toadstools Chemicals and materials – cleaning materials used in a kitchen <p>Enquiry Task 2: Complete one section of the food hygiene course . login into https://www.creativelearninglms.co.uk/</p>	<p>Practical: Food Styling – Dessert</p> <p>Presentation: colours, textures, aesthetics (what it looks like) flavours, placement of food on the plate, types of plates</p> <p>Mise-en-place – things in their place (equipment, ingredients, pre-heating oven, greasing tins, Preparation of ingredients (chopping, peeling etc). Accompaniment – added to the side of a dishes eg vegetables, custard, icing cream. Garnish – food used to decorate a plate eg chopped parsley, grated cheese, whipped cream, lemon. Preparation skills: Coulis – a fruit sauce – pureed fruit, piping – using a piping back to pipe cream, butter icing, coulis onto food for decoration, grate – using a grater to make smaller to sprinkle onto a dish eg chocolate</p>

Hospitality and Catering

Week 7	Week 8	Week 9
<p>COMMON TYPES OF FOOD POISONING</p>  <p>Remember! CC-BLESS</p> <p>Enquiry Task 3: Find out the foods these can be found in and symptoms and onset period.</p>	<p>Practical: Food Styling – Quiche</p> <p>Presentation: colours, textures, aesthetics (what it looks like) flavours, placement of food on the plate, types of plates</p> <p>Mise-en-place – things in their place (equipment, ingredients, pre-heating oven, greasing tins, Preparation of ingredients (chopping, peeling etc).</p> <p>Accompaniment – added to the side of a dishes eg vegetables, salad, sauces – mayo, dressing.</p> <p>Garnish – food used to decorate a plate eg chopped parsley, grated cheese, lemon.</p> <p>Preparation skills: sauce – mayonnaise (egg based), dressing (oil and vinegar flavoured with spices or herbs).</p> <p>Baine-marie (water bath) – water in a sauce with bowl above to gently melt or cook something eg mayonnaise, whisk (add air to food eg egg), emulsion (egg and oil, water and oil) blend through whisking</p>	<p>Food Allergies - A serious reaction to a food. body's immune system reacting to an allergen.</p> <p>Symptoms: Skin rash, Itchiness of skin, eyes and mouth. Swollen lips, face, eyes, difficulty in breathing.</p> <p>Can get anaphylactic shock- the person develops swelling of throat and mouth, difficult to speak or breathe, can lead to death – treatment EpiPen.</p> <p>Intolerance - sensitivity to certain foods- nausea, abdominal pain, joint aches and pains, tiredness and weakness.</p> <p>Not an allergic reaction, not immune system. Eg lacto-intolerance (dairy) - stomach pain, Nausea, Diarrhoea, wind.</p> <p>Coeliac disease - autoimmune disease – gluten wheat. Symptoms: Severe diarrhoea, wind/ constipation, nausea, vomiting, stomach pain, cramping or bloating.</p> <p>Enquiry Task 4: finish Food Hygiene login into https://www.creativelearninglms.co.uk/</p>
Week 10	Week 11	Week 12
<p>Practical Skills – Food Hygiene – Cheesecake</p> <p>High risk: food that has protein and moisture in it. Eg dairy, meat, fish</p> <p>Gelatine: a setting agents from animal bones – like an edible glue to set desserts/savoury dishes</p> <p>Food Preparation Skills: crush – crush biscuits using a food processor, Melting – eg butter on a low heat in a saucepan, Zest – grate off the yellow part of a lemon, juice – juice a lemon with a squeezer, Whisking – adds air to cream to thicken</p> <p>Piping – whisking and piping of cream for decorating a dessert (nozzle/piping bag)</p> <p>Enquiry Task 5: Revise key words/skills from week 1 – 10 for formal theory assessment next week.</p>	<p>Practical Assessment Curry/Formal Theory Assessment Week:</p> <p>Learn food preparation and cooking key words/ skills from week 1-10 for practical work</p> <p>Know the definitions to Food hygiene key words from week 1-10:</p> <ul style="list-style-type: none"> • Bacteria • Food Poisoning • Toxin • Symptoms • Allergy • Intolerance • Salmonella • Campylobacter • e-coli • anaphylactic shock • cross contamination 	 <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...



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



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

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



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



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

Week 1	Week 2	Week 3
<p>Learning Objectives - In your coursework there will be 4 of these LO1 - Research LO2 - Planning LO3 - You Building a product LO4 - You Reviewing that product</p> <p>Folder Structure - Really important as you will be marked on your ability to keep files and folders well ordered</p> <p>Moodboards - A moodboard is a collection of sample materials, existing products and related items that represents the style of a new product that could be created. It can be physical with randomly placed photos, samples, and ideas Or digital - images, videos, sounds</p> <p>Enquiry Task: Build a moodboard for a company who sell outdoor clothing.</p>	<p>Moodboards - Where they are used</p> <ul style="list-style-type: none"> As a starting point to a project A place to collect samples A constant reminder about possible styles To share thoughts They are not a final plan <p>They can contain</p> <ul style="list-style-type: none"> Images - photos, graphics, logos Colours (and scheme) Text (font, style, colour) Textures (whether physical or notes made) Sound and video clips Annotations <p>Enquiry Task Build a moodboard for a company who sell sporting goods.</p>	<p>Mindmaps - These are used to generate outline ideas and link or connect aspects of ideas. They have a clear structure, and contain:</p> <ul style="list-style-type: none"> Central Node Sub Nodes Topics (keywords) Images (icons) <p>Visualisation Diagrams - These are mock versions of the intended product. You do not need to draw the images. Boxes with images described are acceptable. They contain:</p> <ul style="list-style-type: none"> Images Fonts - size, colour, style Annotations Background colours Colours (scheme in general) <p>Enquiry Task Build a visualisation diagram for a front cover for an IT hardware magazine</p>
Week 4	Week 5	Week 6 Mid Cycle Assessment
<p>Storyboards - Mock version of intended product. Visual plan on a timeline, and provide guidance on how scenes pan out. They can include</p> <ul style="list-style-type: none"> Numbered scenes Camera angles Camera movements Timings Location Sound Scene Sketches Lighting <p>Enquiry Task: Pick your favourite advert and build a storyboard for it.</p>	<p>Scripts - These provide lines for a character so that they know what to say. Provide details about expressions or actions. Provide stage directions for actor and production crew. They can include:</p> <ul style="list-style-type: none"> Speech Dialogue Location / set Direction (what happens in the scene) Character names Sound and sound effects Shot type Camera Movement <p>Enquiry Task: Write the script for 2 mins from your favourite film or tv series episode.</p>	<p>File Formats which you will need to know Audio: mp3 wav aac Video: mp4 wmv mov Image Web: png jpeg gi Image Print: tiff pdf Animation: flv swf Text: pdf doc</p> <p>Lossy compression - means an image loses resolution when compressed and cannot be returned to original state</p> <p>Lossless compression - Uses an algorithm to compress the image - no loss of quality and can be returned to original state.</p> <p>Enquiry Task: Find a logo from a company. Redesign it using only the colours black and white</p>

iMedia

Week 7	Week 8	Week 9
<p>Work Plans- Provide timescales so you don't spend too long on one thing. They allow for</p> <ul style="list-style-type: none"> • Projects to meet deadlines • Use checkpoints • Use of milestones • Contingencies - a provision of time if something goes wrong • What order the tasks need to be in • Task list , Activities , Duration  <p>Enquiry Task: Build a work plan of a school day - include travel to and from school and getting up in the morning</p>	<p>Marching ants – Show your current selection. Alt + Click will remove parts of your selection. Filenames – are very important when photo-editing and include a version number. Example: Stonehenge_v1.psd Layers – Are used to order images inside Photoshop. Locking Layers - Stops you from editing that layer. The Eye On Layers – Allows you to hide that layer. Layer Blending - Allows you to alter how a layer interacts with the layers above and beneath it. Resolution – is the total number of pixels an image is made of (width * height) and may include colour depth.</p> <p>Enquiry Tasks: Use www.photopea.com use 2 layers and experiment with 3 different blending options. Colour overlay, Soft Light, Luminosity</p>	<p>Client Requirements – This is an outline which explains what a client needs from a product. Guide Lines – are used to help structure photo editing, this could be a book spine or DVD case cover lines. Primary Sources – Sources of information you have built Secondary Sources – Sources of information which you have taken from someone else. Target Audience - These are the considerations you must think about</p> <ul style="list-style-type: none"> • Income - Can they afford your product • Age - Different ages have very different designs • Gender - Is it aimed at Male Female neutral? • Location - is this going to restrict the target audience • Interests / hobbies <p>Enquiry Tasks: Build a moodboard on your favourite music band / film and then design a CD / DVD front cover for that group / film on paper.</p>
Week 10	Week 11 Revision & Test	Week 12 - Careers' Focus
<p>Risk Assessment - This must be done before a task is started.</p> <ul style="list-style-type: none"> • Identify Hazards • Can anyone be harmed • Evaluate risks and decide and precautions • Record any findings <p>Location Recce - Visiting a specific location for recording purposes such as filming, audio recording or photography. Check is it suitable</p> <ul style="list-style-type: none"> • Lighting • Safe • Electricity / scenery • Distance • Any other issues which may arise 	<p>Assessment week You will need to check all this information 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 iMedia</p>  <p>https://links.iscaexeter.co.uk/1cb</p>

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.

