

ISCA ACADEMY



KNOWLEDGE ORGANISER

Autumn 2021

Year 8

Bullying Information



'They're not bullying you because of you, they're bullying you because of how they are' *Jessie J*

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 bullying
- social media
- threatening behaviour
- name calling
- sexting
- cyberbullying



Bullying includes:

- people calling you names
- making things up to get you into trouble
- hitting, pinching, biting, pushing and shoving
- taking things away from you
- damaging your belongings
- stealing your money
- taking your friends away from you or leaving you out
- posting insulting messages or rumours, in person online
- threats and intimidation
- making silent or abusive phone calls
- sending you offensive texts or messages

Speak

'You always have to remember that bullies want to bring you down because you have something that they admire' *Zac Efron*

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

You are not alone
It is not your fault

There is no reason for you to ever put up with any kind of bullying



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



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.

Don't be afraid to tell an adult that you trust.

Telling someone shares the problem. It helps you feel supported.

It is really important to tell someone, particularly if the bullying has been going on for a while or the strategies you've tried haven't worked.

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:

‘Noughts and Crosses’ - Malorie Blackman: Set in an alternative reality where white people are discriminated against, two young people from across the divide fall in love. Can they possibly find a way to be together? A thought-provoking look at racism and prejudice.

‘The Woman in Black’ - Susan Hill: A chilling ghost story. Alone in a remote house surrounded by marshes, a young lawyer struggles with the sense that someone is there with him and eventually uncovers a ghastly secret. Arthur is too disturbed by his memories to share his story aloud, so he writes it down.

‘The Giver’ - Lois Lowry: A utopian story told from the point of view of Jonas, an eleven-year-old boy living in a futuristic society that has eliminated all pain, fear, war, and hatred. There is no prejudice, since everyone looks and acts basically the same, and very little competition, but how perfect really is this society?

‘Our House Is on Fire: Scenes of a Family and a Planet in Crisis’ - Greta Thunberg: Written by a remarkable family, Our House Is on Fire is the story of how they fought their problems at home by taking global action, and how Greta decided to go on strike from school, igniting a worldwide rebellion.

‘The Book Thief’ - Markus Zusak: It is 1939 in Nazi Germany, and Death has never been busier. Liesel, a nine-year-old girl, is living with a foster family on Himmel Street, her parents having been taken away to a concentration camp. This is her story, and that of the people of her street when the bombs begin to fall.

‘You are a Champion’ - Marcus Rashford packed full of stories from Marcus’s own life, brilliant advice and top-tips from performance psychologist Katie Warriner. It will show you how to be the very BEST that you can be.

Art and Design

Project 1: OBJECTS AND VIEWPOINTS

* I see: list 10 things that you can see in the art piece. **I think- make 3 links between what you see and what you know, use your knowledge and understanding of the world, (what, when, how...) ***Opting for art or photography as one of your GCSEs? If so, copy the artist image as a voluntary stretch and challenge task***

<p>Week 1&2: Georgio Morandi: "Large circular still-life with bottle and three objects. 1946</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Stretch and Challenge: Copy the artwork/make your own version – bring to your teacher***</p> <p>Key Words</p> <p>Still-life: an object or group of objects placed on a surface Viewpoint: is the point from which we, the viewer, looks at a scene.</p>	<p>Week 3&4: Vincent van Gogh, A Pair Of Leather Clogs, 1888</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Stretch and Challenge: Copy the artwork/make your own version – bring to your teacher***</p> <p>Key Words</p> <p>Contrast: the difference between tones, colours, textures Proportion: is the relationship between two parts or two measurements</p>	<p>Week 5&6: André Kertész, Fork, Paris. 1928</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Stretch and Challenge: Copy the artwork/make your own version – bring to your teacher***</p> <p>Key Words</p> <p>Negative space: the space between objects or around an object Angle: a portion of space contained between two lines</p>
<p>Week 7&8: Sarah Graham, Watermelon Chupa Chup. 2016</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Stretch and Challenge: Copy the artwork/make your own version – bring to your teacher***</p> <p>Key Words</p> <p>Close-up: a type of viewpoint that is zoomed in on the subject</p>	<p>Week 9&10: Kathi Blinn, Topsy Stripes.</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Stretch and Challenge: Copy the artwork/make your own version – bring to your teacher***</p> <p>Key Words</p> <p>Composition: the arrangement or placement of visual elements in an artwork</p>	<p>Week 11: Tom Wesselmann, Still Life #34.1963 Week 12: Careers</p> <p>Enquiry task 1: I see* Enquiry task 2: I think**</p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/36b453</p> <p>Key Words</p> <p>Commercial: to promote or advertise something</p>

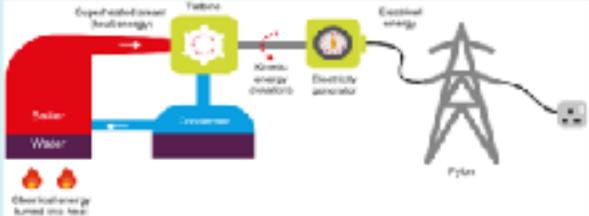
Computer Science / Creative iMedia

Week 1 & 2	Week 3 & 4	Week 5 & 6
<p>Python Key Commands</p> <p>IDE - Integrated Development Environment</p> <p>Print - Used to output into the terminal</p> <p>Sleep - Used to pause the computer program</p> <p>Assignment - Giving a variable or constant a value. e.g. counter = 0.</p> <p>Selection - Any IF statement block.</p>	<p>Data Types</p> <p>String - Used for text - i.e. "Computer"</p> <p>Integer - Used for whole numbers</p> <p>Float - Used for decimal point numbers</p> <p>Boolean - Only stores true or false</p> <p>Char - Used for storing single character</p> <p>Variable - A location of computer memory with a name which can be changed.</p>	<p>Constant - A location of computer memory with a name which cannot be changed.</p> <p>List - A structured variable which can store multiple values with an index.</p> <p>Sequence - A series of steps in a specific order to complete a task.</p> <p>Iteration - Any repeat block, or forever. It is a loop.</p>
Week 7 & 8	Week 9 & 10	Week 12 - Careers' Focus
<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) a = a + 1 (without this line this code would run forever)</pre>	<p>Assessment Week</p> <p>You will need to check all keywords for this week.</p> <p>All teacher resources and lessons are in google classroom. Your assessment will be on Python Programming.</p>	<p>Please open this link and complete your careers focus homework on Computer Science</p>  <p>https://links.iscaexeter.co.uk/1cb</p>

Design and Technology

Week 1 – Simple Circuits	Week 2 – Electricity (the basics)	Week 3 - Components
<p>A circuit is a path or route that electricity takes</p> <p>There is a start and a finish point known as the power source or power supply</p> <p>In this example, the two 1.5 Volt AA batteries are the power supply, providing 3 Volts The batteries are joined by wires or tracks to a toggle switch and a filament bulb</p>  <p>When the switch is in the on position, current flows around the circuit and the bulb lights up</p>	<p>To understand what electricity is doing in a circuit we need to learn the meaning of a few words;</p> <p>Voltage – is the difference in charge between two points in a circuit. Voltage is measured in Volts.</p> <p>Current – is the rate at which the charge flows around a circuit. Current is measured in Amperes or Amps.</p> <p>Resistance – is the measure of how much a material restricts the flow of charge. Resistance is measured in Ohms.</p> <p>Enquiry Task – Draw a simple circuit diagram using both symbols and pictures.</p>	<p>A Light emitting diode (LED) is another type of optoelectronic component. LEDs use very little current compared to filament bulbs. LEDs are polarised, meaning they have positive and negative legs. The long leg is the anode and is connected to positive +. The short leg is the cathode and is connected to negative -</p>  <p>A Resistor limits the amount of current flowing in an electrical circuit. The unit of resistance is called ohms, represented by Ω. Resistors are used in series with LEDs to restrict the amount of current flowing through the LED. Too much current will cause the LED to 'blow'</p> 
Week 4 – Soldering	Week 5 – Metals (Non-Ferrous)	Week 6 – Metals (Alloys)
<p>Soldering metals are joined with a metal filler known as solder. Solder has a lower melting point than the adjoining metals. Soft soldering is commonly used in manufacturing electrical circuits and plumbing with copper components.</p> <p>Flux is used to help the solder flow and keep the join clean. Hard soldering is used for joining precious metals.</p> <p>Enquiry Task – describe with the aid of sketches how to solder properly. Reference Health & Safety.</p>	<p>Aluminium – Properties: Lightweight, ductile, resists corrosion. Uses: Bike frames, drink cans, takeaway trays.</p>  <p>Zinc - Properties: Brittle, yet malleable. High corrosion resistance. Uses: Used to galvanise steel.</p> <p>Copper - Properties: Ductile and malleable. Good electrical conductor. Uses: Plumbing supplies, electrical cables.</p> <p>Tin - Properties: Malleable and ductile, high corrosion resistance. Good electrical conductor. Uses: Solder, plating surfaces such as cans.</p> <p>Enquiry Task – List as many metal products that you use each day and what type of metal they might be made from.</p>	<p>Alloys are a mixture of at least one pure metal and another element. The alloying process combines the metals and other elements to improve working properties or aesthetics. Alloys are harder than pure metals as they contain atoms of different sizes. These distort the arrangement of the atoms making it hard for the layers of atoms to slide over each other, creating a Harder & stronger metal.</p>    <p>Stainless steel Brass High speed steel</p>

