

# ISCA ACADEMY



INSPIRATION FOR LIFE



## KNOWLEDGE ORGANISER Spring 2022

## Year 7

# 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	
<b>Code</b>	<b>What it means</b>	<b>What you need to do in purple pen</b>	<b>1. Following the text</b>	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.	<b>2. Switching readers</b>	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.	<b>3. Pointing out the error</b>	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.	<b>4. Collecting ambitious vocabulary</b>	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:

**'You are Awesome' - Matthew Syed:** An empowering guide to help young people build resilience, fulfil their potential and become successful, happy, awesome adults. 'You are Awesome' challenges you to create a more positive mindset and helps build your confidence to be one thing - awesome!

**'Once' - Morris Gleitzman:** Set during the Second World War, Once tells the story of a young Jewish boy who is determined to escape the orphanage he lives in to save his parents from the Nazis. This story reveals the redemptive power of stories and the potential for humanity and hope even in the most tragic times.

**'Black and British: A Forgotten History' - David Olusoga:** In this vital re-examination of a shared history, historian and broadcaster David Olusoga tells the rich and revealing story of the long relationship between the British Isles and the people of Africa and the Caribbean.

**'I am Malala' - Christina Lamb and Malala Yousafzai:** Told from the perspective of Malala who was shot in the head three times by the Taliban for campaigning for female education in Pakistan, we explore the memoir of her childhood in Pakistan, her attack by the Taliban and her recovery in the UK.

**'Refugee Boy' - Benjamin Zephaniah:** Alem's life is in danger from war, so his father brings him to Britain and abandons him to seek asylum and find a new and better life. A powerful story of retaining dignity and independence in the most challenging of circumstances while also adapting to the demands of a new life.

**'The Time Machine' - H. G. Wells:** Set in the 1890's, a Victorian scientist claims that he has invented a device that enables him to travel through time, and that he has visited the future, arriving in the year 802,701 in what had once been London.

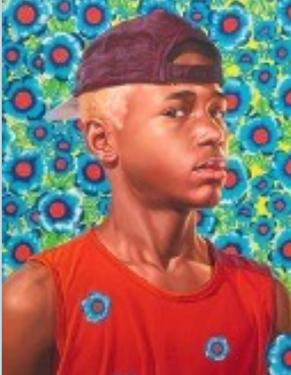
# ART and DESIGN

## Project 1: ME & MY WORLD – People and Portraits

\* 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><b>Week 1&amp;2:</b> Unknown artist, <i>Queen Elizabeth I</i>, circa 1600. National Portrait Gallery, London.</p>	<p><b>Week 3&amp;4:</b> Kehinde Wiley, <i>Randerson Romualdo Cordeiro</i>, 2008. Seattle Art Museum.</p>	<p><b>Week 5&amp;6:</b> Leonardo DaVinci, <i>Lady with an Ermine</i>, 1490s. Krakow Museum.</p>
<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>	<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>	<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>
<p style="text-align: center;"><u><b>Key Words</b></u></p>  <p><b>Portrait:</b> the image of a person.  <b>A painting:</b> an image created with brushes and paint on a surface.  <b>A photograph:</b> an image created with a camera.</p>	<p style="text-align: center;"><u><b>Key Words</b></u></p>  <p><b>The sitter:</b> the person that we see in the portrait.  <b>The figure:</b> the main subject in a painting.  <b>The background:</b> what we see behind the figure.</p>	<p style="text-align: center;"><u><b>Key Words</b></u></p>  <p><b>The pose:</b> the body position of the sitter.  <b>The viewer:</b> You.  <b>Eye contact:</b> the sitter may look at the viewer or not. The sitter may acknowledge the viewer or just allow them to look.</p>
<p><b>Week 7&amp;8:</b> Brian Duffy, <i>David Bowie Aladdin Sane</i>, 1973.</p>	<p><b>Week 9&amp;10:</b> Shin Young An, <i>Peeking Painting</i>.</p>	<p><b>Week 11&amp;12:</b> Julian Opie, <i>Julian With T-Shirt</i>, 2005. Tate Modern, London.</p>
<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>	<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>	<p><b>Enquiry task 1:</b> I see*    <b>Enquiry task 2:</b> I think**</p>
<p style="text-align: center;"><u><b>Key Words</b></u></p>  <p><b>Androgynous:</b> Partly male and partly female in appearance.  <b>Pop culture:</b> trends that the most people like, buy or follow.</p>	<p style="text-align: center;"><u><b>Key Words</b></u></p>  <p><b>Realistic:</b> it shows resemblance with reality.  <b>Abstract:</b> the opposite of realistic, it does not</p>	 <p>Follow the QR code or type in the link into your browser  <a href="https://links.iscaexeter.co.uk/36b453">https://links.iscaexeter.co.uk/36b453</a></p>

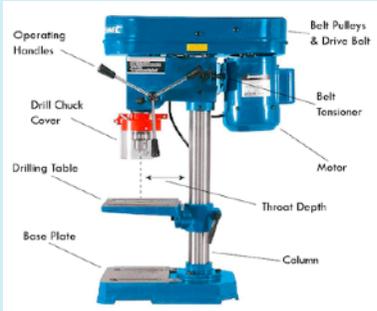
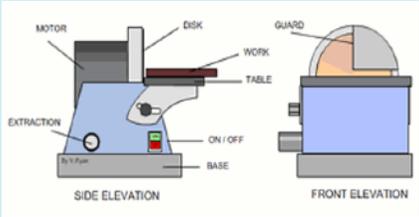
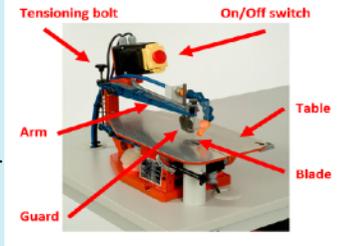
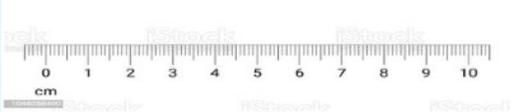
# Computer Science / Creative iMedia

Week 1-2	Week 3-4	Week 5-6
<p><b>Computer Hardware</b> – The physical parts of a computer system.</p> <p><b>Computer Software</b> – Is the programs which are installed onto a computer system, just like apps on your phone.</p> <p><b>Hard drive</b> –Is secondary storage used to store program files and the operating system.</p> <p><b>Fan</b> – Are used to cool computer systems as they get hot when they are doing calculations.</p> <p><b>Heat Sink</b> – Are attached to the CPU with a fan on top, these help dissipate heat away from the CPU.</p>	<p><b>Sequence</b> – A set of steps needed to complete a task.</p> <p><b>Selection</b> – Any IF statement in a program.</p> <p><b>Iteration</b> – Any Loop, or Repeat (pink blocks on code.org).</p> <p><b>CPU</b> –Stands for Central Processing Unit. It Fetches Decode and Executes.</p> <p><b>RAM</b> – Stands for Random Access Memory. This is primary memory and stores running programs and a little bit of the operating system.</p>	<p><b>Primary Memory</b> – It holds data and instructions which the CPU can much more easily and quickly access than from secondary storage devices.</p> <p><b>Secondary Memory</b> – Memory which is persistent examples of this are: hard drives and USB drives.</p> <p><b>SSD</b> - Solid State Device; stores data using microchips. Very robust.</p> <p><b>HDD</b> - Hard Disk Drive: Stores data using a spinning disk. Has large storage but because of moving parts is not very robust.</p>
Week 7-8	Week 9-10	Week 11-12
<p><b>Optical Disk</b> - These are CDs not very robust. Easy to scratch, but are waterproof and very portable.</p> <p><b>LAN</b> - Small geographic area. All the hardware for the LAN is owned by the organisation using it. Wired with UTP cable, fibre optic cable or wireless using routers and Wi-Fi access points.</p> <p><b>WAN</b> - Large geographic area. All the hardware for the WAN is not owned by the person using it. Wired connections are using coaxial cable, fibre optic cable, and satellite connections.</p>	<p><b>Variable</b> - A value that can change, depending on conditions or on information passed to the program.</p> <p><b>Constant</b> - A value that cannot be altered by the program during normal execution, i.e., the value is constant.</p> <p><b>Wireless Access Point</b> - A networking hardware device that allows a Wi-Fi device to connect to a wired network.</p> <p><b>Router</b> - A router sends data between networks. It is needed to connect a local area network to a wide area network. It uses the IP address on a device to route traffic to other routers</p>	<p>Please open this link and complete your careers focus homework on Computer Science</p> <div data-bbox="1576 916 1935 1267" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser  <a href="https://links.iscaexeter.co.uk/1cb">https://links.iscaexeter.co.uk/1cb</a></p>

# Design and Technology - Mr Louis

Week 1 & 2 – Health & Safety	Week 3 & 4 – Hand Tools	Week 5 & 6 – Art Deco
<p>Workshop Health &amp; Safety (H&amp;S). All of these points must be observed when completing a practical task in the DT workshop.</p> <ol style="list-style-type: none"> <li>1. Bags are stored away, off the workshop floor, to avoid any trip hazards.</li> <li>2. Tie back long hair and remove any jewelry.</li> <li>3. Wear sound shoes to protect your feet.</li> <li>4. Stack the stools away from the work benches and machines.</li> <li>5. Always wear an apron to protect your clothes from dirt and machines.</li> <li>6. Do not run, push or mess around in the workshop, it could cause an accident.</li> <li>7. Always wear safety goggles when machining.</li> </ol> <p><b>Enquiry Task 1:</b> Design a H&amp;S Poster for DT.</p>	<p><b>Tenon saw</b> – sawing straight cuts on wood. </p> <p><b>Coping saw</b> – sawing curves and shapes in wood or acrylic. </p> <p><b>Files &amp; rasps</b> – smoothing &amp; shaping wood, metal or acrylic. </p> <p><b>Tri square</b> – marking and measuring right angles </p> <p><b>Bench hook</b> – Used for holding wood or acrylic when cutting with a saw. </p>	<p><b>Art Deco</b> - sometimes referred to as Deco, is a style of visual arts, architecture and design that first appeared in France just before World War 1 and became very popular in the 1930's. It influenced the design of buildings, furniture, jewellery, fashion, cars, movie theatres, trains, ocean liners, and everyday objects such as radios and vacuum cleaners.   </p> <p><b>Enquiry Task 3:</b> Research the design style, colours, shapes &amp; famous examples of architecture &amp; furniture.</p>
Week 7 & 8 – CAD/CAM	Week 9 & 10 – Hardwoods & Softwoods	Week 11 & 12 –
<p><b>CAD – Computer Aided Design</b> Designing a product using computer drawing software, such as 2D Design.</p> <p><b>CAM – Computer Aided Manufacture</b> Using machines controlled by computers, to make products. Machines can be quicker, more accurate and safer. In school you will use a laser cutter to cut acrylic – this is CAM</p> <p><b>Enquiry Task 3:</b> Can you think of any disadvantages to using CAD/CAM when designing and making a product?</p>	<p><b>Softwood</b> comes from coniferous trees. Most coniferous trees have needles, are evergreen, &amp; they keep their needles all year round. - Softwood trees grow faster than hardwood trees making it relatively cheap and readily available. -The grain is wider making it more absorbent</p> <p><b>Hardwood</b> is sourced from deciduous trees - Deciduous trees drop their leaves in the autumn &amp; new leaves grow in spring - Hardwood is usually slower growing &amp; is therefore more expensive - Sought after for its variety of colours and grains, it has good aesthetical and physical properties, with a closer grain, making it more dense &amp; hard wearing.</p> <p><b>Enquiry Task 4:</b> Research which trees give us softwood &amp; hardwood - give examples of what the timber can be used for.</p>	<p><b>Keywords;</b></p> <ul style="list-style-type: none"> <li>• Art Deco</li> <li>• Laser cutting</li> <li>• Deciduous &amp; Coniferous trees.</li> <li>• Aesthetics</li> <li>• Primary research</li> <li>• Secondary research</li> <li>• Iterative design</li> <li>• Collaborative design</li> <li>• 2D Design</li> </ul> <p><b>See week 11 &amp; 12 on the next page for careers information.</b></p>