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6	6	12	18	24	30	36	42	48	54	60	66	72
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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 2022

Task 1

D40 $12 + 13 = 25$ ✓

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

F60 $\begin{pmatrix} 12 & 13 \\ 2 & 3 \end{pmatrix} \times 6$ ✓

H70 $\frac{1}{19} + \frac{1}{7} = \frac{24}{133}$ ✗

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

A01 $\frac{475}{152} = 3.125$ ✓

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

C21 $\frac{1}{53} + \frac{1}{77} = \frac{1}{33} + \frac{2}{33}$
 $= \frac{3}{33}$ ✓

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 $P(\text{odd}) = \frac{3}{5}$ ✓

Task 3

J21 False ✓

K31 Unlikely ✗

L41 B, A, C ✓

M03 4 more blue balls ✓

N13 4 black, 2 red, 2 blue
The probability of picking
black or evens: Bag E ✓

F13 E ✓



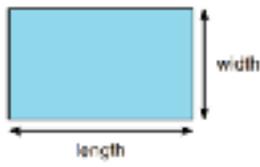
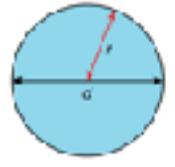
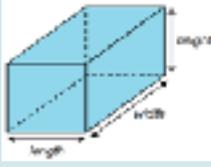
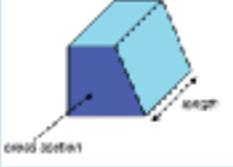
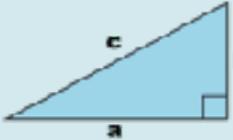
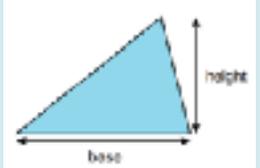
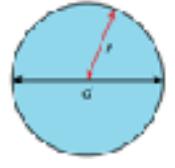
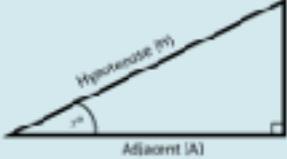
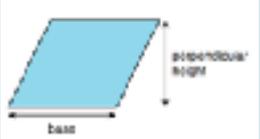
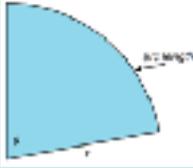
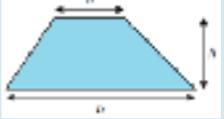
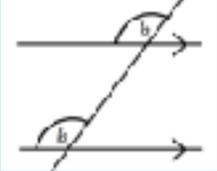
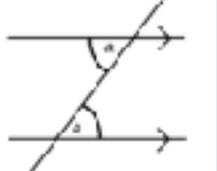
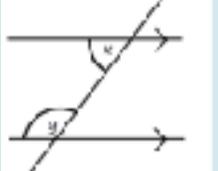
**WEEK 12
CAREERS WEEK**

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

<https://links.iscaexeter.co.uk/dhq>

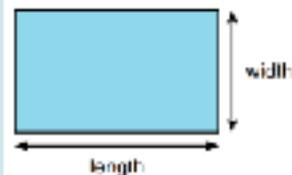


Mathematics - Core

<p>Area of a Rectangle</p>  <p>$A = \text{length} \times \text{width} = l \times w$</p>	<p>Circumference of a circle</p>  <p>$C = \pi \times d$</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 a Triangle</p>  <p>$A = \frac{1}{2} \times \text{base} \times \text{height} = \frac{bh}{2}$</p>	<p>Area of a circle</p>  <p>$A = \pi \times r^2$</p>	<p>Speed</p>  <p>$\text{speed} = \frac{\text{distance}}{\text{time}}$</p>	<p>Compound Interest</p> <p>$P =$ principal amount $r =$ Interest rate $n =$ 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 Parallelogram</p>  <p>$A = \text{base} \times \text{perp. height}$</p>	<p>Arc Length</p>  <p>$\text{Arc Length} = \frac{\theta}{360} \times \pi \times d$</p>	<p>Density</p>  <p>$\text{density} = \frac{\text{mass}}{\text{volume}}$</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="1594 863 2007 1094"> <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>$\frac{\sqrt{3}}{3}$</td> <td>1</td> <td>$\sqrt{3}$</td> <td>Not defined</td> </tr> </tbody> </table>		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	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Not defined
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<p>Area of Trapezium</p>  <p>$A = \frac{1}{2}(a + b)h$</p>	<p>Area of a Sector</p>  <p>$A = \frac{\theta}{360} \times \pi \times r^2$</p>	<p>Pressure</p>  <p>$\text{pressure} = \frac{\text{force}}{\text{area}}$</p>	<p>Corresponding angles are equal</p> 	<p>Alternate Angles are equal</p> 	<p>Co-interior angles add to 180</p> 																							

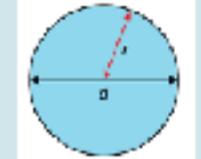
Mathematics - Higher

Area of a Rectangle



$A = \text{length} \times \text{width} = l \times w$

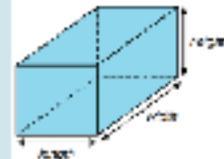
Circles



Circumference: $C = \pi \times d$

Area: $A = \pi \times r^2$

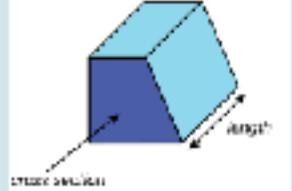
Volume of a Cuboid



$\text{Length} \times \text{width} \times \text{height}$

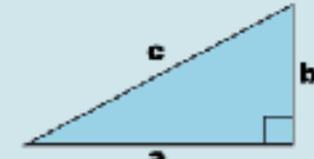
$V = l \times w \times h$

Volume of a Prism



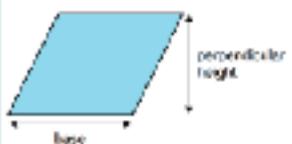
$\text{Vol} = \text{Area of a cross section} \times \text{length}$

Pythagoras Theorem



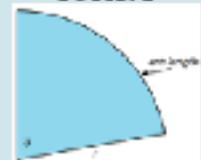
$a^2 + b^2 = c^2$

Area of Parallelogram



$A = \text{base} \times \text{perp. height}$

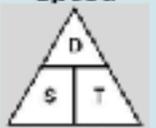
Sectors



Arc Length: $\frac{\theta}{360} \times \pi \times d$

Area Sector: $\frac{\theta}{360} \times \pi \times r^2$

Speed



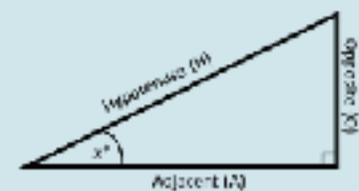
$\text{speed} = \frac{\text{distance}}{\text{time}}$

Compound Interest

$P = \text{principal amount}$
 $r = \text{Interest rate}$
 $n = \text{number of years/months/day}$

$\text{Total Accrued} = P \left(1 + \frac{r}{100}\right)^n$

Trigonometric Formulae

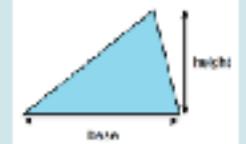


$\sin x = \frac{\text{opp}}{\text{hyp}}$

$\cos x = \frac{\text{adj}}{\text{hyp}}$

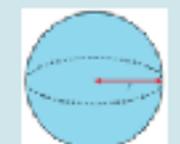
$\tan x = \frac{\text{opp}}{\text{adj}}$

Area of a Triangle



$A = \frac{b \times h}{2}$

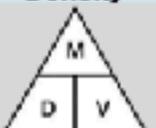
Sphere



$S.A. = 4\pi r^2$

$V = \frac{4}{3}\pi r^3$

Density



$\text{density} = \frac{\text{mass}}{\text{volume}}$

Quadratic Formula

To solve $ax^2 + bx + c = 0$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Exact Values of Trigonometry Functions

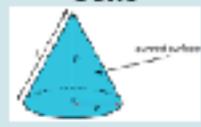
	0°	30°	45°	60°	90°
$\sin \theta$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan \theta$	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Not defined

Area of Trapezium



$A = \frac{1}{2}(a + b)h$

Cone



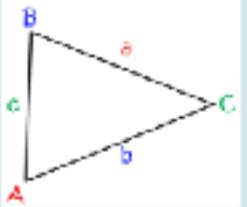
Curved S.A. $= \pi r l$

$V = \frac{1}{3}\pi r^2 h$

Pressure



$\text{pressure} = \frac{\text{force}}{\text{area}}$



Statistics and Further Maths

Week 1	Week 2	Week 3									
<p>What is primary data? When you collect the data yourself. Eg. By conducting a survey</p> <p>What is secondary data? When someone else has collected the data. Eg. Data from the internet.</p> <table border="1" data-bbox="181 400 757 687"> <thead> <tr> <th></th> <th>Advantages</th> <th>Disadvantages</th> </tr> </thead> <tbody> <tr> <td>Primary</td> <td>You can be sure about the accuracy of the data.</td> <td>Can take a long time. Can be expensive. It might be difficult to collect (eg. Wind Speed)</td> </tr> <tr> <td>Secondary</td> <td>Quicker and cheaper than primary</td> <td>You can't be sure about the accuracy of the data.</td> </tr> </tbody> </table> <p>Enquiry Task: Explore the secondary data available at https://www.gapminder.org/</p>		Advantages	Disadvantages	Primary	You can be sure about the accuracy of the data.	Can take a long time. Can be expensive. It might be difficult to collect (eg. Wind Speed)	Secondary	Quicker and cheaper than primary	You can't be sure about the accuracy of the data.	<p>What is raw data? Data that has just been collected but not processed or cleaned in any way.</p> <p>What is meant by cleaning the data? This is the process of detecting and correcting (or removing) inaccurate items of data.</p> <p>What is quantitative data? Quantitative data is numerical - either counted or measured</p> <p>What is qualitative data? Qualitative data relates to the qualities of something eg colour, texture, style, name. Usually words.</p> <p>Enquiry Task: Research one example of quantitative data and one example of qualitative data - how would you collect this data.</p>	<p>What is discrete data? Discrete data can only take certain values. Usually counted data (such as how many people....) but can also be other eg shoe size, clothing sizes.</p> <p>What is continuous data? Continuous data can take ANY value in a given range and is measured data such as distance, weight, time, speed.</p> <p>What is Categorical Data? Data which may be divided into groups. Eg. Race, gender, Age Group.</p> <p>What is bivariate data? Bi-variate data has two variables. We can see if there is correlation in bi-variate data by drawing a scatter graph.</p> <p>Enquiry Task: Find examples of discrete and continuous data from https://www.gapminder.org/</p>
	Advantages	Disadvantages									
Primary	You can be sure about the accuracy of the data.	Can take a long time. Can be expensive. It might be difficult to collect (eg. Wind Speed)									
Secondary	Quicker and cheaper than primary	You can't be sure about the accuracy of the data.									
Week 4	Week 5	Week 6									
<p>What is a pilot survey or pilot study? A pilot survey is a small scale study before a full-scale study is done. It is used to check if a questionnaire or survey "works", and to fine tune your method/ questions.</p> <p>What is a population? Every item in a given set. For example every member of a school. (Not just limited to people – It could be the all of the items in a pencil case.).</p> <p>What is a census? A census is a survey of a whole population rather than just a small part of it.</p> <p>What is a sample? A sample is a small part of a population rather than the whole population</p> <p>Enquiry Task: What scenarios would it be best to use a sample to gather data?</p>	<p>What is bias? Prejudice for or against one group or opinion or result in a way that is "unfair".</p> <p>What are the three main methods of collecting data? Experiment, Observation, Questionnaire</p> <table border="1" data-bbox="819 970 1406 1283"> <thead> <tr> <th></th> <th>Advantages</th> <th>Disadvantages</th> </tr> </thead> <tbody> <tr> <td>Census</td> <td>Unbiased, totally Accurate, takes Account of the whole population.</td> <td>Time consuming, expensive, can be difficult to ensure everyone is included.</td> </tr> <tr> <td>Sample</td> <td>Cheaper, quicker, less data to be analysed.</td> <td>It could be biased. Not completely representative of the population.</td> </tr> </tbody> </table> <p>Enquiry Task: Research the 2011 Census. What data was collected?</p>		Advantages	Disadvantages	Census	Unbiased, totally Accurate, takes Account of the whole population.	Time consuming, expensive, can be difficult to ensure everyone is included.	Sample	Cheaper, quicker, less data to be analysed.	It could be biased. Not completely representative of the population.	<p>What does random sampling mean? Random means that every member of a population has an equal chance of being chosen</p> <p>Disadvantage of random sampling: It can sometimes be expensive and time consuming.</p> <p>Advantage of random sampling: Your sample is likely to represent the target population.</p> <p>How do you take a random sample of 50 from 1000 pupils in a school? Give every pupil a unique number using the school register. Use a random number generator to select 50 random pupil numbers.</p> <p>Enquiry Task: Research how random number generators work. If they are programmable how are they random?</p>
	Advantages	Disadvantages									
Census	Unbiased, totally Accurate, takes Account of the whole population.	Time consuming, expensive, can be difficult to ensure everyone is included.									
Sample	Cheaper, quicker, less data to be analysed.	It could be biased. Not completely representative of the population.									