Design and Technology

Week 7 - Rivets	Week 8 – CAD/CAM	Week 9 – Energy Generation
<p>Rivets are used to join two or more sheets of metal together to create a strong and permanent fixing. Riveting is suited to situations where workers cannot access the back of a product such as in tubing or walls.</p> <p>Rivets are used by the aircraft, shipbuilding and automotive industries, where neatness and strength are important, but also allowing for lighter weight particularly in an aircraft.</p> 	<p>Advantages of CAD (Computer Aided Design). Designs can be created, saved and edited easily, saving time. Designs or parts of designs can be easily copied or repeated. Designs can be worked on by remote teams simultaneously. Designs can be rendered to look photo-realistic to gather public opinion in a range of finishes. CAD is very accurate CAD software can process complex stress testing.</p> <p>Disadvantages of CAD (Computer Aided Design) CAD software is complex to learn. Software can be very expensive. Compatibility issues with software. Security issues - Risk of data being corrupted or hacked</p> <p>Enquiry Task – list as many examples of CAM (Computer Aided Manufacture) as you can.</p>	<p>Renewable alternatives to fossil fuels include:</p> <ul style="list-style-type: none"> • Wind • Solar • Tidal • Biomass • Hydroelectric • Nuclear (over 11% of the world's electricity). <p>Fossil fuels include; coal, gas, oil. They are extracted through mining & drilling.</p> 
<p>Week 10 – Designers & Companies</p>	<p>Week 11 – Assessment Week</p>	<p>Week 12 - Careers</p>
<p>Investigate, analyse and evaluate the work of past and present designers and companies to inform your own designing.</p> <p>You should investigate the work of a minimum of two of the following designers: • Alexander McQueen • Aldo Rossi • Charles Rennie Macintosh • Coco Chanel • Ettore Sottsass • Gerrit Reitveld • Harry Beck • Louis Comfort Tiffany • Marcel Breuer • Mary Quant • Norman Foster • Philippe Starck • Raymond Templier • Sir Alec Issigonis • Vivienne Westwood • William Morris.</p> <p>You should investigate the work of a minimum of two of the following companies: • Alessi • Apple • Braun • Dyson • Gap • Primark • Under Armour • Zara.</p> <p>Enquiry task - https://www.focuselearning.co.uk/</p>	<p>Keywords;</p> <p>Ores – Materials which are mined from the ground.</p> <p>Ferrous Metal – A metal or alloy that contains iron, because of this most of them are magnetic</p> <p>Non-Ferrous Metal – A metal or alloy that doesn't contain iron, so usually does not rust.</p> <p>Alloy – a mixture of two or more metals, or a metal mixed with one or more elements.</p> <p>Corrosion – The gradual destruction of material as it reacts with substance, e.g. ruating of iron.</p> <p>Finite Resource – A source that will run out eventually, e.g. crude oil. Also called a non-renewable resource.</p> <p>Non-Finite Resource – A resource that can be replaced by natural processes as fast as it is consumed by humans. E.g softwood trees.</p>	 <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4sw</p>

Drama

Week 1/2	Week 3/4	Week 5/6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Improvisation: Any work in drama without a script. ● Spontaneous: When work is created and performed at the same time. ● Polished: When work is repeated and refined. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Genre: a style or category of art, music, theatre or literature ● Conventions: The key features that relate to a particular style or genre. ● Tension: An atmosphere created by a build up to an event. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Characterization: The process of creating a character by changing your voice and physical appearance. ● Thought tracking: When a performer explains their thoughts or feelings to the audience.
<p><u>Enquiry Task:</u> Write a story that alternates Fortunately and Unfortunately at the start of every sentence.</p>	<p><u>Enquiry Task:</u> Write a ghost story that creates tension by building up to a scary event.</p>	<p><u>Enquiry Task</u> Create a character profile for your character; it should include as many details as possible. This could take the form of a fact file or a social media profile.</p>
Week 7/8	Week 9/10	Week 11/12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Naturalism: A type of drama that tries to be as realistic as possible, with believable stories and characters. ● Non-naturalism: Any style of drama that uses unrealistic techniques. ● Monologue: One character speaking uninterrupted, heard by the other characters on stage. 	<p><u>Key Words</u></p> <ul style="list-style-type: none"> ● Soliloquy: One character speaking uninterrupted, not heard by the other characters on stage. ● Marking the moment: Using a technique to highlight an important moment. ● Flashback: A jump backward in time in a story. 	
<p><u>Enquiry Task:</u> Write a soliloquy or monologue for a character who is about to spend the night in the haunted house.</p>	<p><u>Enquiry Task:</u> Write a script for a news report about what happened when the children spent the night in Darkwood Manor</p>	

English

London

Week 1	Week 2	Week 3
<p>1. Research and create a list of 10 famous London landmarks or buildings. Write at least two sentences about each one to include why they are famous and what is significant about them.</p> <p>2. Research information about 18th century London. Write down 5 facts you discover about everyday life at this time in the city.</p> <p>3. Research the artist and writer William Blake. Write down 5 facts you have learnt about him.</p>	<p>1) Learn the spellings and definitions of the following words by using say, look, cover, write, check:</p> <ul style="list-style-type: none"> • <u>Corrupt</u> - dishonest and immoral • <u>Underbelly</u> - an area vulnerable to attack OR a hidden unpleasant or criminal part of society. • <u>Depict</u> - portrays / shows • <u>Oppression</u> - cruel & unfair treatment • <u>Enforced</u> - forced / compulsory • <u>Metropolis</u> - city • <u>Iconic</u> - very famous or popular, especially being considered to represent something. • <u>Seminal</u> - important & influential <p>2) Use each word in a separate full sentence.</p> <p>3) Learn these quotes from London by William Blake by using say, look, cover, write, check:</p> <ul style="list-style-type: none"> • ‘Marks of weakness, marks of woe’ • ‘mind-forged manacles’: they are trapped in poverty • Repetition ‘In every..’ • Criticises the powerful: ‘Every black’ning church appals’ - the church is corrupt • ‘the hapless soldier’s sigh / Runs in blood down palace walls’ – soldier’s suffer and die due to the decisions of those in power, who themselves live in palaces 	<p>Use the websites below, and any further websites of your choice to research the topic headings.</p> <p>Now write in your own words a summary of what you learn about each topic. You should write at least one A4 sheet on each topic.</p> <ul style="list-style-type: none"> • Romanticism Movement https://www.bl.uk/romantics-and-victorians/articles/the-romantics# https://kids.kiddle.co/Romanticism • The Industrial Revolution https://www.bl.uk/georgian-britain/articles/the-industrial-revolution • https://www.bbc.co.uk/bitesize/guides/zvmv4wx/revision/1

English

Week 4	Week 5	Week 6
<p>1. Learn the spellings and definitions of the following words by using look, cover, write, check <i>at least</i> 3 times:</p> <p>Depersonalised = deprived of human characteristics or individuality. Romanticised = make something seem better or more appealing than it really is.</p> <ol style="list-style-type: none"> 1) Use each word in a separate full sentence. 2) In Blake's poem 'The Chimney Sweeper', how does the quote "A little black thing among the snow" show depersonalisation? 3) How is the job of a Chimney Sweeper presented in the following extract? Write down the words and phrases that support your idea. <p>Working conditions for the climbing boys were harsh and cruel. It was a dangerous and filthy job for the boys to undertake, especially without the protection of safety clothing and respirators, and many suffered from job related ailments, such as twisted spines and kneecaps, deformed ankles, eye inflammations and respiratory illnesses</p>	<p>1. Learn these language methods by using look, cover, write, check:</p> <ul style="list-style-type: none"> • Simile – comparison using like or as • Metaphor – comparison saying one thing is another • Personification – giving inanimate objects human qualities • Juxtaposition – two things with contrasting effects placed close to each other • Imagery – created a picture in the reader's head • Foreshadowing – a hint or indication of something to come • Adjectives – describing words • Verbs – action or state • Nouns - a word used to identify any of a class of people, places, or things <p>2. Write 4 separate sentences that include a different language technique from above.</p>	<p>Identify the language methods which you learnt in Week 5 that appear in the following extract:</p> <p>The gruel disappeared; the boys whispered to each other, and winked at Oliver; while his next neighbours nudged him. Child as he was, he was desperate with hunger, and reckless with misery. He rose from the table; and advancing to the master, basin and spoon in hand, said: somewhat alarmed at his own temerity: 'Please, sir, I want some more.' The master was a fat, healthy man; but he turned very pale.</p> <ol style="list-style-type: none"> 1. Find the meaning of the word 'temerity'. 2. Identify why Dickens may have chosen to use this word here. 3. Consider the phrase 'reckless with misery'. 4. What is Dickens explaining to us about Oliver's state of mind here? 5. Now rewrite this paragraph adding additional language methods. 6. Extra challenge: Adapting the language within it to change the tone of the text e.g create a joyful tone or a callous tone.

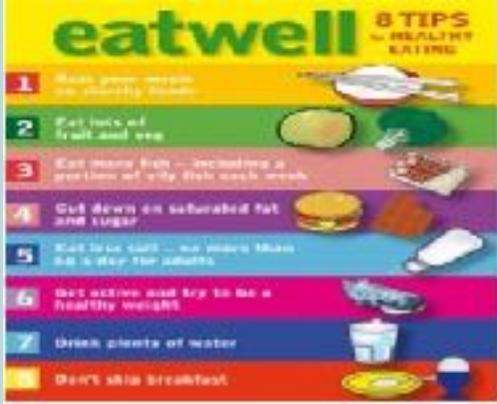
English

Week 7	Week 8	Week 9
<p>1. Write out and learn the 5 ingredients for amazing writing by using say, look, cover, write, check:</p> <ul style="list-style-type: none">• Ambitious vocabulary• Structure methods• Language techniques• Punctuation• Varied sentences <p>2. Write out the following definitions:</p> <ul style="list-style-type: none">• Petrarchan sonnet = has fourteen lines, has a particular rhyming scheme and is split into an octave and a sestet.• Octave = the first 8 lines of a Petrarchan sonnet, usually with rhyme scheme <i>abba abba</i>• Sestet = the last 6 lines of a Petrarchan sonnet with a regular rhyme scheme. <p>3. What language techniques are the following quotes an example of? “This City now doth, like a garment, wear the beauty of the morning” “The very houses seem asleep”</p>	<p>1. Write a sentence about how each of the following themes have a link to London based on what we have studied in this topic:</p> <ul style="list-style-type: none">• Poverty• Child Labour• Crime• Women• Status• Power and corruption	<p>Answer as many of the following questions as you can from memory:</p> <ol style="list-style-type: none">1. How many lines does a Petrarchan sonnet have? Name the 2 parts of it.2. Which two poems (that we've studied) did Blake write?3. Who did Blake think was to blame for the inequality in society?4. What does seminal mean?5. What word beginning with 'o' means cruel and unfair treatment?6. Define corrupt.7. Underbelly can mean 2 things – an area vulnerable to attack and what else?8. What word beginning with 'd' means the state of combining two different things.