# Design and Technology - Mr Donaldson

Week 1 & 2 – Pillar Drill	Week 3 & 4 – Sanding Machine	Week 5 & 6 – Fret Saw
<p>Understanding the safe use of workshop machinery is very important.</p> <p><b>Enquiry Task 1:</b> Draw a pillar drill in your workbook and label each part.</p> <p>List all the health &amp; safety rules to consider when using the pillar drill.</p> 	<p>Understand how to use the machine correctly &amp; safely. Recognise the correct height for the safety guard when operating the machine. Always wear safety goggles when using this machine and keep your fingers behind the black &amp; yellow tape.</p> 	<p>Know how to use the fret saw carefully and safely. The fret saw or Hegner saw can do the same tasks as a coping saw, but quicker and more accurately. Used for cutting and shaping wood and manufactured boards.</p>  <p><b>Enquiry Task 2:</b> draw the fret saw in your workbook and label each part. List the health &amp; safety rules to consider when using the fret saw.</p>
Week 7 & 8 – Measurement	Week 9 & 10 – Assessment Week	Week 11 & 12 - Careers
<p>Accurate measuring is an important part of working in technology. If your measurements are not accurate then your design or the object you are making, might not work. We use a metric system to measure, using Metres (m), Centimetres (cm) and Millimetres (mm). Learn and remember these measurements.</p> <p>1 metre = 100cm      or      1m = 1000mm          10cm = 100mm           1cm = 10mm</p> <p>Practice measuring objects in your home, using metres, centimetres or millimetres. Record the sizes of 10 objects in your workbook.</p> 	<p><b>Keywords;</b></p> <ul style="list-style-type: none"> <li>• Softwood</li> <li>• Hardwood</li> <li>• Jig</li> <li>• Chuck Key</li> <li>• Emery Paper</li> <li>• Machine Vice</li> <li>• PVA Glue</li> <li>• Masking tape</li> <li>• Safety Guard</li> <li>• Dowel</li> <li>• Jacobs chuck</li> <li>• Half-round file</li> <li>• Sustainability</li> </ul>  	 <p>Follow the QR code or type in the link into your browser  <a href="https://links.iscaexeter.co.uk/4sw">https://links.iscaexeter.co.uk/4sw</a></p>

# Drama

## Melodrama

Week 1/2	Week 3/4	Week 5/6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Melodrama: A dramatic work, typical in Victorian England where the plot is sensational, the characters are simple and exaggerated.</li> <li>Stock Characters: Stereotypical, exaggerated character such as Hero, Villain, Sidekick and Damsel in distress,</li> <li>Stance: A way of standing that makes your character recognizable.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Plot: The story of a play. In a melodrama often the good but not very clever hero is duped by a scheming villain, endangering the heroine, until good eventually triumphs over evil.</li> <li>Climax: The point of maximum tension in a play. The point of no return for the hero.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Villain: A scheming, intelligent but evil character who is always concerned with capturing the heroine against her will.</li> <li>Sidekick: The Villain's servant, helps the Villain but often very badly, creating comedy through idiotic mistakes.</li> <li>Musical motif: Each character would have a particular piece of music to announce their arrival.</li> </ul>
<p><u>Enquiry Task:</u> For each of the stock characters create a mind map with their name in the centre and their characteristics (What they are like) around the outside.</p>	<p><u>Enquiry Task:</u> Create a storyboard for your own melodrama. Make sure you include a hero, villain and heroine.</p>	<p><u>Enquiry Task</u> Write a speech from the perspective of a villain who is just about to complete his evil plan. The speech can be directed to the audience, the sidekick or maybe even the damsel in distress.</p>
Week 7/8	Week 9/10	Week 11/12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Hero: Moral, manly, brave and handsome. He believes in justice and fights against evil and injustice.</li> <li>Damsel/Heroine: beautiful, kind, gentle and innocent. She is in love with the hero. She is often in some distress or danger and needs to be saved.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Entrances and Exits: When an actor arrives or leaves the stage. A stock character should be recognizable by the way they enter and exit the stage.</li> <li>Asides: An aside involves a character turning to the audience and giving them a piece of information that the other characters don't know.</li> </ul>	<p>Follow the QR code or type in the link into your browser <a href="https://links.iscaexeter.co.uk/9vw">https://links.iscaexeter.co.uk/9vw</a></p>
<p><u>Enquiry Task:</u> Learn your lines for the assessed piece off by heart. Make sure you know which script your group is doing and which part you are playing. All scripts are on google classroom in the folder marked Melodrama Assessment Scripts.</p>	<p><u>Enquiry Task:</u> Use one of the scripts from google classroom and add in two 'asides' for each character. They should let the audience know more about the character's real state of mind.</p>	

# English

## Welcome to Sparx Reader!

### What is Sparx Reader?

Sparx Reader lets you choose from a range of books. As you read, you'll answer questions about the story. If you answer correctly, you'll earn **Sparx Reader Points** (SRP), so you can see your progress and climb the league table.

If you do extra reading, you can unlock **Gold Reader!** Gold Readers can read any paper book using Sparx Reader.

### How do I get more SRP?

You can get more SRP by doing more reading! Reading carefully is the best way to earn the most SRP, because you'll get more questions right.

### What am I expected to do?

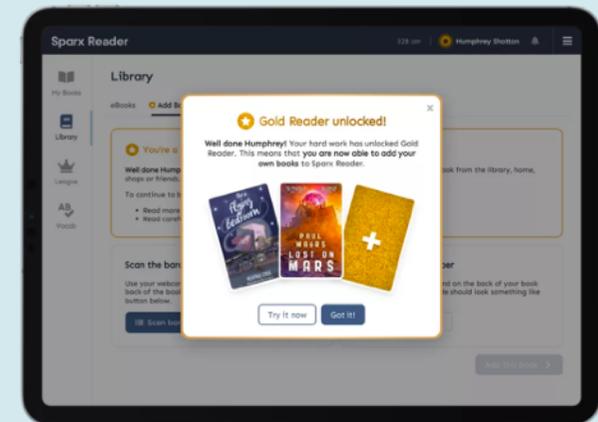
Sparx Reader learns how quickly you read. It will only count the time that you are focusing independently on your book. It is your responsibility to ensure that you have met your reading goal each week.

### How do I log in?

1. Go to [sparxreader.com](https://sparxreader.com) and click **Log in**
2. Select your school from the list
3. Click **Login with Sparx**
4. Enter the same username and password as you use for **Sparx Maths**.

### Why is it important to read?

Reading for 20 minutes a day helps expose you to **1.8 million words** in a school year. It helps students succeed across all of the subjects and most importantly has been shown to have mental health benefits too.

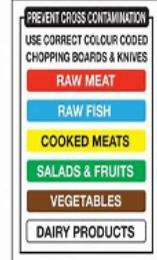


### Week 12: CAREERS

Follow the QR code or type in the link into your browser  
<https://links.iscaexeter.co.uk/4my>



# Food & Nutrition

Week 1 – Food Hygiene & Safety	Week 2 - Chips Assessment	Week 3
<p><b>Knife skills:</b></p>  <p>Bridge Claw</p> <p><b>4Cs</b> <b>COOK</b> - above 63°C <b>CHILL</b> - fridge 0-5°C <b>CROSS-CONTAMINATION</b> boards <b>CLEAN</b> – remove bacteria</p>  <p><b>Temperatures:</b> 0-5°C fridge -18°C freezer Above 63°C cooking Above 75°C high risk meat – chicken 5°-63°C Danger Zone – bacterial grows the most</p> 	<p><b>Baseline practical assessment: Chips – Knife Skills</b></p> <p><b>Preparation skills:</b> bridge, claw, peel, baton (chip shape), julienne, wedge, dice (cube), Seasoning (flavour with herbs/spices).</p> <p><b>Sensory Analysis:</b> In sentences: Use descriptive words to describe taste (eg spicy), texture (how it feels in your mouth eg crunchy), appearance (even, colourful) and aroma (smell). What went well (eg My chips were evenly cut), What could be improve – My chips could be cooked for longer to make them more crunchy and golden.</p> <p><b>ENQUIRY TASK 1:</b> Identify 1 hygiene and 1 safety rule to follow for your practicals</p>	<p><b>Eatwell Guide:</b> Government guidelines for healthy eating.</p> <p><b>Fruit and vegetables group:</b> Vitamins and mineral – good immune system. 5 portions a day. A portion is a hand full. <b>Vitamin C</b> immune system, Calcium (bones and teeth), <b>Fibre</b> is needed to aid digestion</p> <p><b>Protein</b> – meat, fish and alternatives (quorn, beans, nuts, seeds, pulses etc.)</p> <p><b>Carbohydrates:</b> <b>provides energy</b> - Bread, potatoes, rice, pasta, cereals Fat – dairy foods – milk, cheese, Yoghurt, butter. Warmth/energy</p> 
<p><b>Week 4 Pizza Toast</b></p>	<p><b>Week 5 Fruit Salad</b></p>	<p><b>Week 6 Apple crumble</b></p>
<p><b>Beans, pulses, eggs, fish and meat .</b> Protein is needed for growth and repair of all the cells in the body. <b>Dairy</b> – main nutrient fat (needed to warmth, energy – too much clogs up arteries. <b>Calcium</b> is needed for strong teeth and bones. Oils, fats and spreads – use lower fat options (from plants not animals). <b>Water</b> - Rehydrates us. We need 6-8 glasses a day</p> <p><b>Food preparation skills:</b> Grill (dry heat no oil), slice, cross contamination, grate.</p> <p><b>ENQUIRY TASK 2:</b> Explain what nutrients are in Pizza and what they do in the body</p>	<p><b>Fruit –</b> 5 fruit and vegetables a day. Contains fibre – aids digestion of food through your body (in skin and flesh of fruit and vegetables). Vitamins and minerals. <b>Types of Diets: Vegetarian</b> Someone who doesn't eat meat. <b>Vegan</b> Someone who doesn't eat anything from an animal. Alternatives: <b>Beans, nuts, lentils, quorn, soya</b></p> <p><b>Obesity</b> – Being largely overweight from consuming too much fat in the die Too much Sugar – Dental caries/diabetes Lack of vitamin C – Scurvy Lack of Calcium – rickets/osteoporosis</p> <p><b>Food Preparation skills:</b> Slice, dice, peel, segment (orange), coulis (fruit sauce)</p>	<p><b>Preparation skills:</b> Weighing in grams (g), Measuring liquid (ml) Peel, slice, dice, core – take out centre (seeds/pips)<b>rubbing in</b> Method (rub butter into flour)</p> <p><b>Enzyme browning</b> (apple goes brown – acid lemon stops) when peeled.</p> <p><b>Food Preparation skills:</b> Slice, dice, peel, segment (orange), coulis (fruit sauce).</p>