Statistics and Further Maths

Week 7	Week 8	Week 9									
<p>Why do we use stratified sampling? Stratified sampling ensures each group in a population is represented in proportion to its size.</p> <p>What is a control group? The group in an experiment or study that don't receive treatment to allow comparison with those that do.</p> <p>What is systematic sampling? Taking a sample at equal intervals through a population eg every third person on a register or every twentieth car that passes on a road. This is not a random method.</p> <p>What is a sampling frame? The list of people or items to be sampled. Enquiry Task: Why is systematic sampling not a random method?</p>	<p>What is quota sampling? The amount of each specific group is specified. Eg. 30 women are needed.</p> <p>What is cluster sampling? The population is divided into groups and then a group is chosen at random.</p> <table border="1" data-bbox="864 440 1361 679"> <thead> <tr> <th></th> <th>Advantages</th> <th>Disadvantages</th> </tr> </thead> <tbody> <tr> <td>Quota</td> <td>Good when impossible to use a stratified sample.</td> <td>Bad because not truly random</td> </tr> <tr> <td>Cluster</td> <td>Cheaper and quicker.</td> <td>It may not be representative of the sample</td> </tr> </tbody> </table> <p>Enquiry Task: Why is quota sampling not truly random? Can you write an argument to convince someone else that it is not random?</p>		Advantages	Disadvantages	Quota	Good when impossible to use a stratified sample.	Bad because not truly random	Cluster	Cheaper and quicker.	It may not be representative of the sample	<p>What is convenience sampling? When items are selected because of convenience. Eg. Asking people in your class rather than in the whole school.</p> <p>Advantages of convenience sampling: Easier and cheaper</p> <p>Disadvantage of convenience sampling: Much more likely to be biased.</p> <p>What is a Random Response Method? Uses a random event (coin toss) to decide how to answer the question. It helps with sensitive topics, such as drug use, medical issues, personal issues.</p> <p>Enquiry Task: Research the history of the random response method? Why is it used?</p>
	Advantages	Disadvantages									
Quota	Good when impossible to use a stratified sample.	Bad because not truly random									
Cluster	Cheaper and quicker.	It may not be representative of the sample									
Week 10	Week 11	Week 12									
<p>What is a hypothesis? A hypothesis is an idea or opinion that you start with, and which you test using statistical techniques. eg "Gromow makes plants grow taller"</p> <p>Closed Questions: Gives a set of answers to choose from. Restricts answers making data easier to analyse but might be less detailed..</p> <p>Open Questions: When there are no suggested answers. Allows for a range of answers but can be difficult to analyse.</p> <p>What is a leading question? A leading question is one where there is a suggestion that one response is "better" than another.</p> <p>Enquiry Task: Write a hypothesis that you would like to collect data on. What method would you use to collect this data? Why?</p>	<p>Give an advantage of using a face-to-face interview for a questionnaire: follow up questions are possible, more likely to get an "honest" response, can explain what questions mean more fully</p> <p>Give a disadvantage of using a face-to-face interview for a questionnaire: Time-consuming/ labour intensive, May have to ask many people before someone agrees to do it.</p> <p>Give a disadvantage of using postal questionnaires: Lots of postal questionnaires are ignored, People may not answer honestly, Cost of postage & printing</p> <p>Enquiry Task: Summarise each week into 20 words/ create a flash card for each week.</p> <p>How can you improve the response rate to a postal questionnaire? -Reward or prize draw, Provide a return envelope, Use "Freepost"</p>	<p>CAREERS</p> <p>Follow the QR code or type in the link into your browser</p> <p>https://links.iscaexeter.co.uk/dhq</p> 									

Music

Decades

Week 1	Week 2	Week 3
<p>1950s</p> <p>HISTORY = Post war – Invention of electronic instruments and use of radio.</p> <p>GENRES = Swing: Swung high hat, big band instruments (brass and strings) and was made for dancing. Blues: Uses the 12 bar blues structure. Guitar, vocals and repetitive structure. Comes from the African work songs brought across to America as part of the Slave trade.</p> <p>Enquiry task: Can you copy out the 12 bar blues pattern? Can you take a pop song and ‘swing it’ either live or on a DAW.</p>	<p>1950s</p> <p>GENRES= Rock and Roll: Use of electronic instruments, big band instruments and often the 12 bar blues structure. Made for fast paced dancing and jiving. Jazz: Varying types of jazz that oppose each other. Lots of improvisation, very scalic and virtuosic (Showing off). Lots of extended chords and solos. Uses a lead sheet with a popular tune on that instrumentalists use to base their performances on.</p> <p>Enquiry task: Have a go at improvising on your instrument. Pick a ‘jam track’ in an easy key (C of G) on YouTube and have a go at jamming to it. Make it up as you go along and have fun!</p>	<p>1960s</p> <p>HISTORY = Counter culture – rise of people’s freedom and speech.</p> <p>GENRES British Invasion – Sounds more American and was geared towards chart hits. Pop – Cute and novelty using big band style instruments.</p> <p>Enquiry Task: Can you write a diary entry from the point of view of a 1960s teenager? What has changed, what are you listening to, what are you excited about?</p>
Week 4	Week 5	Week 6
<p>1960s</p> <p>GENRES = Surf rock– reverb and stacked vocals / Folk rock – Tells a story and is acoustic / Psychedelic rock – Uses clever orchestration, electronic sounds and doesn’t necessarily use a song structure.</p> <p>Blues in Britain – Electronic version of the 50s blues with smoother vocals.</p> <p>Enquiry task: Explore the blues scale either on your instrument or using this tutorial. https://www.simplifyingtheory.com/blues-scale-blue-note/</p>	<p>1970s</p> <p>HISTORY = Hippie culture and rise of Green revolution. CDs and pocket technology</p> <p>GENRES = Pop – Syncopated, novelty, wide variety of instruments, pop song structure.</p> <p>Rock – heavy guitar and distortion, driving drum beats</p> <p>Enquiry task: Using musicmap.info create a similar mind map of the genres we have studied so far.</p>	<p>1970s</p> <p>GENRES = Prog Rock – orchestrated, no structure, sci-fi style stories.</p> <p>Disco – ‘disco’ hi hat, soaring vocals, electronic instruments.</p> <p>Enquiry task: Using musicmap.info create a similar mind map of the genres we have studied so far.</p>

Music

Week 7	Week 8	Week 9
<p style="text-align: center;">1980s</p> <p>HISTORY = Synthesisers! Live Aid and advancement of technology.</p> <p>GENRES = Pop – Love songs, notable artists and novelty. / Synthpop – Heavy use of synthesisers Urban Pop / R&B – influenced by soul and gospel, Melisma, Electronic sounds and disco beats. Hip Hop – body percussion, drum beats, socio-political messages.</p> <p>Enquiry question: Explore how synthesisers work using https://learningmusic.ableton.com/</p>	<p style="text-align: center;">1980s</p> <p>GENRES = Electronic Music – uses synths and samples. Rock – guitar backing and distortion with driving drum beats Hard Rock – Raspy singing / Heavy Metal – Faster and more frantic Post Punk – Lots of solos and messages New Wave / New romantics – softer and lovey dovey.</p> <p>Enquiry task: Explore how synthesisers work using https://learningmusic.ableton.com/</p>	<p style="text-align: center;">1990s</p> <p>HISTORY = Globalisation of the internet, mobiles phones and MP3.</p> <p>GENRES = Brit Rock / Grunge – raw sounding Pop Punk - Greenday? Indie Rock – melody driven Soft Rock – Usually female and solo Heavy Metal – fast and aggressive (same as 80s) Nu Metal – Hard to differentiate from Heavy Metal</p> <p>Enquiry task: Using musicmap.info create a similar mind map of the genres we have studied so far. You can also make a playlist of your own similar to those on musicmap.info.</p>
Week 10	Week 11	Week 12
<p style="text-align: center;">1990s</p> <p>GENRES = Britpop – Distinguishable by its distinctly British lyrical themes. R&B – Gospel and soul influence, melisma. Hip Hop – drum machines and more lyrical than the 80s version. Electronic Music – Pop but made entirely of electronic instruments.</p> <p>Enquiry task: Using musicmap.info create a similar mind map of the genres we have studied so far. You can also make a playlist of your own similar to those on musicmap.info.</p>	<p style="text-align: center;">2000</p> <p>HISTORY = Youtube, DAWs, accessible internet.</p> <p>GENRES = Post Britpop – real bands and fewer British themes. Garage rock revival – more distortion. Soft rock – singer songwriter and acoustic Heavy metal –Fast and aggressive. New rave – Electronic, fast tempo, loops, high pitch Pop rock – Real bands and a softer vocal Punk – Sometimes female vocals.</p> <p>Enquiry task: Explore the 2010s and what changed between 2000 and 2020? Use musicmap.info to help.</p>	<p>Careers</p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