English

Week 10	Week 11	Week 12
<p>1. Learn the spellings and definitions of the following words by using look, cover, write, check <i>at least</i> 3 times:</p> <ul style="list-style-type: none"> • Noun – A noun is a naming word for a person, place or object. • Verb – A verb is a word to describe an action. • Adjective – An adjective is a word which is used to add detail to the noun by adding description. • Adverb – An adverb is a word or phrase that modifies or qualifies an adjective, verb, or other adverb or a word group. <p>Extension: Write a paragraph of your own about something you enjoy and then colour code the nouns, verbs, adjectives and adverbs you have used.</p> <p>2. Learn the words below and their definitions:</p> <ul style="list-style-type: none"> • Language - the words we use • To analyse language - to examine the word choices writers are making and explain the effects on the reader. • Effective - means successful in producing a desired or intended result. <p>3. Copy this statement into your Knowledge Organiser book</p> <p>Writing an Isca Way paragraph is a little like showing your workings out in Maths. Isca Way paragraphs allow the person marking your essay to see your thought process (and that you haven't just guessed the answers).</p>	<p>1. Write out the information below into your Knowledge Organiser book.</p> <ul style="list-style-type: none"> • A noun phrase is a group of words built around a noun. • The easiest way to expand noun phrases is by adding adjectives (and adverbs) this is called an expanded noun phrase. <p>2. Expand the nouns below to make them into noun phrases. Then expand them further to make expanded noun phrases.</p> <ul style="list-style-type: none"> • House • Dog • Teacher <p>3. Learn the spellings and definitions of the following words by using say, look, cover, write, check <i>at least</i> 3 times:</p> <ul style="list-style-type: none"> • Denotation - the meaning/definition of a word • Connotation – the feelings or ideas we associate with a word. <p>4. Learn the spellings and definitions of these new words and their meaning</p> <ul style="list-style-type: none"> • Explain - To make something clear or easy to understand by describing or giving information about it. • Prepositions - indicate locations (the man <i>on</i> the platform), directions (<i>look to your left</i>) • Pronouns - used to substitute for nouns (eg. 'She' instead of 'Sarah') or refers to something mentioned elsewhere 	<p>Careers</p> <ul style="list-style-type: none"> • Journalist • Author • Blogger • Editor • Secondary School English Teacher <div data-bbox="1556 643 1973 1062" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4my</p>

Food & Nutrition

Week 1 - Recap Food Hygiene & Safety	Week 2 - Knife skills/Hygiene/Safety	Week 3 – 8 Tips healthy eating
<p>Knife skills: Bridge/claw</p>  <p>4Cs COOK - above 63°C CHILL - fridge 0-5°C CROSS-CONTAMINATION boards CLEAN – remove bacteria Temperatures: 0-5°C fridge -18°C freezer Above 63°C cooking Above 75°C high risk meat – chicken 5°-63°C Danger Zone – bacteria grows the most Bacteria – a Micro living organism that can cause food poisoning eg salmonella. Needs 4 things to grow, moisture, time, warmth, food (protein)</p>  	<p>Practical baseline assessment: Couscous Salad A pasta, nutrient carbohydrates – starchy slow releasing energy. 5 fruit and vegetables a day. Vitamins eg vitamin C – good for immune system, minerals eg calcium, iron etc Cross contamination: avoid bacteria transferring from one food/equipment to another – use colour coded board, wash hands, tissue paper for peelings Food Preparation skills: peel (take off skin), slice, dice (cubes) (bridge and claw knife techniques) Cooking skills: re-hydrate – turn from dried to wet by adding water – couscous. Boil – water to make a– vegetable/chicken) stock (water and stock cube ENQUIRY TASK 1: Find out what nutrients are in a couscous salad. Search www.bbcgoodfood.co.uk</p>	<p>8 Tips for Healthy Eating Calories: Men 2,500, Women 2,000 per day</p> 
Week 4 - Nutrients and functions	Week 5 - You are what you eat	Week 6 – Modify for different diets
<p>Practical – Nutrients and functions – cheesecake Nutrient – a natural chemical in food that keeps us healthy Macro (large amounts), Micro (small amounts) Food Group Dairy – Nutrient Fat – energy, warmth too much leads to obesity heart disease Nutrients – Vitamin C in lemons good for immune, cells - scurvy. Calcium – strong teeth and bones – rickets. Biscuits – sugar carbohydrates – tooth decay, obesity. Only 5g of salt a day – too much high blood pressure ENQUIRY TASK 2: Research what happens to your body if you don't have enough calcium, vitamin C or if you have too much fat, sugar and salt.</p>	<p>HOMEMADE V FAST FOODS (Nutrition labels) Homemade – positives Know what's in it, Lower fat, sugar and salt. No artificial additives, know their food provenance (where comes from), energy used in making Fast food – negatives High in sugar, fat and salt, Artificial additives. Not fresh, throw away packaging (plastic) Modify a Recipe – make more healthy. Adding vegetables to the sauce – more fibre, vitamins, minerals. Adding a protein (meat/fish etc), making a homemade sauce Make vegetarian/vegan, less fat, ethical reasons lean meat (remove fat), less fat. Semi skimmed milk – less fat, wholemeal pasta (fibre), healthier oils, margarine no butter, Low fat cheese. Lactose free ingredients. ENQUIRY TASK 3: print off a nutrition label</p>	<p>Practical – Modify – macaroni cheese Multi-cultural –Food from different countries – Italian. Modify: change an ingredients for different diets/likes/dislikes. Seasoning – herbs and spices that give food flavour – chilli, curry powder, coriander, parsley, mint instead of salt unnatural additives and flavours. Healthier – wholemeal pasta (gluten free), low fat cheese or lacto free, margarine instead of butter, more vegetables – more fibre (aids digestion of food), fills you up for longer. Use low fat or lean (reduced fat meat eg chicken). Food Preparation techniques-roux (butter and flour to thicken a white sauce), grate. Cooking techniques; boiling – cook in water in a saucepan reaches 100°C and simmering – continue cooking on a low heat (small bubbles).</p>

Food & Nutrition

Week 7 – Modify a recipe	Week 8 – Diet and Lifestyles	Week 9 – Practical Cakes																
<p>Practical Assessment: Fakeaway Curry and Rice Food Preparation methods: Peel, dice, slice, crush (garlic) Multi-cultural: foods from different countries Modify your own recipe: vegetable curry, spicy, mild/creamy, flavoured/coloured rice with spices/herbs Cooking methods: fry (frying pan in oil – gives flavour, colour and texture to food), boiling in water in a saucepan (pasta, rice, vegetables) reaches 100°C then simmering on a low heat to continue cooking (small bubbles)</p>	<p>Research the life stages and the nutrients they need Infants – bodies are growing, need more carbohydrates for energy, protein for muscles, calcium for teeth bones(dairy foods). Children, teenagers (as above and iron – red blood cells , adults (, elderly(more calcium weak bones, protein, iron, pregnant womens - calcium bones and teeth, less processed foods (home cooked no additives), less fat, sugar, salt) Special diets: gluten free, lactose intolerant (no lactose in milk), nut allergies, diabetic, vegetarian, vegan. ENQUIRY TASK 4: Find out the nutritional needs of teenagers, what nutrients they need a day, how much and why</p>	<p>Practical: Healthier desserts – Carrot Cake Carrot: Vitamin A: needed for healthy eyesight. Carbohydrates starchy slow release of energy. Wholemeal flour – more fibre – aids digestion of food through your body – fuller for longer, also in fruit and vegetables. Healthier fats – unsaturated – from plants – vegetable, olive oil, rapeseed oil , margarine instead of butter. Sugar – sugary carbohydrates , quick release of energy doesn't fill you up. Gluten free – use gluten free flour Fondant icing – icing sugar and glucose which is moldable icing, butter icing – icing sugar and butter or soft cream cheese Food Preparation, and Cooking skills – mixing,grating baking.</p>																
Week 10 – Nutritional analysis	Week 11 Assessment	Week 12																
<p>Nutritional Analysis Pizza: www.explorefood.co.uk Traffic light labelling – how much sugar, salt and fat is in food. DRV/R – Dietary Reference Values/ Intake are the amount in grams of each nutrients you should have a day. Calories (how energy) men 2,500, women 2,000</p> <table border="1" data-bbox="183 1090 600 1369"> <thead> <tr> <th>Energy or nutrient</th> <th>Reference Intake</th> </tr> </thead> <tbody> <tr> <td>Energy</td> <td>8000kJ/1900kcal</td> </tr> <tr> <td>Fat</td> <td>70g</td> </tr> <tr> <td>Saturated</td> <td>30g</td> </tr> <tr> <td>Carbohydrate</td> <td>150g</td> </tr> <tr> <td>Total sugars</td> <td>30g</td> </tr> <tr> <td>Protein</td> <td>50g</td> </tr> <tr> <td>Salt</td> <td>5g</td> </tr> </tbody> </table>	Energy or nutrient	Reference Intake	Energy	8000kJ/1900kcal	Fat	70g	Saturated	30g	Carbohydrate	150g	Total sugars	30g	Protein	50g	Salt	5g	<p>Practical Assessment: Practical- pizza dough – nutrients Key word: Gluten (protein in flour that helps bread to stretch and rise). Yeast: living organism helps bread to rise. Warm water activates yeast Bread flour/strong flour – higher content of gluten helps to stretch and rise Food Preparation Skills: mixing, kneading (stretching out the gluten 5-10), prove – leave dough at room temperature for 1 hour, yeast lets off carbon dioxide (bubbles) helps to rise gives a lighter dough, well risen. Shaping the dough into a circle or alternative. Glazing, - egg wash to give golden colour and shine on bread.Cooking skills: baking (in oven, no oil, browns food). Revise: all key words/skills week 1-12 for test next week</p>	<div data-bbox="1585 890 1933 1236" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/4sw</p>
Energy or nutrient	Reference Intake																	
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French

Cycle 4 – Où j'habite (Where I live)