# Food & Nutrition

Week 7	Week 8 – Chicken Goujons	Week 9
<p><b>Meat – Food provenance/traceability</b></p> <p><b>Food Provenance</b> (knowing where your food comes from, how it is grown, slaughtered, processed).</p> <p><b>Battery hens</b> (reared in a cage), <b>organic/free range</b> (organic food, roam inside and outside). We can buy meat in many different cuts (eg, chicken breast, leg, thigh)</p> <p><b>Practical skills:</b> Goujons (cut into strips), Pane (coating of flour, egg, breadcrumbs), season (flavour with spices or herbs)</p> <p><b>ENQUIRY TASK 3:</b> look in your fridge and find out where your food has come from</p>	<p><b>Meat – Food provenance/traceability</b></p> <p><b>Food Provenance</b> (knowing where your food comes from, how it is grown, slaughtered, processed).</p> <p><b>Battery hens</b> (reared in a cage),</p> <p><b>Organic/free range</b> (organic food, roam inside and outside). We can buy meat in many different cuts (eg, chicken breast, leg, thigh)</p> <p><b>Practical skills:</b> Goujons (cut into strips), Pane (coating of flour, egg, breadcrumbs), season (flavour with spices or herbs)</p>	<p><b>Functions of ingredients</b></p> <p><b>Sugar</b> – traps air, gives colour, flavour,  <b>flour</b> – bulk, helps to rise.  <b>egg</b> – traps air, helps to rise, binds and sets when cooked.  <b>Butter</b> – traps air, add flavour and colour to cakes. Other ingredients: fruit and vegetables to add flavour and increase nutritional value.  <b>Baking powder/bicarbonate of soda</b> – raising agents – helps cakes to rise and gives light fluffy texture. <b>Fat</b> (adds warmth/energy) – saturated (butter from animals), unsaturated (plant based – margarine). <b>Sugar</b> – Sugary carbohydrates (quick releasing energy), Egg – protein, fat (good fats), vitamin D (bones/teeth)  <b>ENQUIRY TASK 4</b> Research some recipes and create your own healthier version of muffin.</p>
Week 10 – Muffins	Week 11 – Practical Assessment	Week 12 - Careers
<p><b>Food preparation and cooking skills:</b></p> <p><b>Muffin</b> - heavier cake than fairy cakes. Makes a thicker batter.  <b>Sieve</b> - use a sieve to add air – helps to rise  <b>Beat</b> - mix vigorously with a wooden spoon add air  <b>Mix</b> - stir ingredients  <b>Mash</b> - used and potato masher or fork to press harder food to a soft mixture.  <b>Whisk</b> - use an electric whisk to add air – helps rise  <b>Bicarbonate of soda</b> – raising agent to help rise.  <b>Baking powder</b> – raising agent  <b>Bake</b> - cook in oven with no oil. Browns food with a dry heat.</p>	<p><b>Fruit Salad</b>  Eatwell Guide, food groups, main nutrients (carbohydrates, fat, vitamin C, vitamins and minerals, protein and function of these in the body)  Food preparation and cooking skills  How to make dishes healthier – eg more fibre (wholemeal. (brown bread, pasta etc) or more vegetables). Healthier oil – vegetable, rapeseed and olive oil, lean meat (lower in fat), lower fat alternatives of margarine instead of butter.  <b>Cooking skills;</b> boil, fry, simmer, season, bake, grill</p> <p><b>ENQUIRY TASK 5:</b> Revise key words and definitions ready for theory assessment next week. Check google classrooms for revision help.</p>	<p>Theory written assessment – Review and Improve.</p>  <p><a href="https://nationalcareers.service.gov.uk/job-categories/hospitality-and-food">https://nationalcareers.service.gov.uk/job-categories/hospitality-and-food</a></p>

# French

WEEK	French	English	Enquiry Tasks – to be done in French
1	Je vais au collège <b>qui</b> s'appelle Isca. <b>C'est</b> très moderne et <b>il y a</b> une bibliothèque.	I go to a school <b>which</b> is called Isca. <b>It is</b> very modern and <b>there is</b> a library.	Write 3 or 4 sentences to describe your school.
2	J'étudie <b>beaucoup de</b> matières. Tous les jours nous étudions l'anglais.	I study <b>a lot of</b> subjects. Every day we study English.	Find the days of the week from cycle 1 and write out your school timetable.
3	J'aime l'EPS mais je n'aime pas du tout la géographie. <b>Je la trouve</b> très ennuyeuse.	I like PE but I really don't like Geography. <b>I find it</b> very boring.	Write a paragraph to say what subjects you like and don't like, and why.
4	En Angleterre <b>il faut</b> porter un uniforme. Je porte un pantalon gris et une chemise blanche.	In England <b>you must</b> wear a uniform. I wear grey trousers and a white shirt.	Write a description of your school uniform. Include opinions.
5	<b>J'aimerais</b> porter un jean avec un t-shirt.	<b>I would like</b> to wear jeans with a t-shirt.	Cover the French for weeks 1-5. Practice saying it out loud. Can you recall the text?
6	<b>Dans</b> mon sac j'ai un crayon et des stylos.	<b>In</b> my bag I have a pencil and some pens.	Make a list of what is in your school bag. Use <a href="http://www.wordreference.com">www.wordreference.com</a> to look up any additional items.
7	<b>Je dirais que</b> mon prof d'histoire est plus patient que mon prof de dessin.	<b>I would say that</b> my history teacher is more patient than my art teacher.	Write comparisons of 3 of your teachers using 'more...than' and 'less...than'.
8	<b>En ce qui concerne</b> le règlement, on doit faire les devoirs et il est interdit de manger du chewing-gum.	<b>With regards to</b> the rules, we must do homework and you're not allowed to chew gum.	Create 3 new rules for school and write them out.
9	Mon école primaire <b>était</b> très ancienne.	My primary school <b>was</b> very old.	Write 3 or 4 sentences to describe your primary school.
10	<b>C'était</b> d'une autre époque!	<b>It was</b> from another era!	Adapt the sentences from weeks 1-10 to write about your school.
11	Full text revision		Cover the French for weeks 1-10. Practice saying it out loud. Can you recall the text?
12	Full text revision		Redo the Quizlet tests for Cycle 2 Weeks 1-10.

# French

Week 1 School		Week 2 Subjects		Week 3 Opinions		Week 4 Uniform		Week 5 Adjectives	
le collège	the school	<b>étudier</b>	<b>to study</b>	j'aime	I like	<b>porter</b>	<b>to wear</b>	c'est	it is
c'est	it is	j'étudie	I study	j'adore	I love	je porte	I wear	ce n'est pas	it isn't
ce n'est pas	it isn't	tu étudies	you study	je préfère	I prefer	tu portes	you wear	bleu	blue
grand	big	il étudie	he studies	je n'aime pas	I don't like	il porte	he wears	jaune	yellow
petit	small	elle étudie	she studies	je déteste	I hate	elle porte	she wears	vert	green
moderne	modern	le français	French	ma matière préférée est	my favourite subject is	un pantalon	trousers	rouge	red
ancien	old	l'espagnol	Spanish			un pull	a jumper	rose	pink
joli	pretty	l'anglais	English	parce que	because	un jean	jeans	noir	black
moche	ugly	le théâtre	Drama	c'est	it is	un t-shirt	a t-shirt	marron	brown
il y a	there is	le dessin	Art	très	very	une jupe	a skirt	blanc	white
il n'y a pas	there isn't	le sport	Sport	un peu	a bit	une cravate	a tie	violet	purple
une cantine	a canteen	l'EPS	PE	assez	quite	une chemise	a shirt	gris	grey
une cour	a playground	les sciences	Science	intéressant	interesting	des chaussures	(some) shoes	confortable	comfortable
des salles de classe	some classrooms	les maths	Maths	relaxant	relaxing	des chaussettes	(some) socks	élégant	smart
des labos	some labs	la géographie	Geography	ennuyeux	boring	une veste	a jacket	cher	expensive
une bibliothèque	a library	la musique	Music	facile	easy	mon, ma mes	my	Remember : adjectives go AFTER nouns in French and need to agree e.g. un jean bleu (m), une jupe bleue (f).	
une piscine	a pool	l'informatique	Computing	difficile	difficult	The possessive adjective 'my' agrees with the noun e.g. mon jean (m), ma jupe (f), mes chaussures (pl).			
un gymnase	a gym	l'histoire	History	important	important				
un terrain de foot	a football pitch	la religion	RE	amusant	fun				
<b>KEY :</b>	<b>verbs</b>	<b>masculine nouns</b>	<b>feminine nouns</b>	<b>adjectives</b>	<b>connectives</b>				