GCSE Physical Education

Week 1 – Health and Fitness	Week 2 – How Sport Improves Health and Fitness	Week 3 – Sedentary Lifestyle
<p><u>Key Definitions:</u></p> <p>Health: A state of complete mental, physical and social well-being, and not merely, the absence of disease or infirmity</p> <p>Physical Health: All body systems work, free from illness and injury. Ability to carry out everyday tasks</p> <p>Mental Health: A state of mental well-being in which the person realises their own potential, can cope with normal stressful life, work productively, and able to contribute to their community</p> <p>Social Health: Basic human needs met. The individual has friendship and support, some value in society, socially active and has little stress in social circumstances.</p> <p>Fitness: The ability to meet/cope with the demands of the environment</p> <p><u>Questions</u></p> <ol style="list-style-type: none"> For each of the above definitions, identify how each of the types of health may affect participation in sport and physical activity 	<p>Reasons for participation in physical activity, and how performance in physical activity/sport can increase health, wellbeing and fitness.</p> <p>Physical health and wellbeing:</p> <ul style="list-style-type: none"> improves heart function improves efficiency of the body systems reduces the risk of some illness able to do everyday tasks to avoid obesity. <p>Mental health and wellbeing:</p> <ul style="list-style-type: none"> reduces stress/tension release of feel good hormones (serotonin) able to control emotions. <p>Social health and wellbeing:</p> <ul style="list-style-type: none"> opportunities to socialise/make friends cooperation teamwork have essential human needs (food, shelter, clothing). <p>Fitness:</p> <ul style="list-style-type: none"> improves fitness reduces the chances of injury can aid in the physical ability to work, eg on your feet all day/manual labour. <p><u>Questions</u></p> <ol style="list-style-type: none"> Explain how sport allows for opportunities for people to improve cooperation, and therefore social health? 	<p>Sedentary Lifestyle: A lifestyle with irregular or no physical activity.</p> <p><u>Consequences of a Sedentary Lifestyle</u></p> <ol style="list-style-type: none"> Increased risk of heart disease and hypertension High levels of salt and fats in the diet can lead to increased blood pressure and a build of cholesterol in the arteries, causing a plaque and narrowing of the arteries. Weight Gain & Obesity On average a physically active man needs around 2,500 calories per day, while a woman needs 2,000. If we eat any more, the extra energy is stored for later use, mostly as fat. Poor self esteem A lack of regular exercise decreases self-esteem as body shape will change and may affect how you feel about your body. Poor sleep A vigorous workout means the body relaxes into a deeper state. Diabetes Low levels of exercise increases the risk of obesity and developing type 2 diabetes. Lethargy A lack of physical activity will leave a feeling of a lack of energy and enthusiasm and can result in depression.

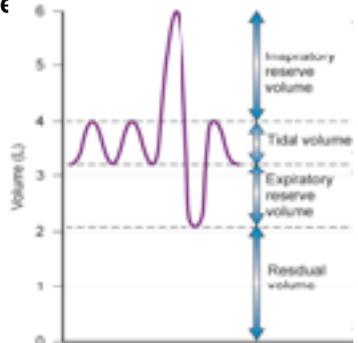
GCSE Physical Education

Week 4 - Somatotypes	Week 5 - Energy Balance, Diet & Nutrition	Week 6 – Skeletal System
<p>Somatotype means “body type” or “body shape”</p> <p>1. Ectomorph = Tall</p> <ul style="list-style-type: none"> - An individual with narrow shoulders and narrow hips - Very thin and often very tall - Very light weight - Large forehead - Often described as rectangular <p>Tend to excel in long distance events</p> <p>2. Mesomorph = Muscular</p> <ul style="list-style-type: none"> - An individual with wide shoulders and narrow hips - High percentage of muscle - Strong and powerful athletes - Often described as an upside down triangle <p>Tend to participate in sports which require strength and sudden bursts of energy. Muscular build means they are stronger and better able to cope with anaerobic exercise</p> <p>3. Endomorph = Doughnut</p> <ul style="list-style-type: none"> - An individual with wide hips and shoulders - High Percentage of body fat - Often described as pear shaped <p>Often grouped in sports that depend on power, for example forwards in rugby. Extra body fat means they can literally get more weight behind themselves and their actions.</p> <p>Question: For each somatotype, identify a sport and explain why that body type would suit that person</p>	<p>Calories</p> <ul style="list-style-type: none"> • A calorie is a <u>unit of energy</u> we receive from food and drink. <p>Males require 2500 calories per day Females require 2000 calories per day</p> <p>Factors that affect calories intake</p> <p>Age – over 25’s need less calories Gender – men need more calories than women Height – taller people need more calories Exercise – the more exercise, the more calories needed.</p> <p>Basal Metabolic Rate (BMR) – how fast energy is being used. This is different for different people.</p> <p>Balanced Diet</p> <p>“A balanced diet contains lots of different types of food to provide the suitable nutrients, vitamins and minerals we require.”</p> <p>Carbohydrate There are 2 types:</p> <ul style="list-style-type: none"> • Simple – Also know as “sugars”. <p>These can break down easily and provide your body with immediate energy</p> <ul style="list-style-type: none"> • Complex – Also know as “starches”. These are released slowly by your body to give long lasting energy. <p>Fats – another form of energy used when carbs have run out. Also important for lubricating the joints</p> <p>Protein – Growth and repair of muscles</p> <p>Vitamins and Minerals – Improve the general health of your bodies such as calcium, which develops strong bones. Also, Iron which is vital for healthy blood.</p> <p>Water – Very important to keep the body hydrated. This stops the blood thickening and helps regulate body temperature.</p>	<p>Location of bones:</p> <ul style="list-style-type: none"> - Head/neck – cranium and vertebrae - Shoulder – scapula and humerus - Chest – ribs and sternum - Elbow – humerus, radius and ulna - Hip – pelvis and femur - Knee – femur and tibia - Knee Joint - Patella - Ankle – tibia, fibula and talus <p>Functions of the skeleton:</p> <ol style="list-style-type: none"> 1. Shape and Structure - The skeleton give us our unique shape and size as well as provides a structure for muscles to attach 2. Support - The skeleton supports muscles and organs. 3. Protection - The skeleton protects delicate parts of the body like the brain, lungs and other vital organs 4. Movement - The skeleton allows us to move. Muscles are attached to the bones and contract to create movement. 5. Blood Cell Production - blood cells are made in the bone marrow. 6. Mineral Storage - essential for general body health <p>Questions:</p> <ol style="list-style-type: none"> 1. Which bones are found at the shoulder joint? <p>Which bones are found at the elbow joint?</p>

GCSE Physical Education

Week 7 – Types of Bones and Joints	Week 8 – Movements	Week 9 – Muscles and Contractions
<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>Articulating bones are where two or more bones meet to form a joint.</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) 3. 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>Flexion occurs when you decrease the angle at a joint, such as bending your arm at the elbow during the upward phase of a bicep curl</p> <p>Extension occurs when you increase the angle at a joint, such as straightening your leg when kicking a ball</p> <p>Circumduction at the shoulder is a circling action to make a cone shape.</p> <p>Rotation at the shoulder is when the arm moves in a circular movement around the joint towards or away from the midline of the body.</p> <p>Adduction is movement towards the midline of the body. This occurs at shoulder joint, returning the arms back to their original</p> <p>Abduction is movement away from the midline of the body. This occurs at the shoulder joint.</p> <p>Plantar Flexion is pointing the toes – this movement only occurs at the ankle joint.</p> <p>Dorsi Flexion is when the the foot moves towards the shin as if you are pulling your toes up. This movement only occurs at the ankle joint.</p> <p>Questions:</p> <ol style="list-style-type: none"> 1. Can you think of sporting examples for each type of movement? 2. Name two types of movements at the shoulder (2 marks) 	<p>Major muscles:</p> <p><u>Upper Body:</u> Deltoid, Rotator Cuff, Pectorals, Triceps, Biceps, Abdominals and Latissimus Dorsi</p> <p><u>Lower Body:</u> Gluteal, Hip Flexors, Quadriceps, Hamstrings, Gastrocnemius and Tibialis Anterior</p> <p>Types of Contraction:</p> <p>Isotonic Contraction: These occur when the muscle contracts and changes length.</p> <p>Isotonic concentric contraction – this involves the muscle shortening.</p> <p>Isotonic eccentric contraction – this involves the muscle lengthening whilst it is under tension.</p> <p>Isometric Contraction: This involves a muscle producing tension, but staying the same length (fixed position).</p> <p>Antagonistic Muscle Pairs</p> <p>The muscle that is contracting is called the agonist and the muscle that is relaxing is called the antagonist.</p> <p>Antagonistic pairs you will need to know:</p> <ul style="list-style-type: none"> - Biceps – Triceps - Hamstring – Quadriceps - Gluteals – Hip Flexors - Gastrocnemius – Tibialis Anterior - Pectoralis Major – Latissimus Dorsi

GCSE Physical Education

Week 10 – Respiratory System	Week 11 – Respiratory System	Week 12 – Careers in Sport
<p>Gaseous exchange takes places at the alveoli. The alveoli are tiny air sacks inside the lungs. When you breathe in, they fill with air.</p> <p><u>6 features assist the process of gaseous exchange</u></p> <ol style="list-style-type: none"> 1. Alveoli's moist thin walls (1 cell thick) allows gases to pass through and travel into the blood stream. 2. A large blood supply. An <u>increased</u> red blood cell count <u>increases</u> the amount of oxygen supplied to muscles and other body tissues. 3. Short distance for diffusion (short diffusion pathway) – capillaries are very near alveoli 4. Large surface area of alveoli allows diffusion to take place. 5. Lots of capillaries – to increase the amount of diffusion possible 6. Movement of gas from high concentration to low concentration <p>Questions:</p> <ol style="list-style-type: none"> 1. Identify two of the air passages which allow air to enter the body. (2marks) 2. Describe what gaseous exchange is and clearly state where it takes place. (3 marks) 3. Outline how two features of the alveoli assist in gaseous exchange. (2 marks) 	<p><u>Respiratory System</u></p> <p>The Mechanics of Breathing</p> <p>Breathing In- Intercostal muscles (between the ribs) contract, pulling the chest walls <u>up and out</u> The diaphragm muscle contracts, moving <u>downwards and flattening</u>, increasing the size of the chest The lungs increase in size, so the <u>pressure inside them falls</u>. This causes air to rush in through the nose or mouth.</p> <p>Breathing out- Intercostal muscles between the ribs relax - the chest walls move <u>in and down</u>. The diaphragm relaxes and bulges up, reducing the size of the chest. The lungs decrease in size, so the pressure inside increases and air is pushed up and out.</p> <p>Spirometer trace</p>  <p>Questions:</p> <ol style="list-style-type: none"> 1. Learn / revise each of the key definitions using look, cover, write, check. Remember to green pen your responses. 2. Define the terms tidal volume and residual volume. (2 marks) 3. Outline what will happen to an athlete's tidal volume and residual volume once exercise starts. (2 marks) 	<p>5 Careers from this cycle:</p> <ol style="list-style-type: none"> 1. Nutritionist 2. Physiotherapist 3. Sports Doctor 4. Sports Massage 5. Health improvement practitioner <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/m6p</p> 