WEEK	French	English	Enquiry Tasks – to be done in French
1	Actuellement j'habite à Cannes avec ma famille, cependant, quand j'étais plus jeune, j'habitais à Paris.	I currently live in Cannes with my family, however, when I was younger, I used to live in Paris.	Make flashcards for the present tense of Habiter. Practice conjugating other -er verbs e.g jouer, manger, visiter.
2	J'habite dans une grande maison dans une ville qui est près de la mer. Je dirais que j'ai de la chance parce que j'adore là où j'habite.	I live in a big house in a town that is near the sea. I would say that I am lucky because I love where I live.	Research different areas of France. Where would you like to live and why?
3	En ce qui concerne ma maison, il y a un salon énorme, une cuisine moderne, et quatre chambres. Dehors il y a un joli jardin où j'aime jouer.	With regards to my house, it has an enormous lounge, a modern kitchen, and four bedrooms. Outside there is a pretty garden where I like to play.	Imagine you are an estate agent. Find a house online and write a description of it that would make somebody want to buy it!
4	Dans ma chambre il y a un lit et une table. Ma chambre idéale serait plus grande avec une télé.	In my bedroom there is a bed and a table. My ideal bedroom would be bigger with a television.	Use a dictionary or www.wordreference.com to look up 10 new words for items in your bedroom.
5	Sur la table il y a mon ordinateur et à gauche de mon lit j'ai mon armoire.	On the table there is my computer and on the left of my bed I have my wardrobe.	Cover the French for weeks 1-5. Practice saying it out loud. Can you recall the whole text?
6	Je dirais que ma ville est très moderne et selon ma mère c'est la plus belle ville du monde! C'est plus touristique que le village de mon copain.	I would say that my town is very modern and according to my mum it is the most beautiful town in the world! It is more touristy than my friend's village.	Using the comparative structure compare Exeter to another place of your choice.
7	Dans ma ville il y a un centre sportif où on peut jouer au basket et on peut visiter le château. Il ne faut pas manquer la rivière.	In my town there is a sports centre where you can play basketball and you can visit the castle. You must not miss the river.	Create a tourist brochure in French for a town of your choice. Say what you can see and do there.
8	La semaine dernière je suis allé au cinéma où j'ai regardé un film avec mon copain qui s'appelle Luc. Ce que j'aimais le plus c'était le popcorn.	Last weekend I went to the cinema where I watched a film with my friend who is called Luke. What I liked the most was the popcorn.	Write a paragraph to say what you did in your town last weekend. Use extended sentences.
9	Ce week-end, s'il fait beau, je vais aller à la plage pour que je puisse nager dans la mer. Ça sera extra!	This weekend, if the weather is good, I am going to go to the beach so that I can swim in the sea. It will be great.	Write a paragraph to say what you are going to do next weekend. Give opinions.
10	Malheureusement, selon la météo, il va pleuvoir des cordes!	Unfortunately, according to the weather forecast, it is going to chuck it down!	Cover the French for weeks 1-10. Practice saying it out loud. Can you recall the whole text?

French

Week 1 – Countries		Week 2 – Places to live		Week 3 - Rooms		Week 4 – In the bedroom		Week 5 – Prepositions			
habiter	to live	dans le nord	in the north	il y a	there is	dans ma chambre	in my bedroom	c'est	it is		
j'habite	I live	dans le sud	in the south	il n'y a pas	there isn't			il y a	there is		
tu habites	you live(s)	dans l'est	in the east	une salle à manger	a dining room	j'ai	I have	sur	on (top of)		
il/elle habite	he/she lives	dans l'ouest	in the west			il y a	there is	à droite	on the right		
nous habitons	we live	dans le centre	in the centre	une salle de bains	a bathroom	une armoire	a wardrobe	à gauche	on the left		
vous habitez	you live (pl)	un appartement	a flat			un ordinateur	a computer	sous	under		
ils habitent	they live (m)			une toilette	a toilet	un tapis	rug	devant	in front of		
elles habitent	they live (f)	un pavillon	a bungalow	un couloir	a hallway	un lit	a bed	à côté de	next to		
j'habitais	I used to live	une maison	a house	un salon	a lounge	une étagère	a shelf	derrière	behind		
je vais habiter	I am going to live	une ville	a town	une cuisine	a kitchen	une lampe	a lamp	entre	between		
		un village	a village	une chambre	a bedroom	une table	a table	sur le mur	on the wall		
en Allemagne	in Germany	en banlieue	in the suburbs	un garage	a garage	une porte	a door	en face de	opposite		
en Angleterre	in England	à la montagne	in the mountains	une pièce	a room	une chaise	a chair	dans	in		
en Ecosse	in Scotland			un jardin	a garden	une télévision	a television	<p>Using articles All French nouns have a gender (masculine or feminine) so when you check your work make sure you have used the correct article. Remember that numbers replace articles e.g. une chaise (a chair) trois chaises (three chairs)</p>			
en Espagne	in Spain	à la campagne	in the countryside	une terrasse	a terrace	une fenêtre	a window				
en France	in France			en haut	upstairs	<p>Using adjectives Remember that if you want to describe items the adjective come after the noun and needs to agree e.g. une chaise bleue (a blue chair) deux lits confortables (2 comfortable beds)</p>					
en Grèce	in Greece	au bord de la mer	by the sea	en bas	downstairs						
en Irlande	in Ireland			dehors	outside			un, une	a		
en Italie	in Italy	ancien(ne)	old fashioned	au rez-de chaussée	on the ground floor			des	some		
au Pays de Galles	in Wales	confortable	comfortable	au premier étage	on the 1 st floor			le, la, les	the		
au Portugal	in Portugal	joli(e)	pretty								
	moche	ugly									
KEY:	verbs	masculine nouns		feminine nouns		Adjectives		connectives			

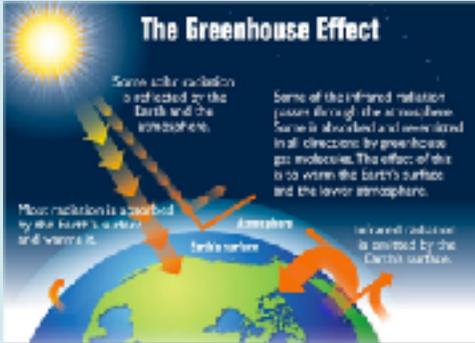
French

Week 6 – Describing towns		Week 7 – Places in town		Week 8 – Last weekend		Week 9 - Future plans		Week 10	
c'est	it is	il y a	there is	le week-end dernier	last weekend	ce week-end	this weekend	Revise the key sentences and all vocabulary from this cycle ready for your assessment next week. Quizlet folder: 	
ce n'est pas	it isn't	il n'y a pas	there isn't			Aller	To Go		
plus...que	more...than	un musée	a museum	je suis allé(e)	I went	je vais	I am going		
moins...que	less...than	un centre commercial	a shopping centre	j'ai visité	I visited	tu vas	you're going (s)		
aussi...que	as...as			j'ai fait	I did	il va	he is going		
le / la plus...	the most	un centre sportif	a sports centre	j'ai mangé	I ate	elle va	she is going		
animé(e)	lively			j'ai bu	I drank	nous allons	we are going		
beau/belle	beautiful	un château	a castle	j'ai vu	I saw	vous allez	you are going (pl)		
bruyant(e)	noisy	un stade	a stadium	je suis sorti(e)	I went out		ils/elles vont		they're going
grand(e)	big	un cinéma	a cinema	j'ai regardé	I watched	faire	to do		
historique	historic	une église	a church	nous sommes allés	we went	jouer	to play		
industriel(le)	industrial	une gare	a station	nous avons visité	we visited	manger	to eat		
moderne	modern	des magasins	shops			nager	to swim		
petit(e)	small	un parc	a park			visiter	to visit		
propre	clean	une patinoire	an ice rink	c'était	it was (description)	voir	to see		
sale	dirty	une piscine	a pool			sortir	to go out		
tranquille	quiet	une place	a square	il faisait	it was (weather)	regarder	to watch		
touristique	touristy	un supermarché	a supermarket	il y avait	there was	ça sera	it will be (description)		
assez	quite								
un peu	a bit	un café	a cafe	It is worth revising days of the week too – you can find them on your KO for Year 7 Cycle 1 Week 4.		il fera	it will be (weather)		
très	very	des collègues	schools						
et	and	un restaurant	a restaurant						
mais	but	une rivière	a river					il y aura	there will be
								Week 11	
								Assessment Week	
								Week 12 - Careers	
									

Geography

Week 1	Week 2
<p>Key vocabulary</p> <ul style="list-style-type: none"> • Weather: the day to day conditions of the atmosphere (e.g. temperature, wind, rainfall). • Climate: the average weather conditions over time, usually over a 30-year period. • Water cycle: the cycle of water between the oceans, atmosphere and land. • Precipitation: water droplets in clouds are too heavy and fall as rain, sleet, snow, hail. • Condensation: water vapour is cooled and turns back to water droplets. • Evaporation: water changing from a liquid into a gas (water vapour). • Transpiration: water released from plant leaves into the atmosphere. 	<p>Types of Rainfall</p> <p>Relief rainfall: warm moist air forced to rise over mountains, cools and condenses to form clouds and rain.</p> <p>Convictional rainfall: Sun heats the land, creating pockets of rapidly rising warm air. It starts to cool and condense to form clouds. This can produce thunderstorms.</p> <p>Frontal rainfall: Occurs when a warm front meets a cold front. Heavier air sinks to the ground and warm air rises above it.</p> <p>Air masses: a large body of air that travels from one area to another.</p> <p>Altitude: Measure of the land's height above sea level. Temperature decreases with 1°C every 100m in height.</p> <p>Latitude: parallel lines on an atlas map drawn north and south of the Equator.</p> <p>Enquiry: (Using the internet) Which are the main air masses that affect the UK? Draw a diagram to show them.</p>
Week 3	Week 4
<p>Depressions</p> <p>Air pressure: the weight of air pushing down on the Earth</p> <p>Depression: A low-pressure system which forms when warm air rises above surrounding cold air which leads to unsettled weather.</p> <p>Cold front: the boundary of an advancing mass of cold air, the trailing edge of the warm sector in a low-pressure system.</p> <p>Warm front: the boundary of an advancing mass of warm air, the leading edge of the warm sector of a low-pressure system.</p> <p>Warm sector: the wedge of air between the warm and cold fronts of a depression.</p> <p>Occluded front: weather pattern in which a cold front overtakes a warm front; associated with the formation of cyclones</p> <p>Enquiry: (Use the internet to research further) – Why does the UK receive so many depressions in an average year?</p>	<p>Anticyclones</p> <p>Anticyclones: high pressure systems in the atmosphere associated with dry, settled periods of weather</p> <p>Winter anticyclones: Cold, dry days with light winds. Temperatures can decrease quickly at night due to clear skies. Fog can form.</p> <div data-bbox="1128 1002 1608 1295" data-label="Diagram"> </div> <p>Summer anticyclones: Long, sunny cloudless days and warm temperatures. Normally dry, although hot temperatures can cause convectional rainfall.</p> <p>Enquiry: Why does the UK have fewer anticyclones than depressions?</p>