# French

Week 6 Equipment		Week 7 Teachers		Week 8 Rules		Week 9 Primary School		Week 10
j'ai	I have	<b>être</b>	<b>to be</b>	il faut	you must	mon école primaire	my primary school	Revise the key sentences and all vocabulary from this cycle ready for your assessment next week.  <b>Quizlet folder:</b> 
je n'ai pas	I don't have	je suis	I am	il est interdit de	you're not allowed to	c'était	it was	
j'ai besoin de	I need	tu es	you are			ce n'était pas	it wasn't	
un sac	a bag	il est	he is	on doit	we must	grand(e)	big	
un sac à dos	a rucksack	elle est	she is	on ne doit pas	we must not	petit(e)	small	
un crayon	a pencil	mon prof est	my teacher is			moderne	modern	
un cahier	an exercise book	plus...que	more...than	faire les devoirs	do homework	ancien(ne)	old	
un livre	a book	moins...que	less...than	faire un effort	make an effort	joli(e)	pretty	
un portable	a mobile	désagréable	unpleasant			moche	ugly	
un stylo	a pen	bien	good	courir dans les couloirs	run in the corridors	il y avait	there was	
un porte-monnaie	a purse/wallet	sympa	nice			il n'y avait pas	there wasn't	
un dictionnaire	a dictionary	sévère	strict	écouter	listen	une cantine	a canteen	Week 12 Careers
un taille-crayon	a pencil sharpener	patient	patient	parler	talk	une cour	a playground	
un carnet de textes	a notebook	juste	fair	boire en classe	drink in class	des salles de classe	some classrooms	
une trousse	a pencil case	bavard	chatty	manger du chewing-gum	chew gum	des labos	some labs	
une calculatrice	a calculator	timide	shy			une bibliothèque	a library	
une gomme	a rubber	et	and	manger en classe	eat in class	une piscine	a pool	
une règle	a ruler	aussi	also			un gymnase	a gym	
The word a (un, une), the (le, la, les) and some (du, de la, des) agrees with the noun.		mais	but	porter l'uniforme	wear uniform	un terrain de foot	a football pitch	

# Geography

## Population and Migration

### Week 1

**Population:** the number of people living in a particular place.  
**Population distribution:** the pattern of where people live and how populations are spread out.  
**Megacity:** a city with a population of over 10 million people.  
**Sparsely populated:** areas with few people living in them.  
**Densely populated:** areas with many people living in them  
**Current global population:** 7.8 billion people

#### Enquiry:

Create an A4 poster (one page of an exercise book) to explain each of the key terms shown above. Use images and colours.

### Week 2

**Population pyramids:** a bar graph that shows the structure of a population by sex and age category.



**Birth rate:** the number of people born in a year, measured for every 1000 of the population.

**Death rate:** the number of people who dies in a year for every 1000 of the population

**Enquiry:** Go to the website PopulationPyramid.net:

<https://www.populationpyramid.net/world/2021/>

Use the 'Country' filter on the right of the home page to find the population pyramid for the United Kingdom (UK).

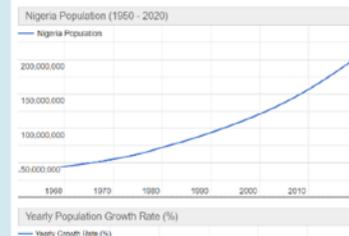
Now, find a country with a population pyramid which looks like the pink and blue one above - a pyramid shape!

Copy the outlines of both pyramids and explain why they are different shapes.

### Week 3

#### Nigeria's youthful population

Nigeria is a Newly Emerging Economy (NEE). Nigeria is Africa's most populated nation with 170 million people. It's fertility rate (how many babies a woman has) is twice the world average at 5.5 births per woman. Half of all Nigerians are under the age of 15.



Half of Nigeria's population lives on less than \$1.90 per day. Nigeria's population is predicted to be 402 million by 2050.

**Enquiry:** The graph shows changes in Nigeria's population from 1960 - 2020. Write down three things the graph tells you about the changes. Use full sentences.

### Week 4

#### The UK's ageing population

The UK is a High Income Country (HIC). In 2016, there were 11.8 million people aged over 65 in the UK (18% of the population).

**Advantages:** Pass on their experience and knowledge, they fulfil childcare roles for their grandchildren and have money to spend in leisure activities.

**Disadvantages:** Less economically active people, strain on healthcare and the government not having enough money for pensions.

**Enquiry:** Many HIC countries like the UK, have an ageing population. This means that people in these countries are living longer and are having fewer children.

Write a short newspaper article (at least 3 paragraphs):

1. Choose a headline, e.g. UK people are getting older!
2. Tell your readers that the UK has an ageing population.
3. Explain the advantages and disadvantages of having an ageing population in the UK.

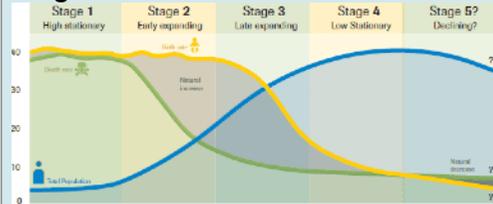
# Geography

## Week 5

**Demographic Transition Model:** a model linking population changes with development changes over time.

**Stage 1:** birth and death rates are high due to famine and disease.

**Stage 4:** birth and death rates are low due to good healthcare.



**Enquiry:**

Why do the birth and death rate decrease as a country gets poorer? Write a paragraph explaining what happens.

## Week 6

**China's One Child Policy (OCP)**

China's OCP started in 1979 to control rapid population growth. It was changed to two children in 2015. Rules used to be that you could only have one child if you lived in the city but two in the countryside if your first was a girl. Now, the government is concerned about an ageing population slowing down their economy. 'Little emperors' was the term used to the single children born as part of the OCP.

**Enquiry:** Plan a Facebook post about the One Child Policy which will get people's attention.

Create an image and add a 'strap line' which will inspire people to follow the policy.  
Strap line = a catchy headline

## Week 7

**Migrant:** someone who moves from one place to another.

**Forced migrants:** people who have no choice to move from one place to another due to war or natural disasters.

**Push factors:** things that make people want to leave an area e.g. lack of jobs.

**Pull factors:** good things that attract people to a new place e.g. better housing.

**Enquiry:** Create a table with two columns. Give it a title:

**Why people choose to migrate.**

Push factors	Pull factors

Add five push factors and five pull factors to your table. Explain one of your factors.

## Week 8

**Mexico to USA migration**

The number of Mexican-born immigrants living in the USA soared from 760,000 in 1970 to a peak of 12.6 million in 2007, including many entering the country illegally. The USA is a rich and attractive nation Mexico is a much poorer country with a rapidly growing population. It has problems of high crime rates, corruption and poor education. Mexicans have filled jobs in the USA as farm laborers, factory workers and cleaners.

**Enquiry:**

Look closely at this photo of the border fence between the USA and Mexico. Describe what you can see. Then explain why you think people risk their lives to cross from Mexico into the USA.

**Muertes means death in Spanish.**



# Geography

Week 9	Week 10
<p><b><u>Syria to Europe migration</u></b>  <b>Refugees:</b> people who have been forced to move away from their home country to seek safety in another country.            Civil war erupted in Syria in 2011 and an estimated 11 million people fled their homes. Many Syrians sought refuge in neighbouring countries such as Turkey. People traffickers offered Syrian migrants transportation across the Mediterranean Sea, which is illegal. Migrants travelled in low quality, dangerous and overcrowded boats.</p> <p><b><u>Enquiry:</u></b>            Imagine you are a refugee from Syria and you have just arrived in the UK. You have had to leave your home and all your friends. You do not speak any English.            Write a letter to a friend about your new life in the UK.            What was your journey like? What are your hopes/fears?</p>	<p><b><u>India's growing cities</u></b>  <b>Rural-urban migration:</b> the movement of people from the countryside to towns and cities within a country.  <b>Urbanisation:</b> an increasing percentage of a country's population moving from the countryside to towns and cities.  <b>Slums:</b> a densely populated urban area with poor quality housing.  <b>Impact of rural-urban migration:</b> fewer people to feed &amp; more resources in rural areas. However, elderly remain and fewer workers on the land.</p> <p><b><u>Enquiry:</u></b>            Scan the QR code to explore this job role. Aid workers go into the slums in India to help provide food, deliver medicines and to help children learn to read/write.            You are an aid worker in an Indian slum. Write a blog post to say what life is like there.</p>
Week 11	Week 12
<p><b><u>Life in Dharavi</u></b></p> <p>There are positives to living in slums such as Dharavi. There is an informal economy which means that people have jobs that are low paying and unregulated (do not pay taxes). These are often jobs such as cleaning clothes or collecting rubbish. This means that people can earn money and send their children to school.</p> <p><b><u>Enquiry:</u></b> Research the positives of life in Dharavi and create a poster encouraging people to move there from the countryside in India.</p>	<p><b>CAREERS:</b>            Follow the QR code or type in the link into your browser  <a href="https://links.iscaexeter.co.uk/of7">https://links.iscaexeter.co.uk/of7</a></p> 

# History

Week 1	Week 2	Week 3
<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Peasant</b> – Poor laborers who worked the land for their lords.</li> <li><b>Feudal System</b> – A social hierarchy that gave land to those below you in exchange for service and loyalty</li> <li><b>Hierarchy</b> – A way of ranking people depending on how important they are.</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Monarch – Barons – Knights – Yeoman – Peasants/Villains</li> </ul> <p><b>This week's enquiry is...</b> <i>How fair was the Feudal System?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Tithing</b> – A method of self-policing whereby local communities share responsibility for a crime</li> <li><b>Buboes</b> – Apple-sized, pus-filled boils</li> <li><b>Miasma</b> – The theory that disease is caused by impure air</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>1348 – Black Death arrives in England</li> <li>Yersinia Pestis – name of the virus</li> <li>Bubonic/Pneumonic/Septicemic</li> </ul> <p><b>This week's enquiry is...</b> <i>What did Medieval people believe caused the plague?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Revolt</b> – A type of widespread protest</li> <li><b>Statute</b> – A law</li> <li><b>Tax</b> – A charge made by a monarch or government on the people</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>1381 – Wat Tyler leads thousands of peasants from Essex to London</li> <li>Statute of Laborers, 1351 – Fixed peasant wages at a low price after the Black Death</li> </ul> <p><b>This week's enquiry is...</b> <i>Why did the peasants revolt in 1381?</i></p>
Week 4	Week 5	Week 6
<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Constitution</b> – The laws and rules of a country</li> <li><b>Oath</b> – A sacred promise</li> <li><b>Charter</b> – A set of laws</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>1215 – King John is forced to sign the magna Carta by the barons</li> <li>Magna Carta limited the power of the monarch</li> <li>Used as the basis of human rights today</li> </ul> <p><b>This week's enquiry is...</b> <i>Why is Magna Carta so significant?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Depression</b> – When money is worth less than usual</li> <li><b>Trade</b> – When two people swap goods or services for money</li> <li><b>Empire</b> – When a country or state takes control of other countries or states</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Mansa Musa – Richest man in history ruled over the Mali empire in 14<sup>th</sup> century</li> </ul> <p><b>This week's enquiry is...</b> <i>Why was there a mini-depression in the Middle East in the 14<sup>th</sup> century?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Continuity</b> – When something stays the same</li> <li><b>Contrast</b> – When two things differ</li> <li><b>Institution</b> – An established organization i.e the church</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Tudor dynasty ruling England from 1485</li> <li>1500-1800 known as Early Modern period</li> <li>Printing press first developed in 1436 by Johannes Gutenberg</li> </ul> <p><b>This week's enquiry is...</b> <i>How had Britain changed by 1500?</i></p>