Sports Studies

Week 1 - Key Components of Performance	Week 2 - Key Components of Performance	Week 3 - Key Components of Performance
<p>What are skills?</p> <ul style="list-style-type: none"> - Skills are learned abilities that athletes acquire through training and practice. - Skill may be defined as the ability to perform at a high standard effectively and efficiently. <p>What are tactics?</p> <ul style="list-style-type: none"> - Tactics are the skills required in any game that allows a player or team to effectively use their talent and skill to the best possible advantage. - Tactics are plans which are set up for a specific purpose during a performance or match. <p>Questions:</p> <ol style="list-style-type: none"> 1. Can you select a sport and identify different types of skills and tactics for this sport? 	<p>When participating in your sport. It is important to show you can use these appropriately. Areas to consider:</p> <ul style="list-style-type: none"> - Tactics (using a drop shot against a baseline player in tennis) - Strategies (when to bowl a bouncer in cricket) - Compositional Ideas (acceleration and deceleration of movements in dance) - Use of creativity in performance (feint to pass, then dribble in basketball) <p>Questions</p> <ol style="list-style-type: none"> 1. Can you think of different sporting examples for each points? Use the examples to help you. 	<p>When competing you must ensure you:</p> <ul style="list-style-type: none"> - Continue to perform under pressure (staying composed on a penalty kick) - Maintain Focus (managing to serve 'in' after several 'faults') - Perform a specific role during a game (covering for a teammate who is out of position) - Adapt to different situations (Acting in a different role because someone has been sent off) <p>Questions</p> <ol style="list-style-type: none"> 1. Can you think of a recent match/competition you have competed in and think of two examples for the four above points?
Week 4 - Applying Practice Methods	Week 5 - Applying Practice Methods	Week 6 - Applying Practice Methods
<p><u>Types of skills</u></p> <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><u>Types of skills</u></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><u>Types of Practice</u></p> <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>

Sports Studies

Week 7 - Planning a Sports Activity Session	Week 8 - Planning a Sports Activity Session	Week 9 – Evaluation Tools
<p><u>Types of Practice</u></p> <p>Variable Practice This is when the skills is practiced in a range of different scenarios that a performer could experience. 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. For example, throwing the ball into a lineout</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? 3. Can identify the most appropriate type of practice to improve a type of skill? 4. Can you think of an example of 'Part Practice' and explain how you would separate and improve a certain skill? 	<p>There are a number of tools you can use to aid evaluation: These are:</p> <p>Video analysis - to identify weaknesses and how performance can be improved</p> <p>Other assistive technology - to improve performance, such as quantitative activity trackers</p> <p>Monitoring competition results - over a period of time</p>
Week 10 – Planning a Sports Activity Session	Week 11 - Planning a Sports Activity Session	Week 12 – Careers in Sport
<p>When planning a sporting session you must consider the following aspects.</p> <ul style="list-style-type: none"> • Clear objectives for the session • Appropriate venue • Equipment needs • Supervision needs • Timing of activities • Introduction/conclusion of session • Basic warm up/cool down • Skills and technique development • Engaging • Organisation 	<p>Safety considerations when planning a sporting session</p> <ul style="list-style-type: none"> - Risk assessments - Corrective action/procedures - Knowing emergency procedures <p>Applying your knowledge:</p> <p>A local primary school have asked you to plan a sporting session for 30, Year 4 students. Can you plan a sporting session of your choice?</p>	<p>Working as a sports coach offers a rewarding career helping individuals and teams across all sporting areas and abilities.</p> <div style="text-align: right;">  </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/m6p</p>

Photography

Basic Elements of the Visual Language and Principles of Composition

These tasks are compulsory to achieve 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: Line and “Fill the Frame”	Week 3&4: Shape and “Rule of Thirds”	Week 5&6: Form & “Figure vs Background”
<p>Enquiry task 1. I see: Make a list of 10 things that you see in the photograph. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2. Mobile phone challenge: Take 5 different photos that are similar to this one. Send them to your school email.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Line: a mark made in one stroke, it shows direction. Frame: the outer box or the rectangle of the photo.</p>  <p style="text-align: center;">photographersresourcecenter.com</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the photograph. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Mobile phone challenge: Take 5 different photos that are similar to this one. Send them to your school email.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Shape: A flat, enclosed area of space. Rule of thirds: dividing the photo in thirds to position the point of interest, making it pleasing.</p>  <p style="text-align: center;">stmphotography.com</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the photograph. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Mobile phone challenge: Take 5 different photos that are similar to this one. Send them to your school email.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Form: the 3D qualities of an item. Figure: the main item in a picture. Background: what is behind the main item.</p>  <p style="text-align: center;">anny-wang.tumblr.com</p>
Steps to success		
<p>Be aware of light and shade. Use a variety of positions, viewpoints and angles.</p>	<p>Place the source of light directly in front of the object to make it look flatter or 2D.</p>	<p>Place the source of light at an angle, instead of frontally or behind the object, to achieve a stronger 3D effect.</p>

Photography

<p>Week 7&8: Texture and “Frame in a Frame”</p>	<p>Week 9&10: Colour and “Horizontal vs Vertical”</p>	<p>Week 11: Tone and Photography Week 12: Careers</p>
<p>Enquiry task 1: I see: Make a list of 10 things that you see in the photograph. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Mobile phone challenge: Take 5 different photos that are similar to this one. Send them to your school email.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Texture: quality that evokes the sensation of touch. Framing: creates or suggests a “box” effect around the point of interest.</p>  <p style="writing-mode: vertical-rl; transform: rotate(180deg);">iphonephotography.school.com/texture/</p>	<p>Enquiry task 1: I see: Make a list of 10 things that you see in the photograph. Draw a diagram placing the main point of interest in the right position. How do you know that this it is the point of interest?</p> <p>Enquiry task 2: Mobile phone challenge: Take 5 different photos that are similar to this one. Send them to your school email.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Hue: the colour (c) Saturation: between intense and desaturated (b+w) Brightness: light: tint (c + white) shade (c + black)</p>  <p style="writing-mode: vertical-rl; transform: rotate(180deg);">digitalsynopsis.com/design</p>	<p>Enquiry task 1: Mobile phone challenge: Take 5 different photos that show a range of tones. Send them to your school email.</p> <p>Enquiry task 2: Photography careers and careers that study the visual language.</p> <p style="text-align: center;"><u>Key Words</u></p> <p>Tone: the amount of light and darkness in a photo. Brightness: lots = high key, little = low key. Contrast: the amount of difference between light and dark tones in a photo.</p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/36b453</p>
<p>Steps to success</p>		
<p>Place the source of light at an angle, instead of frontally or behind the object, to achieve a stronger 3D effect. Tap on the screen to set focus on your area of interest.</p>	<p>Put together combinations of coloured objects, aim at creating harmonies and contrasts, play with the colour of the background.</p>	<p>Use a black background and a torch. Use fruits, vegetables, toys</p>

Religious Education - Core

An Introduction to Philosophy

Week 1 - Pre Teach / Introduction	Week 2 - What is the meaning of life?	Week 3 - What happens when we die?
<ul style="list-style-type: none"> - Agnostic: Someone who is unsure about God's existence. - Atheist: Someone who does not believe in God. - Global Suffering: When lots of countries suffer, for example war. - Monotheistic: Belief in just one God. - Polytheistic: Belief in many God's. - Theist: When a person believes in God. - Moral Evil: Evil that is committed by a human, on purpose. - Natural Evil: Evil that happens naturally, for example earthquakes. - Omnibenevolent: God is all loving. - Omnipotent: God is all powerful. - Personal Suffering: When one person suffers. <p><i>Enquiry Task: Define all words and then dual code. Then, write them all into a paragraph.</i></p>	<p>- Religious people have different opinions on the meaning of life, for example:</p> <ol style="list-style-type: none"> 1. Christians believe that we need to live a good life, like mentioned in the 'sheep and the goats' in order to go to heaven. 2. Jews believe that we need to live a good life as this is what the mitzvot (rules) are teaching us, however they don't have a solid belief about the afterlife. 3. Buddhists believe that the meaning of life is to achieve good karma in order to reach and attain enlightenment. <p><i>Enquiry Task: Can you find out what Hindus and Sikhs believe the meaning of life is?</i></p>	<ul style="list-style-type: none"> - Jews are not sure what happens when we die. They used to think that nothing happened. However some now believe in the 'sheol' a dreary afterlife, whilst others believe in the olam ha ba, which is the 'world to come'. - Christians believe we are resurrected, either as a physical body like Jesus, or it is our soul that is resurrected. - Buddhists and Hindus believe that we are reincarnated. We are reborn into something else, according to how we have lived our previous lives. - Sikhs believe you merge back into universal nature, they do not believe in heaven or hell. <p><i>Enquiry Task: Research one religion and give more detail about their belief on the afterlife.</i></p>
Week 4 - Do we need to see to believe?	Week 5 - Is Science or Religion correct?	Week 6 - The Cosmological Argument
<ul style="list-style-type: none"> - Some people believe that we need to see to believe. For example we need to see God before we can believe in him. - However, some people would argue that you don't need to see Spain to know it exists. <p><i>Enquiry Task: Please make a list of things you do think we need to see to believe, and a list of things we don't need to see to believe.</i></p>	<ul style="list-style-type: none"> - Science uses fact and evidence when discussing ideas. For example in the creation of the world, science argues that human evolved and we went through a process called 'survival of the fittest'. - Science suggests that humanity and the world happened 'by chance'. - Christians believe that we were made on purpose by God, the creator. He made the world in 6 days and rested on the 7th. Humans were made on day 6. Some Christians believe it was 6 actual days, others believe it was 6 time periods. <p><i>Enquiry Task: What do other religions believe about the creation of the world?</i></p>	<ul style="list-style-type: none"> - The argument was created by Thomas Aquinas. - Argued that everything can be traced back to one being which was the cause of absolutely everything. - There must be a first cause. - The first cause doesn't need a cause as it was necessary. - The first cause must have been God. - 'Ex Nihilo' means that God is necessary, he wasn't created and didn't need to be created. He has always been here and always will be here. - This argument goes against the Big Bang theory. <p><i>Enquiry Task: What do you think? Is this logical? Why?</i></p>