Geography

Week 5	Week 6
<p><u>Extremes of Weather in the UK</u></p> <p>Storm Desmond (2015) Cumbria / NW England 342.4mm rainfall in 24 hours 1800 people evacuated Estimated cost of £500m 5200 homes affected by flooding One person died in Cumbria and 40 schools closed. Malham Cove waterfall briefly flowed again for the first time in living memory.</p> <p>UK Heatwave (2018) 2018 became the joint hottest year since 1960. 38.5°C was recorded in Faversham, Kent on 25 July 2018 Record number of A&E admissions from heat-related illnesses. 700 more deaths than average Wildfires over moorland Lavender grew well</p> <p>Enquiry: Is the UK's climate now getting more extreme?</p>	<p><u>Climate Change</u></p>  <p>Climate change: a long-term change in the Earth's climate, especially a change due to an increase in the average atmospheric temperature. Greenhouse effect: <i>natural</i> warming of the atmosphere as heat given off from the Earth is absorbed by liquids and gases, such as carbon dioxide</p> <p>Enquiry: Is Greenhouse Effect good or bad? Explain!</p>
Week 7	Week 8
<p><u>Natural Causes of Climate Change</u></p> <p>Milankovitch cycles: Sometimes the Earth's orbit is more elliptical than circular, the Earth's tilt on its axis changes or the Earth wobbles on its axis, all influencing its global temperature.</p> <p>Sunspots: The sun's output is not constant. Temperatures are greatest when there are more sunspots radiating more heat.</p> <p>Volcanic eruptions: Eruptions produce ash and sulphur dioxide which can enter the upper atmosphere. Sunlight can be reflected off this blanket of ash and gas, cooling the planet.</p>  <p>Enquiry: Is climate change completely natural?</p>	<p><u>Impacts of Climate Change in the UK</u></p> <p>The UK's ten warmest years on record have all occurred since 2002. Heatwaves are now 30 times more likely to happen. Parts of the UK would be in danger of flooding with low-lying and coastal cities at risk. There are 240,000 homes currently in flood risk areas. Hotter weather may make growing some crops easier or allow us to grow new ones, such as oranges. Climate change likely to increase the likelihood of new diseases such as malaria</p> <p>Enquiry: Is climate change good as well as bad? Explain your opinions.</p>

Geography

Week 9	Week 10
<p><u>Worldwide impact of Climate Change</u></p> <p>Small islands in the Pacific are losing ground to erosion Half of the Great Barrier Reef – one of the biosphere’s brightest jewels - is dying due to coral bleaching. In 2019, Greenland lost 600 billion tonnes of ice raising sea levels by 2mm in two months. Bangladesh could lose 20% of its land, leaving 40 million people homeless. Climate change will worsen the uneven distribution of water resources in China. It will cost at least \$12 billion to defend the Netherlands from sea level rise.</p> <p><u>Enquiry:</u> Explain how the negative effects of climate change far outweigh any positive impacts. Give examples.</p>	<p><u>International Agreements</u></p> <p>Previous agreements like the Kyoto Protocol, or Copenhagen, or Rio have not resulted in any significant change – they were just “talking shops”. The Paris Agreement in 2015 was the first legally binding agreement signed by 190 parties. Goal to keep an increase in global average temperature below 2°C. Carbon capture: removal of CO2 from power stations and storing it underground. Water supply: water transfer schemes could be used to take water from an area of surplus to an area of shortage Reducing risk from sea level rise: areas at risk may need sea defences to protect valuable land from increased coastal erosion</p> <p><u>Enquiry:</u> Find out how successful the Paris Agreement has been so far.</p>
Week 11	Week 12
<p><u>The Trump Effect</u></p> <div data-bbox="188 911 730 1220">  </div> <p>When Donald Trump became President of the USA in November 2016 he promptly removed the USA from the Paris Agreement. With the biggest player off the field, was the agreement worth anything?</p> <p><u>Enquiry:</u> Investigate how the Paris Agreement was compromised by the USA's actions in 2016-2020. Will Joe Biden be better for the environment?</p>	<p><u>CAREERS:</u></p> <div data-bbox="1137 991 1413 1270">  </div> <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/of7</p>

History

Week 1	Week 2	Week 3
<p>Key Terms:</p> <ul style="list-style-type: none"> • Cottage industry (n): manufacturing carried out in people's homes. • Urbanisation (n): increased population of cities compared to the countryside. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • 1750: UK population = 8 million. 20% in towns. • 1900: UK population = 40 million. 75% in towns. • 1763: James Watt's steam engine led to steam powered factories. <p>This week's enquiry is... <i>Why did the Industrial Revolution take place?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Shift pattern (n): a way of organizing working hours over a 24hr period. • Power loom (n): A weaving loom powered by water, steam or electricity rather than by hand. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • 1833 Factory Act: no working children under 9. 2 hours of schooling a day. • 1880 Elementary Education Act: compulsory education for children under 10. • Jobs for children included scavengers and piecers. <p>This week's enquiry is... <i>What was life like in the factories for working children?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Unsanitary (adj): Unhygienic, dirty conditions. • Poverty: an inability to afford basic necessities like clothing, food and warmth. • Smog (n): Toxic mix of fog & smoke from pollution. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Families often rented a single room in which the whole family lived (often up to 10 people) with no outside space or ventilation. • There was no running water either – families were required to use a communal pump in the street. <p>This week's enquiry is... <i>What was it like to live in an Industrial town or city?</i></p>
Week 4	Week 5	Week 6
<p>Key Terms:</p> <ul style="list-style-type: none"> • Germ theory (n) Pasteur's 1861 theory that disease is caused by microscopic bacteria. • Public health (n): the general state of health amongst the public. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • 1832 cholera epidemic: 32,000 dead. • Edwin Chadwick's 1842 'Sanitary Report' proved that overcrowding, poor water supply and poor waste disposal were the key causes of disease in England. • Underground sewer system designed by Joseph Bazalgette. <p>This week's enquiry is... <i>What was public health like in the 19th century and how did it improve?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Quay (n): A platform next to water used to unload ships or barges. • Khaki (n)/(adj) A strong cotton or wool fabric, usually a dark green/brown colour. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • In 1850, roughly 1/3 of the world's tin came from Devon and Cornwall. • Coldharbour Mill (Uffculme)→ largest producers of wool in South West England. Created dye for the colour khaki first used in British army uniforms. • Canal system – The Exeter Shipping Canal connects the Exe estuary at Topsham to Exeter Quay. <p>This week's enquiry is... <i>What was Devon's role in the Industrial Revolution?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Capitalism (n): When a country's trade and industry is controlled by private companies NOT the government • Globalisation (n): To operate on an international scale – primarily in terms of trade. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Thriving industrial countries like Britain needed cheap labour, cheap resources & new markets→colonisation • IR led to development of canals, roads and railways to carry industrial goods. • Shift patterns developed in this period, along with child labour laws, the concept of 'holiday' and trade unions. <p>This week's enquiry is... <i>What was the impact of the Industrial Revolution?</i></p>

History

Week 7	Week 8	Week 9
<p>Key Terms:</p> <ul style="list-style-type: none"> • Missionary (n): A travelling religious person who aims to convert others to their religion. • Slave factory (n): European fortresses in West Africa built to house captured/traded African slaves. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Portuguese: 1st to establish strong trading links with W. Africa. Slavery very lucrative. • Missionaries saw contact with W.Africa as a chance to convert the African kingdoms to Christianity. • Bunce Island: slave factory in Sierra Leone. <p>This week's enquiry is... <i>Why were Europeans so interested in West Africa and what can the ruins of Bunce Island tell us about the slave trade?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Middle Passage (n): Sea voyage slave ships took from Africa to the Americas. • Planatation (n) A large of area of land where crops are grown. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • By 1800, Britain was transporting 80,000 slaves a year to the Americas. • Around 10% died on the journey. Many from dehydration or disease. • Thistlewood's slaves were flogged and mutilated. Worked up to 17 hours a day. 7 days a week. <p>This week's enquiry is... <i>What was the Middle Passage like, and how representative is Thistlewood's Planatation for learning about the experiences of the enslaved?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Manilla (n): Metal bangle used as currency in W.Africa. • Compensation (n): Money given to you when you lose something. • Devonian (adj): Describes person/object from Devon. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • Devonians, Hawkins and Drake led 1st slave expedition (1562). • Manilas found in Cowick St. Exeter. • 21 Exeter men and women compensated for the ending of slavery, including the Bishop of Exeter. <p>This week's enquiry is... <i>How significant was Exeter's role in the slave trade?</i></p>
Week 10	Week 11	Week 12
<p>Key Terms:</p> <ul style="list-style-type: none"> • Abolition (n): the act of ending something permanently. • Profitable (adj): makes money. • Pamphlet (n): small booklet or leaflet containing arguments or information about a certain topic. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • White British men and women such as Wilberforce & Hannah Moore campaigned against slavery in late 1700s and early 1800s. • Ex-slaves such as Equiano and Douglass spent time touring Britain promoting abolitionist movement & publishing stories of life in slavery. <p>This week's enquiry is... <i>Why was the slave trade abolished?</i></p>	<p>Key Terms:</p> <ul style="list-style-type: none"> • Exodusters (n.pl) Freed ex-slaves who migrated to Kansas to escape conditions in the south. • Ku Klux Klan (n): white supremacists who killed many ex slaves. <p>Key Knowledge:</p> <ul style="list-style-type: none"> • 179,000 Black Americans served on both sides during the American Civil War. • 1862: Lincoln published Emancipation Proclamation → ended slavery in Union, and all states in 1865.. <p>This week's enquiry is.. <i>Did black Americans gain equality during the civil rights movement?</i></p>	<p>CAREERS:</p>  <p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/a0z</p>

iLife - PSHE

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



General

Childline—www.childline.org
0800 1111

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

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

Safety, bullying and abuse

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

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



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

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



Health

School nurse—07520 631722
Text only for confidential advice

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

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

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



Healthy relationships

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



Drugs and alcohol

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

Homeless, skills, advice, getting your voice heard

Young Devon—www.youngdevon.org
01392 331 666

Local support for young people facing a crisis



Health and well-being

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

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

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

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

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



LGBTQ+

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

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

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 you answer in a different colour
 - If you are struggling, watch the video
 - Your homework is only complete when you have answered **every** question correctly.
 - If you are really struggling with one question, complete the other one and ask your maths teacher for help the next day.