# History

Week 7	Week 8	Week 9
<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Pope</b> – Head of the Catholic church</li> <li><b>Protestant</b> – A Christian who follows the Protestant faith and not Catholicism</li> <li><b>Catholic</b> – A follower of the Catholic Church</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Henry VII becomes king in 1485</li> <li>1534 – Act of Supremacy names Henry ‘Head of the Church of England’</li> <li>1538 – Henry VIII is excommunicated by the Pope</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why did Henry VIII fall out with the Pope?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Prosperous</b> – To be wealthy or successful</li> <li><b>Patriarchy</b> – A country or state that is ruled by men and discriminates against women</li> <li><b>Circumnavigate</b> – To travel all the way around something</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Elizabeth I becomes Queen in 1558</li> <li>Religious Settlement produced in 1559</li> <li>Wool trade and naval supremacy bring England huge profits</li> </ul> <p><b>This week’s enquiry is...</b> <i>Was the Elizabethan period really a ‘golden age’?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Privateer</b> – A pirate who has been granted permission by the monarch to participate in piracy</li> <li><b>Armada</b> – A collection of warships</li> <li><b>Galleon</b> – A large sailing ship often used in naval battles or for long journeys between the 15<sup>th</sup> and 18<sup>th</sup> centuries</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>British shipbuilding develops to produce smaller, faster ships</li> <li>Francis Drake attacks Spanish ships – circumnavigated globe 1577-80</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why did Elizabeth celebrate privateers?</i></p>
Week 10	Week 11	Week 12
<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Invasion</b> – Trying to take control of another country by force</li> <li><b>Crusade</b> – An attempt to force religious, political or social change</li> <li><b>Beacon</b> – A warning system</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>1588 – Phillip II attempts to invade</li> <li>Drake leads British forces and wins</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why did Phillip II try to invade in 1588?</i></p>	<p><b>Key Terms:</b></p> <ol style="list-style-type: none"> <li><b>Early Modern</b> – The period of time between the Medieval period and Industrial period. 1500-1800</li> <li><b>Global</b> – To include the entire world</li> <li><b>Reformation</b> – A period in the 1500s when the Protestant church was formed</li> </ol> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>Poor leadership, luck, tactics and differences in weaponry lead to Spanish failure</li> <li>Beginning of British naval supremacy</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why did the Armada fail?</i></p>	<p><b>CAREERS:</b></p> <p><b>Follow the QR code or type in the link into your browser</b></p> <p><a href="https://links.iscaexeter.co.uk/a0z">https://links.iscaexeter.co.uk/a0z</a></p> 

# Mathematics

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

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

Homework Thursday 1<sup>st</sup> June 2022

Task 1

D40  $12 + 13 = \underline{25}$  ✓

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

E60  $\left( \begin{matrix} 12 : 18 \\ 2 : 3 \end{matrix} \right) \div 6$  ✓

H70  $\frac{1}{14} + \frac{1}{7} = \frac{1}{\underline{14}}$  ✗

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

A01  $\begin{array}{r} +493 \\ 162 \\ \hline 655 \end{array}$  ✓

B11 Area =  $3 \times 14$   
 $\times 14$   
 $\frac{42}{1}$  Area =  $42 \text{ cm}^2$  ✓

C21  $\frac{1}{53} + \frac{1}{11} = \frac{1}{33} + \frac{3}{33}$   
 $= \frac{4}{33}$  ✓

D31  $3^2 = 3 \times 3$   
 $= \underline{9}$  ✓

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

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

Task 2

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

H71  $P(\text{odd}) = \frac{3}{5}$  ✓

Task 3

J22 Even ✓

K32 Unlikely ✗

L41 B, A, C ✓

C03 4 more blue balls ✓

D13 4 black, 2 red, 2 blue  
 The probability of picking black is even: Bag B ✓

E23 B ✓



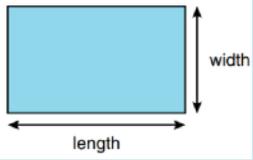
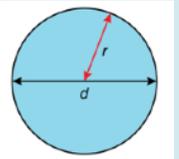
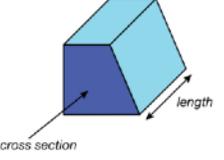
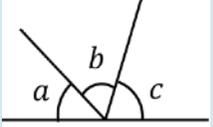
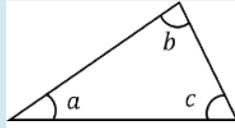
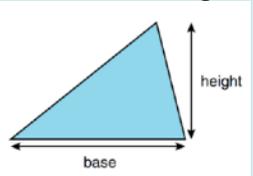
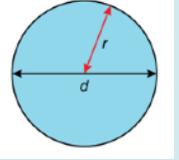
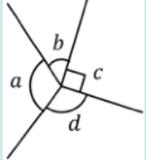
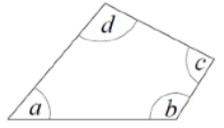
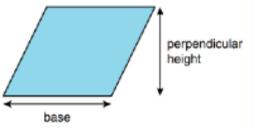
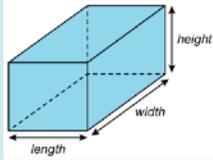
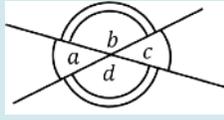
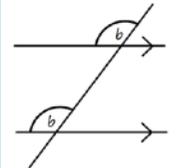
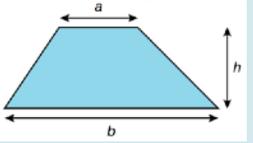
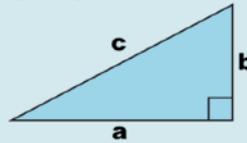
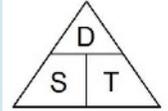
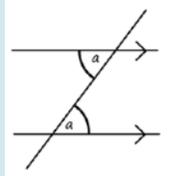
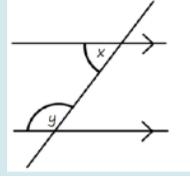
**WEEK 12  
CAREERS WEEK**

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

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



# Mathematics

<p><b>Area of a Rectangle</b></p>  <p><math>length \times width = l \times w</math></p>	<p><b>Circumference of a circle</b></p>  <p><math>C = \pi \times d</math></p>	<p><b>Volume of a Prism</b></p>  <p><math>Area\ of\ a\ cross\ section \times length</math></p>		<p>Angles of Straight Line add up to <math>180^\circ</math></p>  <p><math>a + b + c = 180</math></p>	<p>Angles in a Triangle add up to <math>180^\circ</math></p>  <p><math>a + b + c = 180</math></p>		
<p><b>Area of a Triangle</b></p>  <p><math>\frac{1}{2} \times base \times height = \frac{bh}{2}</math></p>	<p><b>Area of a circle</b></p>  <p><math>A = \pi \times r^2</math></p>	<p><b>Square, Prime and Cube Numbers</b></p> <table border="0"> <tr> <td data-bbox="862 534 1153 1045"> <p>Square Numbers</p> <p><math>1^2 = 1</math>  <math>2^2 = 4</math>  <math>3^2 = 9</math>  <math>4^2 = 16</math>  <math>5^2 = 25</math>  <math>6^2 = 36</math>  <math>7^2 = 49</math>  <math>8^2 = 64</math>  <math>9^2 = 81</math>  <math>10^2 = 100</math>  <math>11^2 = 121</math>  <math>12^2 = 144</math></p> </td> <td data-bbox="1153 534 1489 1045"> <p>Cube Numbers</p> <p><math>1^3 = 1</math>  <math>2^3 = 8</math>  <math>3^3 = 27</math>  <math>4^3 = 64</math>  <math>5^3 = 125</math>  <math>6^3 = 216</math>  <math>7^3 = 343</math>  <math>8^3 = 512</math>  <math>9^3 = 729</math>  <math>10^3 = 1000</math></p> <p>Prime Numbers                      2,3,5,7,11,13,17,19,                      23, 29, 31, 37,...</p> </td> </tr> </table>		<p>Square Numbers</p> <p><math>1^2 = 1</math>  <math>2^2 = 4</math>  <math>3^2 = 9</math>  <math>4^2 = 16</math>  <math>5^2 = 25</math>  <math>6^2 = 36</math>  <math>7^2 = 49</math>  <math>8^2 = 64</math>  <math>9^2 = 81</math>  <math>10^2 = 100</math>  <math>11^2 = 121</math>  <math>12^2 = 144</math></p>	<p>Cube Numbers</p> <p><math>1^3 = 1</math>  <math>2^3 = 8</math>  <math>3^3 = 27</math>  <math>4^3 = 64</math>  <math>5^3 = 125</math>  <math>6^3 = 216</math>  <math>7^3 = 343</math>  <math>8^3 = 512</math>  <math>9^3 = 729</math>  <math>10^3 = 1000</math></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 <math>360^\circ</math></p>  <p><math>a + b + c + d = 360</math></p>	<p>Angles in a quadrilateral add up to <math>360^\circ</math></p>  <p><math>a + b + c + d = 360</math></p>
<p>Square Numbers</p> <p><math>1^2 = 1</math>  <math>2^2 = 4</math>  <math>3^2 = 9</math>  <math>4^2 = 16</math>  <math>5^2 = 25</math>  <math>6^2 = 36</math>  <math>7^2 = 49</math>  <math>8^2 = 64</math>  <math>9^2 = 81</math>  <math>10^2 = 100</math>  <math>11^2 = 121</math>  <math>12^2 = 144</math></p>	<p>Cube Numbers</p> <p><math>1^3 = 1</math>  <math>2^3 = 8</math>  <math>3^3 = 27</math>  <math>4^3 = 64</math>  <math>5^3 = 125</math>  <math>6^3 = 216</math>  <math>7^3 = 343</math>  <math>8^3 = 512</math>  <math>9^3 = 729</math>  <math>10^3 = 1000</math></p> <p>Prime Numbers                      2,3,5,7,11,13,17,19,                      23, 29, 31, 37,...</p>						
<p><b>Area of Parallelogram</b></p>  <p><math>base \times perp.\ height</math></p>	<p><b>Volume of a Cuboid</b></p>  <p><math>Length \times width \times height</math>  <math>V = l \times w \times h</math></p>	<p><b>Vertically Opposite Angles are equal</b></p>  <p><math>a = c, b = d</math></p>		<p><b>Corresponding angles are equal</b></p> 			
<p><b>Area of Trapezium</b></p>  <p><math>\frac{1}{2}(a + b)h</math></p>	<p><b>Pythagoras Theorem</b></p>  <p><math>a^2 + b^2 = c^2</math></p>	<p><b>Speed, Distance, Time</b></p>  <p><math>speed = \frac{distance}{time}</math></p>	<p><b>Percentage % change</b>  <math>\% \ change = \frac{difference}{original} \times 100</math></p> <p><b>Gradient</b>  <math>Gradient = \frac{change\ in\ y}{change\ in\ x}</math></p>	<p><b>Alternate Angles are equal</b></p> 	<p><b>Co-interior angles add to 180</b></p> 		