Religious Education - Core

Week 7 - The Teleological Argument	Week 8 - Religious Experience	Week 9 - The Problem of Evil
<p>- The argument was created by William Paley. - He argued that the world is not an accident. It must have been designed because it is so intricate. - He believed that the designer must have been God. - The world was made on purpose, it was designed and planned. - Like a watch that has been planned and designed, so must the world. - Everything works together, it can't have just happened by chance. - This argument goes against the Big Bang theory.</p> <p><i>Enquiry Task: What do you think? Is this logical? Why?</i></p>	<p>- There are many types of religious experience, for example:</p> <ul style="list-style-type: none"> ● Numinous ● Conversion ● Prayer ● Miracle <p>- Saul to Paul is an important Christian religious experience. Saul was against Christianity and even tortured them. One day he saw a bright light which spoke to him. He believed this was God. From this point Saul changed his name to Paul. Paul has many writings in the Bible. - Nicky Cruz is another example of religious experience.</p> <p><i>Enquiry Task: Research the Religious Experience of Bernadette Soubirous.</i></p>	<p>- The existence of God comes into question when the problem of evil is raised. People question how a loving, powerful God can exist at the same time as evil and suffering. - The inconsistent triad brings into question the characteristics and nature of God. - Christians argue that there are many reasons how and why evil can exist at the same time as God existing, for example:</p> <ol style="list-style-type: none"> 1. It is a test from God (eg Job). 2. We need bad to appreciate evil. <p><i>Enquiry Task: Can you explain why you think an all loving God may allow evil and suffering to happen?</i></p>
Week 10 - Is Free Will an illusion?	Week 11 - Assessment Week	Week 12 - Super Teach Week / Careers
<p>- Free will is the ability to act voluntarily. - Some people argue that we can do what we want, when we want. However this is limited. For example we have rules in society, rules in school, rules in the workplace and rules at home. - Christians believe that God gave humans free will, therefore we can act according to our will. - An example of humans acting with free will is Adam and Eve in the creation story. - Adam and Eve caused original sin in the universe, causing a drift between humans and God. - Some people believe that we are predetermined, this means all of our actions were meant to happen.</p> <p><i>Enquiry Task: Do we truly have free will? How can we tell?</i></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 'big questions' and the study of philosophy. This has included looking at why we exist, what happens when we die and if we have free will. There are many jobs or career areas related to philosophy.</p> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/8bw</p> 

Religious Education - GCSE

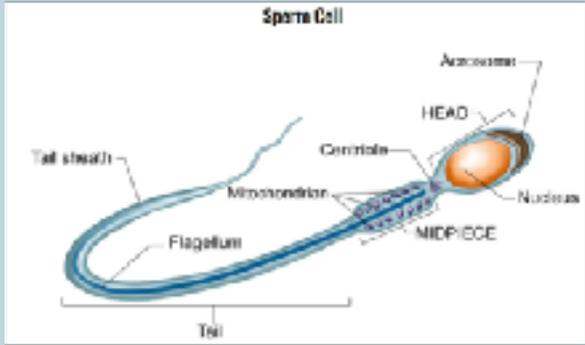
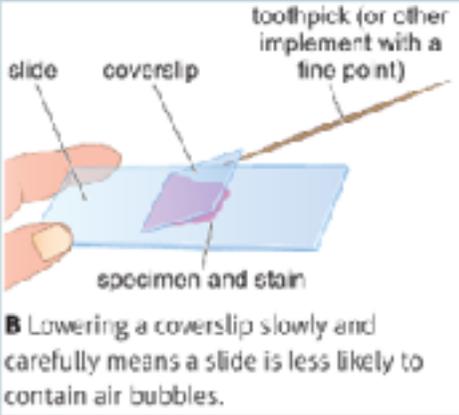
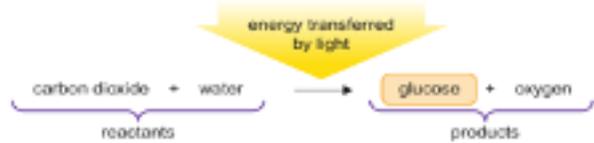
Christianity (Beliefs)

Week 1 - Pre Teach / Christian Denominations	Week 2 - The Nature of God	Week 3 - The Problem of Evil
<ul style="list-style-type: none"> - Catholics: Take many of their beliefs 'literally'. - Quakers: Worship in a circle, in silence (not usually in a Church). - Protestants: Believe that faith alone can get you to heaven. - Church of England: The established Church in England. - Anglicans: Included both protestantism and catholicism. - 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 close by (in the world). <p><i>Enquiry Task: Write out the key words and their definitions and then dual code.</i></p>	<ul style="list-style-type: none"> - Christians believe that there is only one God. - God is omnipotent, omnibenevolent, omniscient, just, a judge and a creator. - Christians believe in the trinity. This is the idea that there are three main characteristics to God: <ol style="list-style-type: none"> 1. God the Father 2. God the Son 3. God the Holy Spirit. - God the father is the part of God that looks after creation and made the world. - God the son links to Jesus. Jesus is the incarnation of God. - God the holy spirit is the part of God that is in the world and guides and helps humans. <p><i>Enquiry Task: What else do Christians believe about their God?</i></p>	<ul style="list-style-type: none"> - The existence of God comes into question when the problem of evil is raised. People question how a loving, powerful God can exist at the same time as evil and suffering. - The inconsistent triad brings into question the characteristics and nature of God. - Christians argue that there are many reasons how and why evil can exist at the same time as God existing, for example: <ol style="list-style-type: none"> 1. It is a test from God (eg Job). 2. We need bad to appreciate evil. <p><i>Enquiry Task: Can you explain why you think an all loving God may allow evil and suffering to happen?</i></p>
Week 4 - Creation	Week 5 - Jesus' Incarnation	Week 6 - Jesus' Crucifixion
<ul style="list-style-type: none"> - Christians believe that God created the world. - The world was made on purpose, it didn't happen 'by chance'. - Literal Christians: Read the Bible word for word. - Liberal Christians: Read the Bible metaphorically. - Some Christians read the Bible literally, therefore they believe that God made the world in 6 days. - Some Christians read the Bible liberally, which means the world may not have been made in 6 days but 6 time periods. - God said that the world was 'good'. This allows room for evil, for example Adam and Eve. <p><i>Enquiry Task: How do you think the world was made?</i></p>	<ul style="list-style-type: none"> - The incarnation is God coming to earth as a human (Jesus). - The incarnation is Jesus' birth. - The incarnation is celebrated at Christmas (25th December) every year. - In the Bible it explain an angel coming to Mary, mother of Jesus and saying that she was going to give birth to a son who would be God's. - Mary became pregnant through 'immaculate conception'. - God is Jesus / Jesus is God, however at the same time God is Jesus' father as he implanted Jesus into Mary's womb. <p><i>Enquiry Task: Research the Bible story of the incarnation.</i></p>	<ul style="list-style-type: none"> - Crucifixion is the Roman method of execution where a person is nailed to a cross and they die. - Jesus was put on the cross as it was believed he committed blasphemy which is saying God's name in vain, for example 'oh my God'. - Jesus wanted to die, as he wanted to sacrifice his life for atonement. This is the idea that he died to bring the relationship of humans and God back together, after the sin of Adam and Eve. - Jesus died within 6 hours and he cried out 'my God, my God, why have you forsaken me'. <p><i>Enquiry Task: Go on the following link and see what else you can learn about Jesus' crucifixion :https://www.bbc.co.uk/bitesize/guides/zxnpjty/revision/8</i></p>

Religious Education - GCSE

Week 7 - Jesus' Resurrection	Week 8 - Jesus' Ascension	Week 9 - The Afterlife
<p>- Resurrection is raising from the dead in the same body you died in. You do not come back to life in a new body!</p> <p>- Jesus was raised physically, it wasn't just his soul that was resurrected.</p> <p>- Jesus came back to life 3 days later. This is called 'Easter Sunday'.</p> <p>- Easter is celebrated every year.</p> <p>- Jesus was put on the cross on 'Good Friday'. It is called Good Friday as he sacrificed his life for humanity.</p> <p>- When Jesus came back to life he walked around proving to people he was the son of God.</p> <p><i>Enquiry Task: Do you think this could have happened? Why?</i></p>	<p>- When Jesus came back to life on Easter Sunday, he was walking around teaching for 40 days.</p> <p>- After 40 days Jesus stood around his disciples and told people to 'go out and make disciples of all nations'. This is why some people believe that they need to convert others to Christianity.</p> <p>- Jesus ascended (rose) back up to heaven in his physical body, and was reunited with God. This is evidenced in the Bible.</p> <p><i>Enquiry Task: Do some more research about the ascension of Jesus: https://www.bbc.co.uk/bitesize/guides/zxnpjty/revision/10</i></p>	<p>- Christians believe in an afterlife.</p> <p>- You need to behave well in this world, for example by helping others, giving to charity, following the rules like the 10 commandments.</p> <p>- If you sin and don't repent your sins, you may go to Hell.</p> <p>- Heaven is where you will live in paradise with God. Hell is an eternal denomination with the devil.</p> <p>- Catholics believe in purgatory, which is a waiting room.</p> <p>- 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> <p><i>Enquiry Task: Explain what you think happens to us when we die? Why?</i></p>
Week 10 - Sin and Salvation	Week 11 - Assessment Week	Week 12 - Super Teach Week / Careers
<p>- Sins are actions that are bad, and go against religious teaching, for example stealing.</p> <p>- Salvation is the concept of Jesus dying on the cross in order for us to still achieve heaven.</p> <p>- All humans have the chance of reaching heaven due to Jesus dying on the cross for atonement.</p> <p>- Humans need to repent their sins (say sorry).</p> <p>- Humans need to grant people forgiveness if they have been told sorry.</p> <p><i>Enquiry Task: Add more detail to your notes by using the following link: https://www.bbc.co.uk/bitesize/guides/zv93rwx/revision/3</i></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 within Christianity. This has included looking at the life of Jesus, the afterlife and the belief in God. 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> 

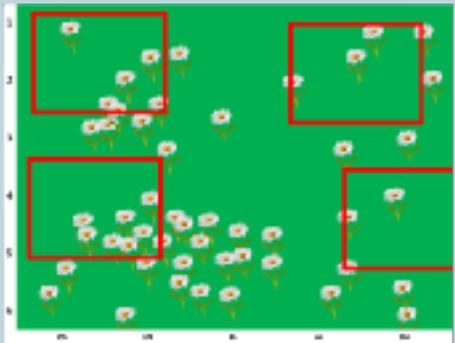
Science

Week 1	Week 2	Week 3
<p>1. Cells from different tissues have different shapes, sizes and functions to help them do their jobs. The cells are specialised.</p> <p>2. Plant cells have thick cell walls and may have some other features not found in animal cells: chloroplasts and a permanent vacuole.</p> <p>3. Animal and plant cells are described as eukaryotic organisms. Bacteria cells are described as prokaryotic organisms.</p> <p>4. Specialised cells are adapted to their function:</p> <ol style="list-style-type: none"> Sperm cell: acrosome, haploid nucleus, mitochondria and tail. Egg cell: nutrients in cytoplasm, haploid nucleus and changes to cell membrane after fertilisation. Ciliated epithelial cells: cilia wave to move substances through the body. <p>Enquiry task: explain the function of each of the parts of the sperm cell labelled in the diagram above.</p> 	<p>1. There are two main types of microscopes; light and electron microscopes.</p> <p>2. Microscopes allow us to examine very small objects by magnifying them.</p> <p>3. Electron microscopes have a greater magnification and resolution which has increased our understanding of sub-cellular organelles.</p> <p>4. Magnification = Image size ÷ Actual size</p> <p>5. A stain can be used on a microscope slide to make organelles more visible</p> <p>6. The sample must be thin enough to allow light to pass through</p> <p>7. A cover slip is used to hold the specimen in place on the slide.</p>  <p>Enquiry task: turn the diagram above into a step by step method detailing how to prepare a specimen for observation under a microscope.</p>	<p>1. All organisms need energy. Plants and algae trap energy by transferring light energy to glucose through photosynthesis.</p> <p>2. Photosynthesis occurs in chloroplasts which contain chlorophyll and it is an endothermic reaction (takes in energy from the surroundings).</p>  <p>3. Leaves have adaptations:</p> <ol style="list-style-type: none"> Palisade cells near the top of the leaf are packed with chloroplasts Stomata are pores that allow CO₂ and water vapour to diffuse in and out of the leaf Guard cells open and close the stomata by losing or gaining water Cuticle a waxy coating that reduces water loss <p>Enquiry task: explain how the guard cells open and close the stomata</p>