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

Homework Thursday 1st June 2012

Task 1

D40 $12 + 13 = 25$ ✓

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

F60 $(12 : 18) \div 6$
 $2 : 3$ ✓

H90 $\frac{1}{14} + \frac{1}{7} = \frac{2}{14} + \frac{2}{14} = \frac{4}{14}$ ✗

J90 $\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$ ✓

A01 $\frac{495}{152} = \frac{55}{16}$ ✓

B11 Area = $3 \times 14 = 42$
 $\frac{14}{3}$ Area = 42 cm^2 ✓

C21 $\frac{1}{55} + \frac{1}{77} = \frac{7}{385} + \frac{5}{385} = \frac{12}{385}$ ✓

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 ✓

H91 $P(\text{odd}) = \frac{3}{5}$ ✓

Task 3

J22 False ✓

K31 Unlikely ✗

L42 B, A, C ✓

M03 4 more blue balls ✓

O13 4 black, 2 red, 2 blue. The probability of picking black is evens: Bag E ✓

F13 E ✓



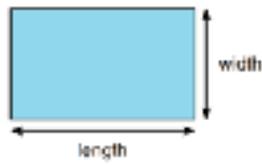
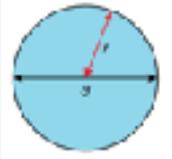
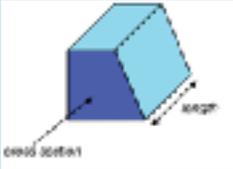
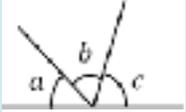
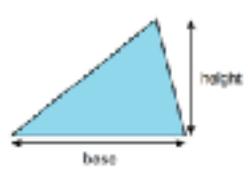
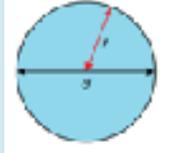
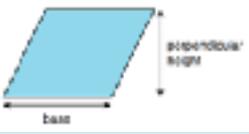
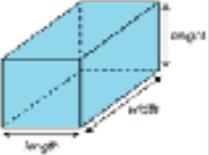
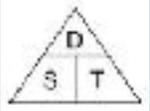
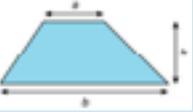
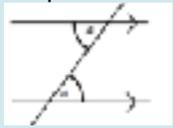
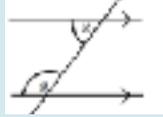
WEEK 12 CAREERS WEEK

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

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



Mathematics

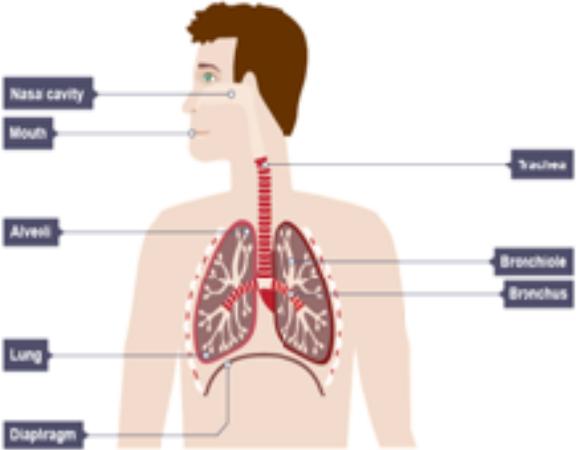
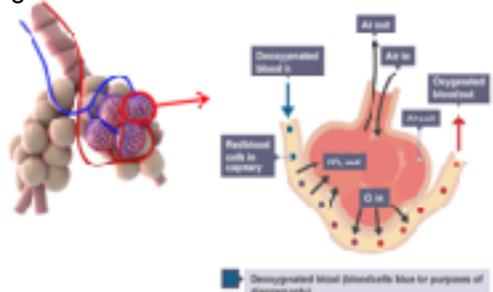
<p>Area of a Rectangle</p>  <p>$length \times width = l \times w$</p>	<p>Circumference of a circle</p>  <p>$C = \pi \times d$</p>	<p>Volume of a Prism</p>  <p>$Area\ of\ a\ cross\ section \times length$</p>		<p>Angles of Straight Line add up to 180°</p>  <p>$a + b + c = 180$</p>	<p>Angles in a Triangle add up to 180°</p>  <p>$a + b + c = 180$</p>
<p>Area of a Triangle</p>  <p>$\frac{1}{2} \times base \times height = \frac{bh}{2}$</p>	<p>Area of a circle</p>  <p>$A = \pi \times r^2$</p>	<p>Square Numbers</p> <p> $1^2 = 1$ $2^2 = 4$ $3^2 = 9$ $4^2 = 16$ $5^2 = 25$ $6^2 = 36$ $7^2 = 49$ $8^2 = 64$ $9^2 = 81$ $10^2 = 100$ $11^2 = 121$ $12^2 = 144$ </p>	<p>Cube Numbers</p> <p> $1^3 = 1$ $2^3 = 8$ $3^3 = 27$ $4^3 = 64$ $5^3 = 125$ $6^3 = 216$ $7^3 = 343$ $8^3 = 512$ $9^3 = 729$ $10^3 = 1000$ </p> <p>Prime Numbers 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, ...</p>	<p>Angles at a point add up to 360°</p>  <p>$a + b + c + d = 360$</p>	<p>Angles in a quadrilateral add up to 360°</p>  <p>$a + b + c + d = 360$</p>
<p>Area of Parallelogram</p>  <p>$base \times perp.\ height$</p>	<p>Volume of a Cuboid</p>  <p>$Length \times width \times height$ $V = l \times w \times h$</p>	<p>Speed, Distance, Time</p>  <p>$speed = \frac{distance}{time}$</p>	<p>Percentage change</p> <p>$\% \ change = \frac{difference}{original} \times 100$</p> <p>Gradient</p> <p>$Gradient = \frac{change\ in\ y}{change\ in\ x}$</p>	<p>Vertically Opposite Angles are equal</p>  <p>$a = c, b = d$</p>	<p>Corresponding angles are equal</p> 
<p>Area of Trapezium</p>  <p>$\frac{1}{2}(a + b)h$</p>	<p>Pythagoras Theorem</p>  <p>$a^2 + b^2 = c^2$</p>			<p>Alternate Angles are equal</p> 	<p>Co-interior angles add to 180</p> 

Music

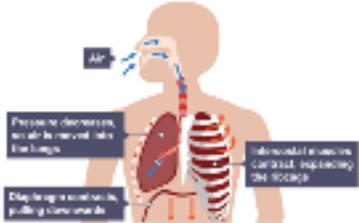
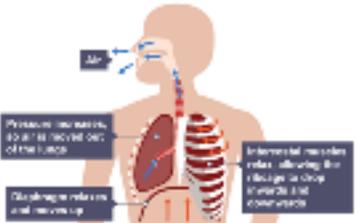
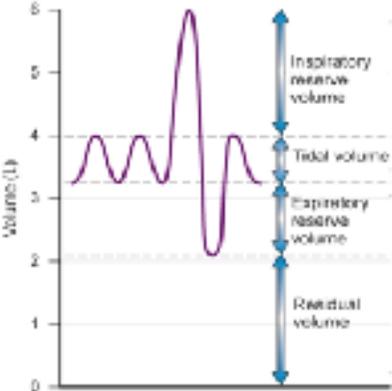
4 Chords and Music tech

Week 1 & 2	Week 3 & 4	Week 5 & 6
<ul style="list-style-type: none"> • Chord – More than one note played at once to create a harmony. • Inversion – The notes of a chord arranged in a different order to create a smoother progression. • Bassline – The lowest part of the Music. 	<ul style="list-style-type: none"> • Verse – Moves the story forward or expands on the central theme • Chorus – Repeated section usually highlighting the central theme. • Bridge – Contrasts with verse and chorus • Introduction / Outro – the beginning and end of a song. 	<ul style="list-style-type: none"> • DAW – Digital audio workspace • MIDI – Musical Instrument Digital Interface • Sequencing – Using a DAW to arrange audio or MIDI into a piece of music • Software Instrument – When the computer program makes the sounds for you • Audio – recorded sound
<p>Enquiry Task:</p> <p>Can you play the 4 chord trick using this keyboard? https://musiclab.chromeexperiments.com/Chords/ Can you make your own chord trick up?</p>	<p>Enquiry Task:</p> <p>Listen to 5 songs and list their structure and organisation. Sometimes, googling the lyrics might help you to identify sections of the song.</p>	<p>Enquiry Task:</p> <p>See if you can create something using a very simply online DAW called 'Beepbox'. Share your work with your teacher.</p>
Week 7 & 8	Week 9 & 10	Week 11 & 12
<ul style="list-style-type: none"> • Sampling – The recording of sounds (samples) for using in a piece of music. Examples include James Brown's drumbeats being samples and reused in hip hop songs. • Texture – Refers to how many tracks there are in the music 		<p>Careers:</p> 
<p>Enquiry Task:</p> <p>Have a look on https://www.whosampled.com/ to see which songs used samples. You can search for a song or read some of their suggestions.</p>	<p>Enquiry Task:</p> <p>Using the virtual keyboard, can you play the 4 chord trick? Can you put them in a different order? Can you change the key? How about using inversions?</p>	<p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/9vw</p>

Physical Education

Week 1	Week 2	Week 3
<p>Respiratory system</p> <ul style="list-style-type: none"> Respiration definition - the movement of air or dissolved gases into and out of the lungs. The human respiratory system is adapted to allow air to pass in and out of the body, and for efficient gas exchange to happen. Exercise and smoking both affect the lungs and circulatory system. The human respiratory system contains the organs that allow us to get the oxygen we need and to remove the waste carbon dioxide we do not need. 	<p>Respiratory Structure</p> 	<p>Pathway of air into the lungs:</p> <ol style="list-style-type: none"> Air enters the body through the nasal cavity or mouth where it is warmed It then enters the trachea The trachea then divides into two bronchi. One bronchus enters each lung Each bronchus branches out into small tubes called bronchioles, which the air travels through At the end of the bronchioles are tiny air sacks called alveoli This is where the gaseous exchange happens <p>Question - Can you copy the diagram of week 2 and add arrows to show the direction/flow of oxygen into the alveoli?</p>
Week 4	Week 5	Week 6
<p>Key Terms</p> <ul style="list-style-type: none"> Inspire/inhale - Breathe in Expire/exhale - Breathe out Deep breathing - Slow, deep breaths whilst relaxed. Alveoli Air - sacs in the lungs Residual volume - Air left in the lungs after maximal expiration Gaseous exchange - The process where oxygen in alveoli moves into the blood whilst removing carbon dioxide Vital Capacity - is the maximum amount of air that can be breathed out after breathing in as much air as possible. Spirometer - equipment that measures air capacity in the lungs 	<p>Gas exchange at the alveoli</p> <ol style="list-style-type: none"> Oxygen that is breathed in passes through the alveoli and into the red blood cells in the capillaries. In the capillaries the oxygen combines with haemoglobin to form oxyhaemoglobin. Haemoglobin carries carbon dioxide from the blood to the capillaries which is then passed through the alveoli and breathed out. Haemoglobin The substance in the red blood cells which transports oxygen (as oxyhaemoglobin) and carbon dioxide. 	<p>Diagram of Gaseous Exchange</p> <p>Structure of the alveoli and how the gaseous exchange occurs.</p>  <p>Semi permeable is a layer that only certain molecules can pass through.</p>