# Music

## Composition

Week 1 & 2	Week 3 & 4	Week 5 & 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Chord – Multiple notes played at once</li> <li>● Melody – sequence of notes played to above the chords</li> <li>● Timbre – The ‘identity’ of the instrument, e.g guitar is ‘twangy’, Piano is ‘soft’.</li> <li>● Texture – how many layers the music has.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Pentatonic - A scale which contains 5 notes and is widely used in pop music.</li> <li>● Scale – The arrangement of notes to signify a musical key</li> <li>● Major – the ‘happy’ sounding scale</li> <li>● Minor – the ‘sad’ sounding scale</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Melody – a sequence of notes above the chords</li> <li>● Motif/riff – a musical idea that is catchy</li> <li>● Harmony – the musical word for chords that we play to accompany the melody</li> </ul>
<p><u>Enquiry Task:</u> Listen to this –</p> <ul style="list-style-type: none"> <li>● The Jackson 5 – ABC (YouTube)</li> </ul> <p>How do the different instruments work together (texture / timbre)? Why does it sound ‘happy’ and up-beat?</p>	<p><u>Enquiry Task:</u> Listen to this –</p> <ul style="list-style-type: none"> <li>● PENTATONIC SCALE MELODIES: how many songs can I play using 5 notes (YouTube – ear training)</li> </ul> <p>What notes are in the C Major pentatonic scale? Do you know what notes are missing from C Major?</p>	<p><u>Enquiry Task:</u> Listen to this –</p> <ul style="list-style-type: none"> <li>● Bastille – Pompeii [piano cover] (YouTube – krolli25)</li> </ul> <p>Which hand is playing the harmony, and which is playing the melody? Can you identify the motif in this song?</p>
Week 7 & 8	Week 9 & 10	Week 11 & 12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● MIDI - Musical Instrument Digital Interface (e.g music keyboards for the iMacs)</li> <li>● AABA – A song structure which sounds like: verse, verse, bridge, verse</li> <li>● DAW – A Digital Audio Workstation (e.g - Garageband on the iMacs)</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Texture – how thick (lots of notes) or thin (few notes) the music sounds. How many layers there are.</li> <li>● Chord sequence – chords played in a particular order for a song</li> <li>● Structure – the arrangement of your different sections, e.g AABA,</li> </ul>	<p><u>Careers</u></p> 
<p><u>Enquiry Task:</u> Listen to this –</p> <ul style="list-style-type: none"> <li>● The Wizard of Oz - Somewhere Over the Rainbow (YouTube - movieclips)</li> </ul> <p>Can you identify the A and B sections? What instruments can you hear?</p>	<p><u>Enquiry Task:</u> Listen to this –</p> <ul style="list-style-type: none"> <li>● The Lord Of The Rings Orchestral Medley (YouTube - Akademia Filmu i Telewizji)</li> </ul> <p>How does the texture change throughout the song? Can you identify when layers are added/taken away?</p>	<p>Follow the QR code or type in the link into your browser <a href="https://links.iscaexeter.co.uk/9vw">https://links.iscaexeter.co.uk/9vw</a></p>

# 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](http://www.childline.org)**  
0800 1111

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

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



**Health**

**School nurse—07520 631722**  
Text only for confidential advice

**National Health Service—[www.nhs.uk](http://www.nhs.uk)**  
Research and useful information on health issues

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

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



**Health and well-being**

**Samaritans—[www.samaritans.org](http://www.samaritans.org)**  
Call 116 123 for emergency help  
Email [jo@samaritans.org](mailto:jo@samaritans.org) (response within 24 hours)

**Papyrus—[papyrus-uk.org](http://papyrus-uk.org) 0800 068 41 41**  
Urgent help for you or someone you know

**YoungMinds—[youngminds.org.uk](http://youngminds.org.uk)**  
Text YM to 85258 for urgent help

**Happy Maps—[www.happymaps.co.uk](http://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](http://www.kooth.com)**  
Mental health advice and support, live chat support

**Safety, bullying and abuse**

**Child Exploitation and Online Protection (CEOP) - [www.ceop.police.uk](http://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](http://www.nspcc.org.uk) 0800 1111**  
Information and help about on- and offline abuse

**National Bullying Helpline—[www.nationalbullyinghelpline.co.uk](http://www.nationalbullyinghelpline.co.uk)**  
**0845 22 55 787**



**Healthy relationships**

**Thinkuknow—[www.thinkuknow.co.uk](http://www.thinkuknow.co.uk)**  
Age-related help and advice about on- and offline relationships, and consent.



**Drugs and alcohol**

**YSmart—[ysmart.org.uk](http://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](http://www.youngdevon.org)**  
**01392 331 666**

Local support for young people facing a crisis



**LGBTQ+**

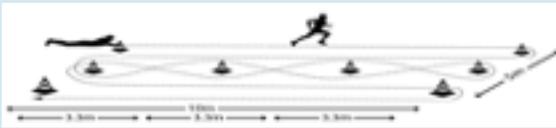
**X-PLORE—[www.lgbtqyouthdevon.org.uk](http://www.lgbtqyouthdevon.org.uk)**  
Local support and groups for LGBTQ+ young people

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

# Physical Education

Week 1	Week 2	Week 3
<p><u>What is Fitness?</u></p> <p><b>Definition - The ability to meet the demands of the environment.</b></p> <ul style="list-style-type: none"> <li>• Fitness can be split into different areas known as components.</li> <li>• Every sport requires different components of fitness depending on the demands of that event.</li> <li>• Remember, many sports require a combination of many components of fitness.</li> <li>• A person doing an office job requires lower levels of physical fitness than an Olympic athlete.</li> </ul> <p>An individual's fitness level can have a knock on effect to their health.</p>	<p><u>Balance</u></p> <p><b>Definition - The ability of the performer to maintain their center of mass over their base of support whilst static (still) or dynamic (whilst moving)</b></p> <ul style="list-style-type: none"> <li>• Balance can be static (i.e. handstand) or dynamic (i.e. keeping your balance on a skateboard or while surfing)</li> </ul> <p>Balance is tested using the Standing stork test</p> <ul style="list-style-type: none"> <li>• Participant places their hand on hips and one foot on inside knee of the opposite leg</li> <li>• Participant raises their heel and holds the balance for as long as possible</li> </ul> <p>The score is taken as the total time the participant held the balance successfully</p>	<p><u>Cardiovascular Fitness</u></p> <p><b>Definition - The ability of the heart and lungs to supply oxygen to the working muscles</b></p> <ul style="list-style-type: none"> <li>• When we exercise, the body needs more oxygen to use as fuel.</li> <li>• The better your cardiovascular fitness, the longer you can perform a sport at a high standard</li> </ul> <p>Cardiovascular Fitness is tested using the twelve minute Cooper run or swim</p> <ul style="list-style-type: none"> <li>• Measure the specific distance around a pitch or track (could be distance in the swimming pool)</li> <li>• Participants run or swim as far as possible in the twelve minutes</li> </ul> <p>The exact distance covered is recorded and compared to normative scores</p>
Week 4	Week 5	Week 6
<p><u>Co-ordination</u></p> <p><b>Definition - The ability to use two or more different parts of the body together, smoothly and efficiently</b></p> <ul style="list-style-type: none"> <li>• In sport hand eye coordination and foot eye coordination are used a lot to perform different skills.</li> </ul> <p>Co-ordination is tested by using the alternate hand wall toss test</p> <ul style="list-style-type: none"> <li>• Participant stands exactly two meters from a smooth-surfaced wall</li> <li>• Participant throws the ball with one hand and catches with the other and repeats.</li> </ul> <p>Count the number of successful catches in 30 seconds.</p>	<p><u>Flexibility</u></p> <p><b>Definition - The range of movement possible at a joint.</b></p> <ul style="list-style-type: none"> <li>• Flexibility is important as it helps prevent injury.</li> <li>• It is also essential for performing certain skills in sports like gymnastics, dance and trampolining.</li> </ul> <p>Flexibility is tested using the sit and reach test.</p> <ul style="list-style-type: none"> <li>• Remove shoes and position sit and reach box against the wall</li> <li>• Keep knees completely locked and reach forward with one hand on top of the other</li> </ul> <p>Stretch and hold position for two seconds while distance is recorded as a score.</p>	<p><u>Muscular Endurance</u></p> <p><b>Definition - The ability of a muscle or muscle group to undergo repeated contractions, avoiding fatigue.</b></p> <ul style="list-style-type: none"> <li>• Muscles are used a lot in sport.</li> <li>• If you train regularly, your muscles get stronger and can last longer giving you an advantage.</li> </ul> <p>Muscular Endurance is tested using a 60 second sit-up bleep test.</p> <ul style="list-style-type: none"> <li>• Participant performs as many full sit ups as they are able to in time to set beeps over 5 minute period.</li> </ul> <p>Measured in complete number of sit-ups performed.</p>