Science

Week 4	Week 5	Week 6
<p>1. Photosynthesis has three limiting factors:</p> <p>a. Temperature: high temperatures cause the enzymes in the chlorophyll to denature so the reaction cannot take place. At low temperatures; the reacts and enzymes may not have enough energy to collide.</p> <p>b. Light intensity: light brings energy to the reaction. After a certain light intensity, the rate of reaction levels off and the rate of photosynthesis remains constant.</p> <p>c. Carbon dioxide concentration: carbon dioxide is a reactant of photosynthesis. The more CO₂, the quicker the reaction can take place. After certain concentrations, increasing the amount of carbon dioxide will no longer affect the reaction and the rate of photosynthesis will remain constant.</p> <div data-bbox="174 898 788 1104"> <p>The first graph shows the rate of photosynthesis increasing with light intensity until it reaches a plateau. The second graph shows the rate of photosynthesis increasing with carbon dioxide concentration until it reaches a plateau. The third graph shows the rate of photosynthesis increasing with temperature up to an optimal point, then decreasing as temperature continues to rise.</p> </div> <p>Enquiry task: describe the trends shown the diagrams above. E.g. as <i>light intensity increases</i>....</p>	<p>1. Transpiration: the flow of water into the roots (by osmosis), up through the stem through the xylem vessel and out of the stomata (as water vapour) in the leaves.</p> <p>2. Factors that increase the rate of transpiration: wind, high temperatures, light intensity.</p> <p>3. Translocation: glucose is moved around the plant in the form of sucrose. The phloem vessels in the stem help transport sucrose.</p> <p>4. Companion cells pump sucrose from the leaf into the phloem by active transport.</p> <p>5. The companion cells require energy from respiration so they contain many mitochondria.</p> <p>6. Root hair cells: have a large surface area & thin cell walls to increase the rate of water (osmosis) and mineral uptake (active transport).</p> <div data-bbox="842 898 1393 1248"> <p>The diagram shows a cross-section of a stem with xylem and phloem vessels. The xylem vessel is shown with a thick wall and a one-way flow of water and minerals. The phloem vessel is shown with a thin wall and a two-way flow of water and food. Labels include: one-way flow, water and minerals, no end walls between cells, thick walls (thickened with lignin), water and food, cells have thin walls with perforations, and two-way flow.</p> </div> <p>Enquiry task: compare and contrast xylem and phloem vessels using the diagram above</p>	<p>1. All organisms and the environment in which they live form an ecosystem.</p> <p>2. Organisms that live and interact in an ecosystem form a community.</p> <p>3. Within a community, populations of different species depend on each other for resources. We say they are interdependent.</p> <p>4. Each population of species lives within a particular habitat in the ecosystem.</p> <p>5. Different species within a community will have different effects on each other.</p> <p>6. Competition: when 2 species compete for the same resource.</p> <p>7. Predation: when one species eats another and their numbers are correlated in the predator-prey cycle</p> <p>8. Some organisms work together to survive in a mutualistic relationship, while others depend on a host in a parasitic relationship.</p> <p>Enquiry task: research the interdependent relationship between the Lynx and snow shoe hare. Include a sketch graph.</p>

Science

Week 7	Week 8	Week 9
<ol style="list-style-type: none"> The distribution of organisms is affected by abiotic and biotic factors. <ol style="list-style-type: none"> Abiotic: temperature, light, water, pollutants Biotic: competition, predation The distribution of a species is determined using a belt transect. Abundance is a measure of how common something is in an area, such as population size. You can estimate population size by taking samples using quadrats. Quadrats are placed randomly along a line and each individual counted within the quadrat. Population size = number of organisms in all quadrats x (total size of area ÷ total area of quadrats)  <p>Enquiry task: write a step by step method for how you could use quadrats to estimate the population of daisies in the field above.</p>	<ol style="list-style-type: none"> Pollutants are substances that cause harm to the environment and lead to pollution. Many human activities release pollutants. The effect of a pollutant can be quantified by studying the changes in population distribution and sizes. Measurements and abiotic factors are recorded. The distribution of the organisms is then compared with the abiotic factors to see which populations are most affected by the changes in the abiotic factors. <p>Enquiry task: the photo above shows lichen. Research how different species of lichen can be used as an indicator of the level of air pollution.</p> 	<ol style="list-style-type: none"> Human interactions within an ecosystem can be both positive (+) or negative (-). <ol style="list-style-type: none"> Fish farming: (+) reduces overfishing, preserves wild stocks, (-) pollutants, spread of disease & parasites. Non-indigenous species: (+) used to control populations out of control, (-) out competing native species. Eutrophication: (-) causes aquatic animals and plants to die. Conservation: (+) preserves the biodiversity of a habitat (difficult if the habitat is under threat). Reforestation: (+) increased number & type of trees grown leads to more habitats and species numbers.  <p>Enquiry task: the photo shows a cane toad. Explain the impact that the introduction of this non-indigenous species had on the community in parts of Australia.</p>

Science

Week 10	Week 11	Week 12
<p>1. The main nutrient cycles are the carbon cycle, nitrogen cycle and water cycle.</p> <p>a. Carbon cycle: carbon dioxide is released into the atmosphere by respiration and the burning of fossil fuels. It is absorbed by photosynthesising plants.</p> <p>b. Nitrogen cycle: lightning and nitrogen fixing bacteria convert nitrogen gas into nitrates in the soil needed for healthy plant growth. Nitrogen is needed by animals to make DNA. Farmers rotate their crops to increase the amount of nitrates in the soil for plant growth.</p> <p>c. Water cycle: water from seas, rivers and lakes evaporates forming water vapour. This then condenses forming clouds. Precipitation (rain/snowfall) then falls back onto the ground and runs into rivers/ oceans.</p> <div data-bbox="331 890 707 1203" data-label="Diagram"> <p>The diagram illustrates the carbon cycle with the following components and processes:</p> <ul style="list-style-type: none"> Atmosphere: Contains CO₂ in the atmosphere. Land: Includes a tree (photosynthesis), a cow (respiration), and a factory (combustion). Sea: Includes fossils and fossil fuels. Processes: <ul style="list-style-type: none"> Photosynthesis: CO₂ in the atmosphere → glucose out. Respiration: glucose in → CO₂ out. Combustion: fossil fuels in → CO₂ out. Decomposition: dead matter in → nutrients out. </div> <p>Enquiry task: the image above shows the carbon cycle. Draw and label a similar style diagram for the nitrogen cycle.</p>	<ol style="list-style-type: none"> Abiotic: non-living factors which affect the distribution of organisms. Active Transport: the movement of substances from low to high concentration, requires energy. Belt Transect: quadrats placed in a line to measure the distribution of a species. Biotic: living factors which affect the distribution of organisms. Chlorophyll: pigment that traps light energy for photosynthesis Community: populations of different species. Diffusion: the movement of substances from an area of high to low concentration. Ecosystem: all the organisms and the environment in which they live. Eukaryotic cell: cell with nucleus and membrane bound organelles Habitat: all the organisms which affect a species and the local environment. Limiting factor: a factor which will affect the rate of a reaction. Mutualism: organisms live together and both benefit. Osmosis: the diffusion of solvent particles through a semi permeable membrane. Parasitism: a feeding relationship where one organism (the parasite) benefits from feeding off the host who is usually harmed. Photosynthesis: chemical reaction which takes place in the chloroplasts of plant leaves which creates glucose for the plant. Population: the individuals within a species. Prokaryotic cell: a cell with no nucleus or membrane bound organelles 	<p>CAREERS</p> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/549</p> <div data-bbox="1556 635 1937 1018" data-label="Image"> </div>

Spanish

Cycle 4 – Mi tiempo libre (My free time)			
WEEK	Spanish	English	Enquiry Tasks – to be done in Spanish
1	En mi tiempo libre, escucho música todos los días y los miércoles monto en bici. Sin embargo nunca navego por internet.	In my free time, I listen to music every day and on Wednesdays I ride my bike. However I never surf the net.	Write out the full present tense paradigm for the verbs escuchar, comer and vivir.
2	A las cinco, después del insti, hago mis deberes y veo un poco de televisión con mi hermano.	At five o'clock, after school, I do my homework and I watch a bit of TV with my brother.	Revise the numbers 1- 100 in Spanish.
3	A veces voy a la piscina y una vez al mes mis amigos y yo vamos al cine.	Sometimes I go to the swimming pool and once a month my friends and I go to the cinema.	Make a list of all the time phrases you know in Spanish, including days and months.
4	Los fines de semana me gusta ir a las tiendas. Diría que ir de compras es más emocionante que hacer los deberes pero lo malo es que es caro.	At weekends I like to go to the shops. I would say that going shopping is more exciting than doing homework but the bad thing is it is expensive.	Write a paragraph in Spanish to say what you like and don't like to do in your free time and why.
5	En cuanto a los deportes, los lunes juego al baloncesto pero mi hermano juega al fútbol.	With regards to sports, on Mondays I play basketball but my brother plays football.	Make flashcards for the verb jugar (to play) and hacer (to do).
6	Cuando hace buen tiempo me encanta ir a la playa para hacer natación pero si llueve me quedo en casa.	When the weather is nice I love to go to the beach to do swimming but if it's raining I stay at home.	Cover the Spanish for weeks 1-6. Practice saying it out loud. Can you recall the whole text?
7	La semana que viene, si hace calor, quiero ir a la piscina. Sería flipante.	Next week, if it is hot, I want to go the swimming pool. It would be great.	Using a dictionary or www.wordreference.com make a list of 10 new adjectives you can use to describe activities.
8	¿Y tú? ¿Quieres salir este fin de semana? ¿Qué te gusta hacer en tu tiempo libre?	And you? Do you want to go out this weekend? What do you like to do in your free time?	Write 5-10 questions you can ask a Spanish friend about their free time.
9	El fin de semana pasado fui al centro de la ciudad con mi familia para el cumple de mi padre y comimos en un restaurante que se llama La Tasca.	Last weekend I went to town with my family for my dad's birthday and we ate in the restaurant which is called La Tasca.	Write a paragraph to say what you did last weekend and what you are going to do next weekend.
10	Fue estupendo porque hacía buen tiempo y había comida deliciosa.	It was great because the weather was good and there was delicious food.	Cover the Spanish for weeks 1-10. Practice saying it out loud. Can you recall the whole text?