Physical Education

Week 7	Week 8	Week 9
<p>Mechanics of Inhaling</p> <p>1.As we inhale/inspire the chest cavity changes shape and size. 2.The diaphragm flattens and moves down. 3.The intercostal muscles (which are attached to the ribs) contract, raising the ribs up and pushing out the sternum, making the chest cavity larger. This reduces the air pressure inside the chest cavity and causes air to be sucked into the lungs.</p> 	<p>Mechanics of Exhaling</p> <p>1.When we exhale/expire the reverse occurs. 2.The diaphragm becomes dome shaped. 3.The intercostal muscles relax, lowering the ribs and dropping the sternum, making the chest cavity smaller. 4.This increases the air pressure inside the air cavity and causes air to be pushed out of the lungs.</p> 	<p>Effect of Exercise on the Respiratory system</p> <p>Immediate effects when first exercising</p> <ul style="list-style-type: none"> • Increased rate of breathing. • Increased depth of breathing – rise in tidal volume. <p>Effects of regular training</p> <ul style="list-style-type: none"> • Increased strength of diaphragm and intercostal muscles. • Greater number of alveoli. • Increased ability of the lungs to extract oxygen from the air. • Increased vital capacity. • Increased amount of oxygen delivered to, and carbon dioxide removed from, the body. <p>Looking at the effects of regular training can you pick 2 bullet points and explain how it will increase your performance in a chosen sport?</p>
<p>Week 10</p> <p>Spirometer trace A measure of lung volume, which includes:</p> <ul style="list-style-type: none"> • tidal volume – volume of air inspired or expired/exchanged per breath • inspiratory reserve volume – the amount of air that could be breathed in after tidal volume • expiratory reserve volume – the amount of air that could be breathed out after tidal volume • residual volume – the amount of air left in the lungs after maximal expiration. 	<p>Week 11</p> <p>Spirometer Trace</p>  <p>Question – What do you think will happen to your tidal volume during exercise and why?</p>	<p>Week 12</p> <p>5 Careers in Sport</p> <ol style="list-style-type: none"> 1.Sport and Exercise Medicine Doctor 2.Physiotherapist 3.Sport Scientist 4.Personal Trainer 5. Sport Therapist

Religious Education

Week 1 - Pre Teach / Introduction	Week 2 - What is the meaning of life?	Week 3 - What happens when we die?
<p>- Agnostic: Someone who is unsure about God's existence.</p> <p>- Atheist: Someone who does not believe in God.</p> <p>- Global Suffering: When lots of countries suffer, for example war.</p> <p>- Monotheistic: Belief in just one God.</p> <p>- Polytheistic: Belief in many God's.</p> <p>- Theist: When a person believes in God.</p> <p>- Moral Evil: Evil that is committed by a human, on purpose.</p> <p>- Natural Evil: Evil that happens naturally, for example earthquakes.</p> <p>- Omnibenevolent: God is all loving.</p> <p>- Omnipotent: God is all powerful.</p> <p>- Personal Suffering: When one person suffers.</p> <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>	<p>- 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'.</p> <p>- Christians believe we are resurrected, either as a physical body like Jesus, or it is our soul that is resurrected.</p> <p>- Buddhists and Hindus believe that we are reincarnated. We are reborn into something else, according to how we have lived our previous lives.</p> <p>- Sikhs believe you merge back into universal nature, they do not believe in heaven or hell.</p> <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
<p>- Some people believe that we need to see to believe. For example we need to see God before we can believe in him.</p> <p>- However, some people would argue that you don't need to see Spain to know it exists.</p> <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>	<p>- 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'.</p> <p>- Science suggests that humanity and the world happened 'by chance'.</p> <p>- 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> <p><i>Enquiry Task: What do other religions believe about the creation of the world?</i></p>	<p>- The argument was created by Thomas Aquinas.</p> <p>- Argued that everything can be traced back to one being which was the cause of absolutely everything.</p> <p>- There must be a first cause.</p> <p>- The first cause doesn't need a cause as it was necessary.</p> <p>- The first cause must have been God.</p> <p>- '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.</p> <p>- This argument goes against the Big Bang theory.</p> <p><i>Enquiry Task: What do you think? Is this logical? Why?</i></p>

Religious Education

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. Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/8bw</p> 

Science

Week 1	Week 2
<p>Cells:</p> <ol style="list-style-type: none"> 1. The basic units from which all living things are made of. 2. Most animal and plant cells have the same basic parts: nucleus, cytoplasm, cell surface membrane, mitochondria and ribosomes. 3. Cells from different tissues have different shapes, sizes and functions to help them do their jobs. The cells are specialised. 4. Plant cells have thick cell walls and may have some other features not found in animal cells: chloroplasts and a permanent vacuole. 5. Animal and plant cells have a nucleus and are described as eukaryotic organisms. Bacterial cells do not have a nucleus and are described as prokaryotic organisms. 6. More details on the functions of the organelles can be found in the key words section on week 11. <p>Enquiry task: draw a Venn diagram to compare the features of plants and animal cells.</p>	<p>Cell transport:</p> <ol style="list-style-type: none"> 1. Dissolved substances move into and out of cells by diffusion and active transport. 2. Diffusion is the movement of gas and liquid particles from an area of high concentration to an area of low concentration. 3. Water moves in and out of cells by osmosis. 4. Cells have a partially permeable membrane (with small holes) that allows some substances through it but not others. 5. During osmosis water molecules move from where there are more of them (a higher concentration of water) to where there are fewer of them (a lower concentration of water) through a semi-permeable membrane. 6. A difference between two concentrations forms a concentration gradient. The bigger the concentration gradient, the faster the rate (speed) of osmosis and diffusion occurs. 7. Osmosis can cause cell tissues to gain or lose mass. <p>Enquiry task: turn the statements above defining diffusion, osmosis and active transport into diagrams.</p>
Week 3	Week 4
<p>The Structure of DNA:</p> <ol style="list-style-type: none"> 1. The genetic information is carried in the nucleus of your cells. 2. Inside the nucleus are thread-like structures called chromosomes. 3. These chromosomes are made up of a special chemical called DNA. 4. A molecule of DNA contains two strands. 5. The strands are joined together by pairs of substances called bases, forming a double helix shape. 6. There are four bases: adenine, thymine, cytosine and guanine. To make things simpler, we often call them A, T, C and G. 7. A always pairs with T and G always pairs with C. The matching bases are called complementary base pairs. 8. The complementary base pairs are joined by hydrogen bonds. A and T form two hydrogen bonds, while C and G form three hydrogen bonds. 9. The backbone of DNA is made of a phosphate and a sugar. <p>Enquiry task: make a mnemonic to remember the key facts of DNA structure.</p>	<p>Inheritance:</p> <ol style="list-style-type: none"> 1. When sex cells (gametes) fuse together at fertilisation, they form a single cell called a zygote. 2. The zygote cell inherits different genetic information from each parent, which produces genetic variation (difference) between individuals. 3. Most cells contain a nucleus, in which there are chromosomes that contain the genetic information. 4. A gene is a short piece of DNA at a particular point on a chromosome. 5. The sex of humans is controlled by one pair of sex chromosomes XY = male; XX = female 6. When sex cells are fertilised there is a 50:50 chance of the baby being male or female. <p>Enquiry task: if there is a 50% chance of a baby being a female, explain why there are slightly more females in the world than men (52%).</p>

Science

Week 5	Week 6
<p>Inheritance:</p> <ol style="list-style-type: none"> 1. A gene may come in different forms, called alleles that produce different variations of the characteristic, e.g. different eye colours. 2. For any gene, a person may have the same two alleles, known as homozygous or two different ones, known as heterozygous. 3. Alleles may be either dominant or recessive. 4. A dominant allele is always expressed (seen), even if only one copy is present. Dominant alleles are represented by a capital letter. 5. A recessive allele is only expressed (seen) if the individual inherits two copies of it and does not have the dominant allele of that gene. Recessive alleles are represented by a lower case letter. 6. Punnet squares can be used to determine the probability of a characteristic being present. <p>Enquiry task: cystic fibrosis is a recessive condition (ff), determine the probability of the offspring developing the condition from heterozygous parents (Ff).</p>	<p>Evidence Of Evolution:</p> <ol style="list-style-type: none"> 1. Fossil remains can be found in rocks of all ages. 2. Fossils of the simplest organisms are found in the oldest rocks, and fossils of more complex organisms in the newest rocks. 3. This supports Darwin's theory of evolution, which states that simple life forms gradually evolved (changed) into more complex forms over time. 4. Many living vertebrate animals have the same pentadactyl (five-fingered) limb structure. 5. Although the pentadactyl bone structure is similar, they have developed in different ways, because they have different uses. 6. The similarities in bone structure provides evidence for evolution from a common ancestor. <p>Enquiry task: research the human ancestors and create a flow diagram of how humans have evolved, e.g. how the skull volume has changed</p>
Week 7	Week 8
<p>Evolution:</p> <ol style="list-style-type: none"> 1. Alfred Russel Wallace and Charles Darwin both independently developed theories to explain how evolution happens. 2. The main steps in natural selection (G.E.N.I.E) <ol style="list-style-type: none"> a) Genetic variation: variation in genes in a species result in a wide range of variation for a characteristic amongst a species. b) Environmental change: for example diseases, weather, predator, diet. c) Natural selection: Individuals with characteristics most suited to the changing environment are more likely to survive. This is called 'survival of the fittest'. d) Inheritance: the characteristics (genes) that have enabled these individuals to survive are then passed on to the next generation. e) Evolve: over time more the species will evolve to have these characteristics (genes). <p>Enquiry task: using the four stages of natural selection explain how giraffes evolved to have long necks as their food sourced moved higher.</p>	<p>Health:</p> <ol style="list-style-type: none"> 1. Health is "the state of complete physical, mental and social wellbeing". 2. Microorganisms that cause diseases are called pathogens. 3. Pathogens include: bacteria (Chlamydia), viruses (HIV, COVID-19), fungi (Chalara Ash Dieback) and protists (Malaria). 4. Different types of disease may interact. This can mean that the presence of one disease can lead to a higher chance of developing another disease. <ol style="list-style-type: none"> a) One disease may weaken the immune system making a person susceptible to another disease. E.g. HIV attacks the immune system leading more colds and flu b) A physical illness may result in someone being more isolated, this could lead to mental or social disorder. 5. Diseases may be communicable (they can be passed from one person to another), or non-communicable (not passed between people) <p>Enquiry task: write a letter describing health to a pupil who has never learnt about it before.</p>