# Physical Education

Week 7	Week 8	Week 9
<p><u>Power</u></p> <p><b>Definition - Is a product of speed and strength.</b>  <b>Power = Speed x Strength</b></p> <ul style="list-style-type: none"> <li>Power is important in explosive events like throwing and sprinting. Power is vital to getting a good start in short races.</li> </ul> <p>Power is tested by vertical jump test</p> <ul style="list-style-type: none"> <li>Participant stands sideways onto wall and measures height with an up-stretched arm.</li> <li>Participant jumps as high as possible and marks wall at peak of the jump on three occasions.</li> <li>The average distance between the standing and jumping height is taken as the score</li> </ul>	<p><u>Reaction Time</u></p> <p><b>Definition - The time taken to initiate a response to a stimulus</b></p> <ul style="list-style-type: none"> <li>A stimulus could be anything from a starting gun in 100m to a sudden side-step by an opponent. The faster you react the better.</li> </ul> <p>Reaction Time is tested by the Ruler drop</p> <ul style="list-style-type: none"> <li>Hold a 30 cm ruler above the open hand of the participant.</li> <li>The 0 cm mark must be directly between the thumb and index finger.</li> <li>Non-participant drops the ruler with no warning and participant catches</li> </ul> <p>The score is taken from where the top of the thumb hits the ruler</p>	<p><u>Strength</u></p> <p><b>Definition - Is the ability to overcome a resistance.</b></p> <ul style="list-style-type: none"> <li>Strength is important for many sports.</li> <li>Being stronger can give you a big advantage in sports like gymnastics, rugby and weightlifting.</li> </ul> <p>Strength is tested by Hand Grip Dynamometer</p> <ul style="list-style-type: none"> <li>Grip with dominant hand</li> <li>Apply maximum force while arm is straight in front of the body</li> <li>Repeat three times while non-participant records the maximum force reading</li> </ul> <p>Question – Why would this be an unreliable test for some athletes?</p>
Week 10	Week 11	Week 12 Careers
<p><u>Speed</u></p> <p><b>Definition - The maximum rate at which an individual is able to perform a movement or cover a distance in a period of time, putting the body parts into action as quickly as possible</b></p> <ul style="list-style-type: none"> <li>Speed is vital to outwit opponents in many sports.</li> <li>It also helps gain momentum in events like long jump.</li> </ul> <p>Speed is tested by the 30 meter sprint test</p> <ul style="list-style-type: none"> <li>Mark out a 30 meter distance on an even, firm surface.</li> </ul> <p>Participant takes a rolling start so that they are running at full speed as they hit the start line.</p>	<p><u>Agility</u></p> <p><b>Definition - The ability to change direction, at speed, while maintaining control.</b></p> <ul style="list-style-type: none"> <li>Athletes with good Agility keep their entire body under control.</li> <li>Agility is especially important in sports that require sharp movements, turns like side-stepping, changing direction, moving around an opponent/court. Agility is tested using the Illinois run.</li> <li>It is a weaving running course, marked by cones, which has to be completed in the shortest possible time.</li> </ul> 	<p><u>Careers in sport from this cycle:</u></p> <p>Careers linked to topic.</p> <ul style="list-style-type: none"> <li>Fitness Instructor/personal Trainer</li> <li>Professional sports coach</li> <li>Specialist Strength and Conditioning Coach</li> <li>Exercise Science Researcher</li> <li>Physiotherapy</li> </ul> 

# Religious Education

## Christian Beliefs and Practices

Week 1- Pre Teach/ Introduction (Beliefs)	Week 2 - The Nature of God (Beliefs)	Week 3- Creation (Beliefs)
<ul style="list-style-type: none"> <li>- <b>Church</b> : Christian place of worship.</li> <li>- <b>The Bible</b> : the Holy Book of Christianity.</li> <li>- <b>The Trinity</b>: Father, Son and Holy Spirit.</li> <li>- <b>Crucifixion</b>: an execution where a person is nailed to a cross.</li> <li>- <b>Resurrection</b>: rising back to life after death.</li> <li>- <b>Sin</b>: an action against teachings of the Bible.</li> <li>- <b>Soul</b>: the spiritual part of a person that continues to live after death.</li> <li>- <b>Prayer</b>: a request for help or expression of thanks made by a person to God.</li> <li>- <b>Faith</b>: complete trust in God and religious teachings.</li> </ul> <p><b>Enquiry Task:</b> Copy out the key words and definitions and then dual code each one.</p>	<ul style="list-style-type: none"> <li>- Christians believe in one God (monotheism).</li> <li>- Christians believe that God has many characteristics such as <b>omnipotence, omnibenevolence, omniscience, transcendence and immanence.</b></li> <li>- Christians understand God as being made up of 3 parts. This is known as the Trinity. God as the Father, the Son (Jesus) and The Holy Spirit.</li> <li>- The Father is understood as the creator of the world and humankind.</li> <li>-The Son of God in human form is Jesus.</li> <li>- The Holy Spirit is believed to guide Christians in everyday life.</li> </ul> <p><b>Enquiry Task:</b> Give three ways the Holy Spirit guides Christians in their daily lives.</p>	<ul style="list-style-type: none"> <li>- Christians believe the world was created in six periods of time (Liberal).</li> <li>-Others believe it was made in 6 days (Literal).</li> <li>- Christians believe God created the world and humankind <u>with good intentions.</u></li> <li>- The Creation story is in Genesis (first chapter in the Bible)..</li> <li>- Some Christians believe the creation story literally.</li> <li>- Other Christians believe the creation story metaphorically, so can often believe in scientific theory too.</li> </ul> <p><b>Enquiry Task:</b> Watch 'Horrible Histories- Charles Darwin (Natural Selection)' on Youtube. Answer the question in your books - Can a Christian believe in evolution?</p>
Week 4- Life of Jesus (Beliefs)	Week 5- Life of Jesus (Beliefs)	Week 6- The Afterlife (Beliefs)
<ul style="list-style-type: none"> <li>-An angel visited Mary and told her she would give birth to a baby called Jesus who was to be the Son of God.</li> <li>- Jesus performed miracles and taught people about Christianity and God.</li> <li>- Many people did not believe Jesus was the Son of God (including the Jews).</li> <li>- Jesus was put to death by crucifixion (nailed to a cross).</li> <li>- Jesus rose from the dead and ascended to heaven.</li> </ul> <p><b>Enquiry Task:</b> Find out and write the definition of 'miracle', then give an example of a miracle.</p>	<ul style="list-style-type: none"> <li>- Jesus told stories that taught moral lessons. These were known as parables.</li> </ul> <p><u>The Parable of the Good Samaritan</u></p> <ul style="list-style-type: none"> <li>- Teaches people how they must behave to get to heaven.</li> <li>- Teaches people to act with compassion and unconditional love.</li> <li>- 'Love thy neighbour'.</li> </ul> <p><b>Enquiry Task:</b> What moral lesson do you think would be good to teach in a parable?</p>	<ul style="list-style-type: none"> <li>- Eternal life means a life beyond the death of the body.</li> <li>- Christians believe humans have souls that will have an eternal life with or without God.</li> <li>- Christians believe in heaven and hell.</li> <li>- Catholic Christians believe in purgatory, a place where a person can repent for their sins before heaven.</li> <li>- Heaven is to be reunited with God.</li> </ul> <p><b>Enquiry Task:</b> Research and answer the question - What is purgatory?</p>

# Religious Education

Week 7- Place of Worship (Practices)	Week 8- Sacraments (Practices)	Week 9- Pilgrimage (Practices)
<p>- Christians worship to show thanks to God for his blessings.</p> <p>- A Christian might pray to strengthen their relationship with God and seek forgiveness for sins.</p> <p>- Church services involve praise of God and readings from the Bible.</p> <p>- There are many types of worship that can be formal and informal.</p> <p>- Different denominations of Christianity worship differently.</p> <p><b>Enquiry task</b> - Read an account of a young person who attended Soul Survivor, a festival in the UK for Christians teenagers looking to worship.  <a href="http://www.soulsurvivor.com/stories">www.soulsurvivor.com/stories</a></p>	<p><u>Beliefs about Infant Baptism</u></p> <ul style="list-style-type: none"> <li>- It welcomes a baby into the Church.</li> <li>- Removes the original sin of Adam and Eve.</li> </ul> <p><u>Beliefs about Believers Baptism</u></p> <ul style="list-style-type: none"> <li>- A person accepts Jesus.</li> <li>- A commitment is made to God to live as a Christian.</li> </ul> <p><u>Beliefs about Marriage</u></p> <ul style="list-style-type: none"> <li>- It unites two people in love and commitment before God.</li> <li>- Say vows to each other and to God.</li> </ul> <p><b>Enquiry Task:</b> What colour should the outfit of a baby be for infant baptism and why?</p>	<p>- A pilgrimage is a journey to a place for religious or spiritual reasons.</p> <p>- A pilgrimage is different from a holiday.</p> <p>- There are many Christian pilgrimage sites in the world today.</p> <p>- Benefits of pilgrimage are</p> <ul style="list-style-type: none"> <li>• To renew their faith or help remove doubts.</li> <li>• Physical or spiritual healing</li> <li>• To visit places from the Bible</li> <li>• Worship amongst other Christians</li> </ul> <p>- Some Christians might not feel pilgrimage is an important part of being Christian.</p> <p><b>Enquiry task:</b> Why do Christians visit Jerusalem?</p>
Week 10- Festivals (Practices)	Week 11- Assessment	Week 12- Careers
<p><b><u>Christmas</u></b>            A holy day that marks the birth of Jesus who Christians believe to be the Son of God. Celebrated on the 25th of December. Jesus is God in human form.</p> <p><b><u>Easter</u></b>            A holy day that marks Jesus rising from the dead. Christians celebrate Jesus dying for the sins of humankind.</p> <p><b>Enquiry Task:</b> Research why we eat chocolate eggs at Easter and why presents are exchanged during Christmas.</p>	<ul style="list-style-type: none"> <li>• Create revision cards for each week, ensuring that there is a question on one side and a short, simple answer, on the other.</li> <li>• Create revision posters for each week, ensuring that lots of colour and dual coding (images) are used.</li> <li>• Summarise each week into 20 words, using images to also help you.</li> <li>• Create a 'quizziz' or kahoot on the information that you have learnt.</li> </ul>	<p>In this cycle, you have learnt about Christian beliefs and practices, such as types of worship, festivals and their place of worship. There are many jobs or career areas related to Christianity / Religion.</p> <div data-bbox="1464 1015 1671 1222" data-label="Image"> </div> <p>Follow the QR code or type in the link into your browser  <a href="https://links.iscaexeter.co.uk/8bw">https://links.iscaexeter.co.uk/8bw</a></p>