Spanish

Week 1 – Free time		Week 2 - Time		Week 3 – Going places		Week 4 Infinitive structures		Week 5 - Sports	
Juego con el ordenador	I play on the computer	¿a qué hora?	at what time?	ir	to go	me gusta	I like	jugar	to play
		a mediodía	at midday	voy	I go	me encanta	I love	juego	I play
Voy...	I go...	a medianoche	at midnight	vas	you go (s)	prefiero	I prefer	juegas	you play (s)
...al cine	to the cinema	a la una	At 1 o'clock	va	he/she goes	no me gusta	I don't like	juega	he/she plays
...a la piscina	to the pool	a las dos y cinco	at 2.05	vamos	we go	odio /detesto	I hate	jugamos	we play
...de compras	shopping			vais	you go (pl)	me gustaría	I would like	jugáis	you play (pl)
Escucho música	I listen to music	a las tres y diez	at 3.10	van	they go	quiero	i want	juegan	they play
		a las cuatro y cuarto	at 4.15	al cine	to the cinema	ir de compras	to go shopping	al baloncesto	basketball
Veo la tele	I watch TV	a las seis y veinte	at 6.20	a la piscina	to the pool	jugar al fútbol	to play football	al fútbol	football
Salgo con mis amigos	I go out with my friends			al polideportivo	to the sports centre	ver la tele	to watch tv	al tenis	tennis
		salir	to go out	al voleibol	volleyball				
Hago mis deberes	I do my homework	a las ocho y media	at 8.30	a las tiendas	to the shops	escuchar música	to listen to music	hacer	to do / make
				una vez...	once...	hago	I do		
Navego por internet	I surf the net	a las nueve menos cuarto	at 8.45	...al día	...a day	hacer esquí	to go skiing	haces	you do
				...al mes	...a week	salir	to go out	hace	he/she does
Monto en bici	I ride my bike	a las once menos cinco	at 10.55	..a la semana	...a month	porque es	because it is	hacemos	we do
				los fines de semana	at weekends	lunes	Monday	barato	cheap
		por la mañana	in the morning	martes	Tuesday	caro	expensive	hacen	they do
los jueves	on Thursdays	por la tarde	in the afternoon / evening	miércoles	Wednesday	emocionante	exciting	atletismo	athletics
a menudo	often			jueves	Thursday	entretenido	entertaining	ciclismo	cycling
a veces	sometimes	por la noche	at night	viernes	Friday	estupendo	great	equitación	horseriding
todos los días	every day	antes de comer	before eating	sábado	Saturday	fatal	awful	natación	swimming
nunca	never	después de ir	after going	domingo	Sunday	sano	healthy	patinaje	skating
KEY:	verbs	masculine nouns		feminine nouns		adjectives		connectives	

Spanish

Week 6 Weather		Week 7 Making plans		Week 8 The future		Week 9 The past		Week 10			
cuando...	when...	voy a	I am going to	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		la semana pasada	last week	Revise the key sentences and all vocabulary from this cycle ready for your assessment next week. Quizlet folder: 			
si...	if...	quiero	I want			hace ... días	... days ago				
hace buen tiempo	it's nice	quisiera	I would like			anoche	last night				
hace mal tiempo	it's bad	vamos a	We are going to			ayer	yesterday				
hace sol	it's sunny	¿a qué hora?	at what time?			fue	it was (opinion)				
hay niebla	it's foggy	¿Quieres venir?	Do you want to come?	voy a	I am going	era	it was (description)			Week 11 Assessment Week	
hace viento	it's windy	conmigo	with me	vas a	you're going (s)	hizo	it was (weather)				
está nublado	it's cloudy	sí	yes	va a	he/she is going	escuché	I listened				
nieva	it's snowing	no	no	vamos a	we are going	ví	I saw/watched				
llueve	it's raining	no quiero	I don't want to	vais a	you're going	comí	I ate				
hace calor	it's hot	no puedo	I can't	van a	they're going	jugué	I played				
hace frío	it's cold	de acuerdo	ok	ir	to go	hice	I did				
hay tormenta	there's a storm	claro	of course	ver	to see	fui	I went				
The verb Hacer Although in English we use the verb 'to be' when we talk about weather, in Spanish you use the verb 'hacer' so 'hace sol' literally translates as "it does sun".		¿Por qué no?	Why not?	escuchar	to listen	salí	I went out				
		sería	It would be	salir	to go out	había	there was/ were				
		flipante	great	comer	to eat	To talk about the Past with regular verbs in the first person: -ar verbs change to é . -er and -ir verbs change to í					
		bueno	good	jugar	to play						
		fenomenal	great	hacer	to do / make						
The verb Hacer Although in English we use the verb 'to be' when we talk about weather, in Spanish you use the verb 'hacer' so 'hace sol' literally translates as "it does sun".								Week 12 			

Travel and Tourism

Week 1	Week 2
<p>Types of tourism</p> <p>Domestic tourism: taking holidays and trips in your own country.</p> <p>Outbound tourism: travelling to a different country for a visit or holiday.</p> <p>Inbound tourism: visitors from overseas coming into the country.</p>  <p>Enquiry task: Draw an image for each type of tourism to represent the differences between them.</p>	<p>Types of travel</p> <p>Leisure travel: day trips, short breaks, holidays, visiting friends and relatives (VFR), staycations, special events</p> <p>Business travel: meetings, incentive, conference and events (MICE)</p> <p>Specialist travel: adventure, health, education, cultural heritage, dark tourism, voluntary work, conservation, eco-tourism</p> <p>Enquiry task: (Use the internet to find more information on each of these types of travel). What other differences are there between the types?</p> 
Week 3	Week 4
<p>Sustainable tourism: meeting the needs of present tourists and local communities while protecting the natural, cultural and historical environment for the future</p> <p>Principles: tourism attempting to make as low an impact on the environment and local culture as possible, while helping to generate future employment for local people</p> <p>Benefits: environmental protection, reduced energy consumption, reduced waste, links with the local community, competitive edge, image, cost savings</p> <p>Enquiry task: Research one tour company/hotel that provides sustainable tourism. When was it created? Where is it located? Which groups of people will visit?</p>	<p>GDP: the value of a country's economy which is a measure of all goods and services over a year</p> <p>The travel and tourism sector provides 9.6% of total jobs in the UK and since 2010 has been the fastest growing sector of the UK in terms of jobs.</p> <p>Some of these jobs are direct which means they are in travel and tourism organisations, e.g., airline companies.</p> <p>Others are indirect, which means they are in industries that support travel and tourism, for example, construction of hotels</p> <p>Enquiry task: Research one of the jobs directly linked to tourism within the UK. What qualifications would you need for this job?</p>

Travel and Tourism

Week 5	Week 6
<p>Economic multiplier effect: the additional income or employment (jobs) created in an area as a result of tourists spending more money</p> <p>Infrastructure: transport networks or facilities for tourists</p> <p>The tourism sector in the UK is growing and the government need to decide what infrastructure to build more of. E.g., there have been debates about whether to build another runway at Gatwick or Heathrow airport</p>  <p>Enquiry task: Research proposals to expand Heathrow airport. What are the pros / cons of this? What is your overall opinion?</p>	<p>Tour operators are the companies that organise package holidays. There are different kinds of tour operators.</p> <ul style="list-style-type: none"> • Domestic – these companies organise holidays for UK residents within the UK, e.g. Shearings Holidays • Outbound – these companies provide holidays for UK residents abroad, e.g., Thomson Holidays • Inbound – these companies provide holidays for people from other countries to visit the UK, e.g., International Friends <p>Enquiry task: Research one of the above types of tour operators. Produce a fact file, including: when it was created & your overall opinion on how successful they have been.</p>
Week 7	Week 8
<p>Travel agents book holidays on behalf of tour operators and advise customers on the type and availability of holidays. The role has changed a lot in recent years because of the internet.</p> <p>There are multiple travel agents that are large chains of more than 50 branches and independent travel agents which are often family-owned and may have only one branch.</p> <p>Enquiry task: What qualities/skills do you think are most important in a travel agent?</p> <p>What do you think are the key challenges in this job role?</p> 	<p>There has been significant growth in the use of the internet to purchase goods and services so nearly all travel and tourism companies have an online service.</p> <p>There are also advice sites and consolidators (they group companies together) such as lastminute.com or expedia.co.uk</p> <p>Enquiry task: Make a table of the pros and cons of online advice sites/ booking companies.</p> <p>Overall, do you think they are a benefit or a disadvantage?</p>

Travel and Tourism

Week 9	Week 10
<p>The different types of passenger transport – road, rail, sea, air and on different scales – regional (within a country), national (to a different country), global (to different countries further away).</p> <p>The role – to provide transport from one location to selected destination, safety of products and/or services provided – transport, hospitality, entertainment, information and advice.</p> <p>The different types of accommodation - hotels, motels, guest houses/ bed and breakfast, apartments, youth hostels, caravans, chalets, camping, holiday cottages, holiday parks).</p> <p>Enquiry task: Which groups of people most commonly visit each of the above types of accommodation?</p>	<p>The different types of visitor attractions – natural (e.g., beaches, mountains), purpose-built (e.g., theme parks, museums) and heritage (e.g., Tower of London and Westminster Abbey). The products and services provided by each (rides, tours, cafes, souvenir shops, educational tours).</p> <p>Enquiry task: Produce a small leaflet/poster to advertise an attraction of your choosing. Use the internet to find any that have been produced already/info about the attraction.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
Week 11	Week 12
<p>Tourists often visit places to see art exhibits or attend special events. It could be sporting such as the Olympics or the tennis at Wimbledon or a music festival such as Glastonbury. They also go to visit the theatre such as the West End in London.</p> 	<p>Careers linked to these topics:</p> <ul style="list-style-type: none"> Tour guide Travel agent Hotelier Receptionist Ticket vendor Cabin crew <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 20px;">  <div style="text-align: right;"> <p>Follow the QR code or type in the link into your browser</p> <p>https://links.iscaexeter.co.uk/oys</p>  </div> </div>