Science

Week 9	Week 10 (revision)
<p>Non-specific defence system: a body defence system which protects the body from any pathogen. It is made up of physical barriers (e.g. skin) and chemical defences (e.g. stomach acid).</p> <p>The Immune System (specific defence system):</p> <ol style="list-style-type: none"> 1. If pathogens get through the body's natural defences they will cause an infection. However, the body has a second line of defence to stop or minimise this infection. This is called your immune system. 2. Your immune system contains different types of white blood cells, one type are called lymphocytes. 3. Lymphocytes recognise proteins on the surface of pathogens called antigens. 4. Lymphocytes detect pathogens and produce antibodies to help destroy them. The type of antigen and antibody must match (be specific) <p>Enquiry task: create a diagram of the physical and chemical defenses the body has against pathogens.</p>	<p>Revision Use the knowledge organiser to answer the tasks below. Instructions can be found at the front of the knowledge organiser.</p> <ol style="list-style-type: none"> 1. Create a revision clock, the 6 sections are – cells and cell transport, DNA, inheritance, evolution, natural selection and health. 2. Create an infographic on cells and cell transport (weeks 1 and 2) 3. Read week 3 (DNA) and then cover the page and try to recall as much of the key information as possible. Repeat until you can recall the key facts 4. Write a letter explaining inheritance (weeks 4/ 5). 5. Define evolution and describe the evidence for the theory of evolution. 6. Create a mnemonic to remember the difference stages of natural selection. 7. Draw a mind map to revise health and the body's defences (weeks 8 and 9) 8. Make flash cards on the three areas,. 9. Look, cover, write and check the key words until you can spell them all.
Cells key vocabulary	Week 12 - CAREERS
<ol style="list-style-type: none"> 1. Chloroplasts: a structure inside cells where photosynthesis takes place. 2. Cytoplasm: the jelly-like substance inside the cell, where all chemical reactions take place 3. Eukaryotic: a cell that contains a nucleus 4. Mitochondria: where aerobic respiration happens 5. Nucleus: contains genes that control the activities inside the cell 6. Permanent vacuole: a structure inside cells that stores water and nutrients and helps to support the plant by keeping the cells rigid 7. Prokaryotic: a cell with no nucleus 8. Ribosomes: a cell structure where protein synthesis takes place 9. Mitosis: cell division which produces two genetically identical body cells 10. Cell surface membrane: a thin barrier surrounding the cell that controls what enters and leaves the cell 11. Cell wall: a thicker barrier that strengthens the cell and provides structural support 	<p>Follow the QR code or type in the link into your browser https://links.iscaexeter.co.uk/549</p> 

Spanish

Cycle 1 – ¡Vamos! (Let's go!)														
WEEK	Spanish					English					Enquiry Tasks – to be done in Spanish			
1	¡Hola! Me llamo Joaquín. Soy español.					Hello! My name is Joaquín. I am Spanish.					Make flashcards for the verb Vivir and ask somebody to test you on them.			
2	Se escribe J-O-A-Q-U-I-N. ¡No es fácil!					It is written J-O-A-Q-U-I-N. It isn't easy!					Use www.wordreference.com to find 10 new adjectives to describe where you live.			
3	Vivo con mi familia en Perú y hablo español.					I live in Peru with my family and I speak Spanish.					Write a paragraph to describe your home. Use adjectives in your work.			
4	Actualmente tengo trece años.					Currently I am 13 years old.					Draw a plan of your bedroom or take a photo and describe it in Spanish using prepositions.			
5	Acabo de celebrar mi cumpleaños. Es el veinte de agosto.					I have just celebrated my birthday. It is the 20th of August.					Cover the Spanish for weeks 1-5. Practice saying it out loud. Can you recall the whole text?			
6	Estudio muchas asignaturas y hoy tengo la educación física. ¡Qué estupendo!					I study a lot of subjects and today I have PE. How great!					Revise numbers from Cycle 1.			
7	Me gusta la educación física porque me encanta el deporte, pero no me gusta nada la geografía.					I like PE because I love sport, but I do not like Geography at all.					Write a paragraph to describe your normal daily routine.			
8	Diría que mi profesor de geografía es demasiado severo y también muy aburrido.					I would say that my geography teacher is too strict and also very boring.					Use the preterite (past) tense to write 5 sentences about what you did last night.			
9	Mi profesor dice que en clase hablo y no trabajo.					My teacher says that in class I talk and I don't work.					Use the immediate future to write 5 sentences about what you are going to do tonight.			
10	Siempre estoy listo para mis clases con un boli, un lápiz y ¡mi guitarra para la música!					I am always ready for my classes with a pen, a pencil and my guitar for music!					Adapt the sentences from weeks 1-10 to write your own version of the text.			
A	B	C	CH	D	E	F	G	H	I	J	K	L	LL	M
ah	bay	thay	chay	day	ey	eh-fay	hay	ah_chay	ee	hoh-tah	kah	eh-lay	eh-yay	eh-may
N	Ñ	O	P	Q	R	RR	S	T	U	V	W	X	Y	Z
eh-nay	eh-nyay	oh	pay	coo	eh-ray	eh-rray	eh-say	tay	ooh	ooh-bay	ooh-bay doh-blay	eh-kees	e-gri-eh- gah	thay-tah

Spanish

Week 1 – Greetings		Week 2 – Alphabet		Week 3 – Where you live		Week 4 - Ages		Week 5 – Birthdays	
¿Cómo te llamas?	What are you called?	¿Cómo se escribe?	How is it written?	vivir	to live	¿Cuántos años tienes?	How old are you?	Mi cumpleaños es el..de...	My birthday is the...of...
me llamo	I am called	escribir	to write	vivo	I live	tener	to have		
hola	hello	se escribe	it is written	vives	you live (s)	tengo ... años	I am ... years old	enero	January
buenos días	good morning	es	it is	vive	he / she lives			febrero	February
buenas tardes	good afternoon/ evening	no es	it isn't	vivimos	we live	tienes... años	you are ... years old	marzo	March
buenas noches	good night	complicado	complicated	vivís	you live (pl)			abril	Abril
adiós	goodbye	fácil	easy	viven	they live	tiene ... años	he / she is ... years old	mayo	May
¿Qué tal?	How are you?	difícil	difficult	¿Dónde vives?	Where do you live?			junio	June
soy	I am	nombre	first name	en España	in Spain	tienen ... años	they are ... years old	julio	July
eres	you are	apellido	surname	en Inglaterra	in England			agosto	August
fenomenal	great	+ alphabet (previous page)		en América del Sur	in South America	actualmente	currently	septiembre	September
bien	good	Quizlet Link 		Present tense verbs In Spanish you do not need to use pronouns (I, you, we) as the verb ending tells you who you are talking about. 'Vivir' is a regular -ir verb and other -ir verbs will follow the same pattern. You will learn the endings for -ar verbs in week 6 & -er verbs in week 9.		los días	the days	octubre	October
regular	ok					lunes	Monday	noviembre	November
fatal	awful					martes	Tuesday	diciembre	December
inglés(a)	English					miércoles	Wednesday	Capital letters In Spanish you do not use capital letters on days of the week or months of the year unless they are at the beginning of a sentence.	
español(a)	Spanish					jueves	Thursday		
sí	yes					viernes	Friday		
no	no					sábado	Saturday		
						domingo	Sunday		
KEY:	verbs					masculine nouns	feminine nouns	adjectives	connectives

Spanish

Week 6 – Subjects		Week 7 – Likes and dislikes		Week 8 – Teachers		Week 9 – Present tense		Week 10 - School bag	
estudiar	to study	me gusta	I like	mi profesor(a) es	my teacher is	comer	to eat	(no) hay	there is (not)
estudio	I study	no me gusta	I don't like			como	I eat	necesito	I need
estudias	you study (s)	odio	I hate	antipático/a	unpleasant	comes	you eat (s)	(no) tengo	I (don't) have
estudia	he/she studies	detesto	I hate	bueno/a	good	come	he/she eats	un bolígrafo	a pen
estudiamos	we study	me encanta	I love	simpático/a	nice	comemos	we eat	un lápiz	a pencil
estudiáis	you study (pl)	prefiero	I prefer	severo/a	strict	coméis	you eat (pl)	un cuaderno	exercise book
estudian	they study	porque es	because it is	paciente	patient	comen	they eat	un libro	a book
el francés	French	interesante	interesting	justo/a	fair	hablo	I speak/talk	un estuche	a pencil case
el español	Spanish	relajante	relaxing	hablador(a)	chatty	no hablo	I don't speak	un móvil	a mobile
el inglés	English	aburrido	boring	tímido/a	shy	leo	I read	una mochila	a rucksack
el teatro	Drama	fácil	easy	y	and	escucho	I listen	un monedero	a purse/wallet
el dibujo	Art	difícil	difficult	también	also	escribo	I write	un diccionario	a dictionary
las ciencias	Science	importante	important	pero	but	trabajo	I work		
las matemáticas	Maths	divertido	fun	un poco	a bit	bebo	I drink	un sacapuntas	a pencil sharpener
la informática	computing	Adjectives agree! -o endings change to -a for feminine, add -s or -es for plurals.		bastante	quite	Negatives 'No' goes before the verb.		una agenda	a diary
la música	music			muy	very			una calculadora	a calculator
la geografía	geography	1	uno	9	nueve	17	diecisiete	una goma	a rubber
la historia	history	2	dos	10	diez	18	dieciocho	una regla	a ruler
la religión	RE	3	tres	11	once	19	diecinueve	Week 11	
la educación física	PE	4	cuatro	12	doce	20	veinte	Assessments	
		5	cinco	13	trece	21	veintiuno	Week 12	
el deporte	sport	6	seis	14	catorce	22	veintidós	Careers	
la tecnología	technology	7	siete	15	quince	30	treinta	Use the QR link on Week 12 French page	
la geografía	geography	8	ocho	16	dieciséis	31	treinta y uno		