# Science

Week 1	Week 2
<p><b>The particle model:</b></p> <ol style="list-style-type: none"> <li>All matter is made up of tiny <b>particles</b>.</li> <li>The <b>particle model</b> explains <b>state</b> changes in terms of the <b>arrangement, movement</b> and <b>energy</b> stored in its particles.</li> <li><b>Solids:</b> the particles are held closely together, by <b>strong forces of attraction</b>. Particles are arranged in a <b>regular pattern</b> and <b>vibrate</b> (wobble) about <b>fixed positions</b>. <b>Low energy</b></li> <li><b>Liquid:</b> the particles are also <b>held closely together</b> by <b>fairly strong forces of attraction</b>. However, the particles can move past each other.</li> <li><b>Gas:</b> the particles are <b>far apart</b> from each other because the <b>forces of attraction</b> between them are <b>weak</b>. Particles move <b>quickly in all directions</b>. <b>High energy</b></li> </ol> <p><b>Enquiry task:</b> Draw a diagram to show the arrangement of particles in a solid, liquid and gas</p>	<p><b>Mixtures:</b></p> <ol style="list-style-type: none"> <li><b>Pure substances:</b> are the same in all parts (<b>fixed composition</b>) and we <u>can't</u> separate them into other substances using <b>physical methods</b> (e.g. <b>filtering</b> or picking bits out).</li> <li>Pure substances can be an <b>element</b> or <b>compound</b>, with no other substances mixed in, e.g. pure gold, or distilled (pure) water</li> <li>Pure substances have a <b>fixed melting and boiling point</b></li> <li><b>Mixtures</b> are <b>impure</b> substances, that contain different elements and/or compounds that are not chemically joined together, e.g. sea water.</li> <li>They <b>do not</b> have a <b>fixed composition</b>.</li> <li>Mixtures can be separated using <b>physical methods</b> (e.g. by filtering).</li> <li>They melt and boil over a <b>range</b> of temperatures.</li> </ol> <p><b>Enquiry task:</b> Find out the composition of air and of sea water</p>
Week 3	Week 4
<p><b>Filtration:</b></p> <ol style="list-style-type: none"> <li>A <b>technique</b> used to separate <b>insoluble</b> substances (ones that won't dissolve) from a mixture, such as <b>sand</b> or <b>pebbles</b> from sea water.</li> <li>It uses <b>filter paper</b> and a <b>filter funnel</b> to separate the insoluble substances from a <b>liquid solution</b>.</li> <li>The larger insoluble substances are too large to pass through the tiny holes in the filter paper.</li> <li>The substance collected after the mixture has been separated is called the <b>filtrate</b>.</li> <li><b>Filtration</b> cannot separate smaller, <b>soluble</b> substances that have dissolved into the solution e.g. dissolved salt</li> </ol> <p><b>Enquiry task:</b> Draw and label a diagram to show how sandy sea water could be filtered to remove insoluble substances.</p>	<p><b>Paper chromatography:</b></p> <ol style="list-style-type: none"> <li>A <b>technique</b> used to separate mixtures of <b>soluble</b> substances. These are often coloured substances such as <b>food colourings, inks, dyes</b> or <b>plant pigments</b>.</li> <li>It can be used to find out which colours are mixed together.</li> <li>It works because some compounds <b>dissolve</b> better in a <b>solvent</b> than others.</li> <li>When a solvent moves along a strip of paper, it carries the substances in the mixture at different speeds.</li> <li><b>Solvent</b> is called the <b>mobile phase</b>.</li> <li>The <b>paper</b> contains the <b>stationary phase</b></li> <li>The paper with the separated substances on is called a <b>chromatogram</b>.</li> </ol> <p><b>Enquiry task:</b> Draw a labelled diagram to show how to carry out chromatography on three different coloured felt tip pens.</p>

# Science

## Week 5

### Simple distillation:

1. **Simple distillation** is used to separate a **solvent** (e.g. water) from a **solution** (e.g. inky water)
2. It works because the dissolved solute (ink) has a much **higher boiling point** than the solvent (water).
3. When the solution is heated, only the water evaporates and turns to a **gas (vapour)**.
4. The gas moves away and is cooled and **condensed** (changing from a gas to a liquid).
5. The collected liquid water will now be **pure**.
6. The ink will be left behind because it has a much higher boiling point.
7. The apparatus used is called a **simple still**.

**Enquiry task:** Draw a labelled diagram of a simple still that could be used to separate pure water from cherry cola.

## Week 6

### Structure of an atom:

1. Scientists have worked out that atoms are made up of three smaller parts (called **subatomic particles**): **protons**, **neutrons** and **electrons**
2. At the centre of atoms is a tiny **nucleus** containing protons and neutrons.
3. This is surrounded by fast moving **electrons** arranged in **electron shells**, at different distances from the nucleus

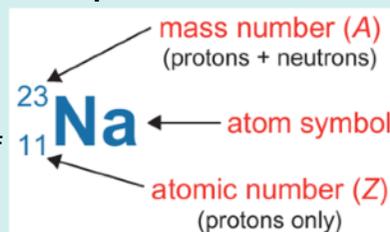
Particle	Charge	Mass
Proton	+1	1
Neutron	0	1
Electron	-1	1/1835

**Enquiry task:** draw a labelled diagram of an atom of lithium.

## Week 7

### Using the periodic table:

1. You can use a **periodic table** to find the number of **subatomic particles** each element has.
2. The **atomic mass number** = the number of **protons** and **neutrons**.
3. To find the **number of neutrons** in an atom subtract the atomic number from the atomic mass.
4. The **atomic number** = the number of protons and is also the same as the number of electrons. This is because all atoms have **no overall charge**.

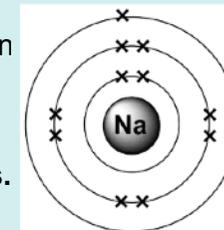


**Enquiry task:** Use a periodic table to find out the number of protons, neutrons and electrons in atoms of fluorine, oxygen, carbon and potassium.

## Week 8

### Electronic Configuration

1. **Electrons** are found on the **electron shells** of an **atom**.
2. The **1<sup>st</sup> shell** can only hold a maximum of **2 electrons**.
3. The **2<sup>nd</sup>** and **3<sup>rd</sup> shell** can hold up to **8 electrons**.
4. When drawing electron shells we use an **X** to represent electrons.
5. **Numbers** are also used to show how many **electrons** are on each shell of a particular atom, e.g. an atom of sodium has the electronic configuration 2, 8, 1 which means it has two electrons in the first shell, 8 electrons in the second shell and one electron in the third shell.
6. The diagram show the electronic configuration of a Sodium atom.



**Enquiry task:** write the electronic configurations for an atom of neon, helium, calcium and boron.

# Science

Week 9	Week 10	
<p><b>Chemical reactions:</b></p> <ol style="list-style-type: none"> <li>For a chemical reaction to occur the <b>reactant</b> particles must <b>collide</b> or 'bump' together with enough <b>energy</b> to react.</li> <li>The minimum amount of energy needed for a reaction to occur is called the <b>activation energy</b>.</li> <li>During <b>successful collisions</b>, this energy helps to <b>break bonds</b>, to be able to make new substances (called <b>products</b>).</li> <li>In general, reaction rates are increased when:             <ol style="list-style-type: none"> <li>the <b>energy</b> of the collisions is increased (by <b>increasing temperature</b>)</li> <li>the <b>frequency</b> is increased (by increasing <b>concentration</b> or <b>surface area</b>)</li> </ol> </li> <li>When <b>iron</b> and <b>sulfur react</b> the product is called <b>iron sulfide</b>.             <ol style="list-style-type: none"> <li><b>Word equation</b> for this reaction is: <b>iron + sulfur → iron sulfide</b></li> </ol> </li> </ol> <p><b>Enquiry task:</b> magnesium reacts with oxygen to make magnesium oxide. Construct a word equation for this reaction. Find out three more word equations</p>	<p><b>Relative formula mass (<math>M_r</math>):</b></p> <ol style="list-style-type: none"> <li>The <b>mass number</b> of an atom is the total number of <b>protons</b> and <b>neutrons</b> in an atom's nucleus.</li> <li>This mass number of an atom is called the <b>relative atomic mass (<math>A_r</math>)</b> and can be found by looking them up on the periodic table see the key in week 7). It is always the larger of the two numbers given.</li> <li>The <b>relative formula mass</b> of a substance is all of the relative atomic masses of all the atoms in its formula added together.</li> <li>It has no units – it is just a number.</li> </ol> <p><b>Enquiry task:</b> calculate the relative formula mass of the following;</p> <ul style="list-style-type: none"> <li>Carbon dioxide, <math>CO_2</math></li> <li>Sulfuric acid, <math>H_2SO_4</math></li> <li>Magnesium chloride, <math>MgCl_2</math></li> </ul>	
Week 11	Week 12 - Key words and Careers	
<p><b>Answer the questions below to help you revise for the assessment week.</b></p> <ol style="list-style-type: none"> <li>Describe the differences between the arrangement of particles in a solid, liquid and gas</li> <li>Compare and contrast filtering and simple distillation</li> <li>Imagine you have found a note left at a crime scene written in pen. You confiscate pens from three suspects. Describe how you could find out which suspect wrote the note.</li> <li>Explain the difference between a chemical reaction and a physical reaction</li> <li>Lithium reacts with water to make lithium hydroxide and hydrogen. Construct a word equation for the reaction</li> <li>Lithium hydroxide has the formula <math>LiOH</math>, calculate the relative formula mass.</li> </ol>	<p><b>Atom:</b> the smallest particle of a chemical element that can exist.</p> <p><b>Compound:</b> contains atoms of two or more different elements, chemically joined together.</p> <p><b>Electronic configuration:</b> the way in which <b>electrons</b> are arranged in an <b>atom's electron shells</b>.</p> <p><b>Element:</b> contains just one type of atom, e.g. pure oxygen.</p> <p><b>Insoluble:</b> a substance that cannot dissolve in a solvent.</p> <p><b>Mixture:</b> contains two or more substances that are not chemically joined together.</p> <p><b>Soluble:</b> a substance that can dissolve in a solvent.</p>	<p><b>Solute:</b> the substance that has dissolved in a solvent to make a solution.</p> <p><b>Solution:</b> a substance and the solvent it has dissolved in to.</p> <p><b>Solvent:</b> the liquid that a solute dissolves in to.</p> <p><b>States of matter:</b> one of three different forms a substance can have (solid, liquid or gas).</p> <p><b>Careers:</b> Follow the QR code or type in the link into your browser <a href="https://links.iscaexeter.co.uk/549">https://links.iscaexeter.co.uk/549</a></p> 





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